

# **ENERGY AS A FACTOR IN THE FOREIGN POLICY OF RUSSIA, 2000-2012**

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for award of the degree of*

**DOCTOR OF PHILOSOPHY**

**NAGESH KUMAR OJHA**



**Centre for Russian and Central Asian Studies  
School of International Studies  
Jawaharlal Nehru University  
New Delhi-110067  
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# JAWAHARLAL NEHRU UNIVERSITY

Centre for Russian and Central Asian Studies

School of International Studies

New Delhi-110067

Tel.: (O) +91-11-2670 4365

Fax: (+91) - 11-2674 1586, 2586

Email: crcasjnu@gmail.com

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## DECLARATION

I declare that the thesis entitled “ENERGY AS A FACTOR IN THE FOREIGN POLICY OF RUSSIA, 2000-2012” submitted by me for the award of the degree of **Doctor of Philosophy** of Jawaharlal Nehru University is my own work. The thesis has not been submitted for any other degree of this University or any other university.

**NAGESH KUMAR OJHA**

## CERTIFICATE

We recommend that this thesis be placed before the examiners for evaluation.

**SANJAY KUMAR PANDEY**  
Chairperson, CR&CAS

**RAJAN KUMAR**  
Supervisor

Dedicated

to

My Mother

et those who made the discipline significant to understand

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Mistakes and omissions are, of course, my responsibility.

Date:  
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Nagesh Kumar Ojha

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## List of Abbreviations

Bbl/d (B/D)	Barrels per day
Bcf	billion cubic feet
bcm	billion cubic metres
Btu	British thermal units
Kb/d	Thousand barrels per day
ktoe	kilotonne of oil equivalent
M/bbl	Million barrels
M/t (Mt)	Million Tonnes
M/toe (Mtoe)	Million Tonnes of Oil Equivalent
Mbbl/D	thousand barrels per day
ML	million litres (megalitre)
MMbbl	million barrels
MMbbl/D	million barrels per day
MMBFOE	million barrels of fuel oil equivalent
MMBtu	million British thermal units
MMcf/D	million cubic feet per day
MMscf/D	million standard cubic feet per day
mpg	miles per gallon
Mtce	million tonnes of coal equivalent
Tbbl/D	trillion barrels per day
T/bbl	Thousand Barrels
Tce	tonnes of coal equivalent
Tcm	trillion cubic meters
Tcf	trillion cubic feet
toe	tonnes of oil equivalent

## Chapter: 1

### INTRODUCTION

Rising energy consumption has created a new energy world order where Russian Federation is a major player. It holds great export potential, especially its oil and gas, for regional as well as global energy markets. Russia has started to focus on new destinations along with conventional and established markets. Growing demand and Russian energy potential together made new avenues to expand its energy networks even in parts of Asian markets. In this context, this study attempts to explore Russian energy policy vis-à-vis expanding markets and use of oil and gas in its foreign policy.



[http://www.face-music.ch/peopleofsiberia/russian\\_federation.jpg](http://www.face-music.ch/peopleofsiberia/russian_federation.jpg)

This research identifies various factors which influence the foreign policy of Russia. It gives a background of this study. Disintegration was a reality, but going through with it was a catastrophe.

### **Identity and Foreign Policy Approaches of the New Russian State**

The fundamental question before the foreign policy makers and ruling elite was to define the Russian national identity first (Jackson 2003) and then structure a policy draft. Its civilisational, historical, and a value system that evolved after the October revolution, all were in consideration to find out a new Russian national identity. In this process language and other elements were considered to define and construct a new

identity. Though, the first and foremost option and approach was to design a civic-state where all the Russian citizenry was equal, and state should member them without any discrimination of caste, creed, and religion (Jackson 2003). However, following elements have played vital role to concede a new construct of Russian national identity and influenced the foreign policy making of the new Russian state as well:

<b>Elements</b>	<b>Construct</b>
<b>Language</b>	Russia comprises all the Russian speakers including post-Soviet states.
<b>Ethnicity</b>	People who have civilisational ties are Russian.
<b>Slavic entity</b>	People who have similar traditional background are Russian.
<b>Reintegration</b>	Northern Kazakhstan, Ukraine, and Belarus are part of Russian society.
<b>Civilian state</b>	Every citizen has a right to be Russian without any discrimination.

Historically, the Russian debate on identity of Eurasianism starts since Peter the Great (1672-1725) when he started westernizing his policies. The idea of Eurasian identity erupted just to incorporate the Swedish territory won through war with Charles XII. It was the deciding historical moment when Russia was integrating Asia with Europe to achieve a dual geographical identity as Eurasian (Schmidt 2005). This identity has been acknowledged as one of the most significant factor in the Russian foreign policy. It was Nikolai Danilevsky (1822-1885), who first defined this entity as a discrete geographical unit which was separated from Asia and Europe. It includes edges of the Himalayas to Arctic, Pacific to Caucasus and Alps, Atlantic Oceans to Mediterranean and Caspian Seas to Black Sea (Schmidt 2005). It was not the combination of Asia and Europe, but a distinct entity as a separate geographical world (Vinkovetsky 2007). Later on this ideology percolated in the early 20th century among intellectuals who emigrated from Russia to Western Europe after the Great Russian revolution (Laruelle 2008). It was termed as ‘third way’ and these people upheld their cultural asset and distinct Russian identity (Hahn 2002). Initially, the idea was acknowledged as a bridge for East and West along with spiritual pursuance and geopolitical ‘third way’ (Kubicek 2004). It is argued that people of the Soviet Union such as Slav, Turk, Orthodox or Muslims had developed a mix cultural identity over centuries and shared those characteristics which laid the foundation of a political unity (Duncan 2002).



After more than six decades of the Soviet system, a new era of definite departure from the existing political structure has started to take place during the 1980s (1986). Along with Glasnost (openness); President Mikhail Gorbachev strived for Perestroika (restructuring) to build a new political and economic system, which was certainly conceived on the lines of Zapadniki or Westernizers. This was a crucial phase of separation between these two approaches and future geopolitical mapping of Russia in the world politics and market. Westernizers argue that democracy and pluralism are significant universal value of the West, which could be positively extended to Russia. On the other hand, the Slavophile or “Eurasianists adhere to a nationalist-patriotic course, believing that because of geographical, psychological, historical and cultural particularity, Russia can neither be classified as East nor West”(Linde et al 2004). Rather, it “is a strong state, communitarianist, and a dominant Eurasian power.” This ideology of Eurasianism has been shared by the extreme right-wingers and communists as well.

The very idea, perception, or reality of Russia’s superpower status carries forward the concept of Eurasianism. It has inspired and shaped the thought process of many groups and those individuals who are still eager to restoring the old Soviet structure in the world politics. However, in the last two and a half decades, from fragile to consolidated stage and transformation of the Russian state into established regional power; the Eurasianism has become an ideological framework to reintegrate Russia within the Central Eurasian region. People belonging to this ideology argue that Russia is bound to subordinate Eurasia and must dominate its own sphere of influence; otherwise, they are afraid that China, Germany, Islamist forces or other regional powers will do so. Various domestic as well as foreign policy moves of the Kremlin show that Russia is not only sympathetic towards Eurasianists, but more importantly, it has extended the support of the Federal Security Service to the idea of Eurasianism and Eurasian movement. In this context, accession of President Vladimir Putin to the power has provided a boost to the reemerging Eurasianism. He has a pragmatic approach toward Central Eurasia and acknowledges the limited resources of Russia even in terms of political or economic capabilities (Smith 2000).

The ascendancy of the President Putin has brought successful and intense centralized control over foreign as well as domestic policies. He relentlessly reshuffled the

cabinet council and replaced significant members of existing political elites by more favourable one. The tight control over civil and defense administration paid him well to formulate policies and strengthening Power Vertical to build a system that is increasingly moving toward centralized control. From media magnates to oligarchs who were not expected to fall in line with the new administration had been replaced. In this respect, “Boris Berezovsky, Vladimir Gusinsky, head of the Ministry of Atomic Energy Yevgeny Adamov who tried to conclude nuclear deals with Iran that were not approved by the Kremlin, the director of gas monopoly Gazprom and the leader of the Defense Ministry” could be significant (Linde et al 2004).

Moreover, several internal ministers were exchanged, new *plenipotentiaries* (powerful diplomatic agents) were set up to oversee Russia’s eighty nine regions, while to acquire better control of a key source of foreign exchange, he consolidated nation’s arms sales agencies into Rosoboronoexport, and expanded international business ties to improve country’s economy (Putin 2003). The best part of his moves was that contrary to the previous administration of President Yeltsin, he secured a good support of the Duma for his new policies, which ultimately legitimize his government, moves, policies, approaches, or rather everything in pursuance of consolidation of state and betterment of the populace at large. All these developments set the ground for Putin to take steps for using nation’s resources to project Russia’s might at the world stage or at least gave the impression of makeshift efforts to change the lot of the nation and public at large as well. The idea of Eurasianism was very useful and supportive for the various moves of Putin’s new and ambitious government, which was fortunately blessed by the high prices of oil for more than a decade as well.

Since, the Soviet disintegration has brought a new form of national identity and statehood for Russia; new circumstances forced Russian state to conceive new approach to formulate its foreign policy and construct the nation de novo. At this crucial juncture, a section of old political elite still perceived Russian state as a superpower even in the new international political world-order. This privileged section of power corridor used to see everything through the binary lenses of old power block politics and made a failed attempt to project Russia as counterbalancing political power against the U.S. On the other hand, a good number of liberal policy makers were interested and strived for democratic norms, values, and setup to

promote liberalization, better relations and enhanced cooperation with the West. Therefore, these binary approaches vis-à-vis Russian geopolitical positioning have generated a decade of fighting and tug-of-war over the future direction of a new country, which had a glorified history and ideological legacy.

The idea of Eurasianism could be found in the speeches and moves of President Putin. He wishes to dominate over the extended contiguous regions vis-à-vis Russia. He can not overlook the former Soviet space and even beyond that as well. In spite of this thought and approach, he is neither chauvinistic nationalist, nor displayed extreme nationalism in his ideas. Rather, he values multi-culture and diversity of Russia. He knows that this approach would unite Turk/Muslim and other Slavic communities (Kubicek 2004). If willingly or otherwise, the approach and thought of ‘Eurasian empire’ has been reflected in any action, strategy, or moves in the Russian foreign policy, it is because of a mindset where Soviet Union was perceived as a continuity of the lost empire which was infused by Russian ethnic nationalism. Interestingly, the current century did not provide ammunitions where this thought could be regarded as an enthusiastic approach “to the future integrity of the common state” (Alexandrov 1999). It was also believed that foreign policy makers have paid more attention to the Western directions in the policy making process and moves; however, vital interests of Russia were with the South and East. It was argued that Russia should deal with the ‘arc of crisis’, which is developing on southern borders. Russia has to deal with other problems as well that is associated with its own Muslim population. Therefore, according to Eurasianists approach these immediate challenges and threats are more significant to face rather than to establish close dialogue with the trans-Atlantic and western counterparts (Malhotra & Sergounin 1998).

### **Three Approaches of Russian Elites to Formulate a New Foreign Policy**

<p><b>Liberalist Westernists</b></p>	<p>Identity of Russia: as a civic state. Clouse relations with NATO and EU. Active cooperation with international institutions. Good neighborly relations with the successor states. Abandon the historical great power ambitions. On the basis of history, culture, and mentality Russia is a part of Europe. Rejected the idea of Eurasia and supported the principles of equality of states, including the noninterference in near abroad or in domestic affairs of other states.</p>
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<b>Pragmatic Nationalists</b>	Linguistic basis of the Russian identity is vital to have concern for the population in its near abroad. Believe in the restoration of Russia's lost status in the world order. Do not believe in the reconstruction of the old Soviet Union. Contradict when support the reintegration of the FSRs.
<b>Fundamentalist Nationalists</b>	Believed in a Slavic or ethnic Russia. West is the cause of collapse of the USSR. Believe in creating a great empire such as the Soviet Union or like Tsarist Russia. Desire to reestablish hegemony of Russia in FSRs. Explain Eurasianism in geographical and economic terms but opted a third way in politics and economics. Emphasis on better relations with Central Asia and other Asian powers.

### Post-Soviet Foreign Policy Perspectives

Approaches	Proponents	Threat Perception and the Idea of Russia
<b>WESTERNIZERS</b>		
<b>Liberals</b>	Kozyrev, Andrei	Russia has been acknowledged as a part of the West. It should be integrated with the western political and economic institutions. It is argued that Russia has most significant threats from non-democratic states.
<b>Social Democrats</b>	Mikhail Gorbachev	Russia has been acknowledged as an independent part of the international society. It has its own strategic and specific interests, but shares common interests as well. Violations of human rights and disrespect for cultural pluralism have been identified as the most significant threats to Russia.
<b>STATISM</b>		
<b>STATISTS</b>	Yevgenii Primakov	Russia has been acknowledged as a sovereign state and great power. It has its own specific interests in maintaining stability of the world order. State-revisionists seeking to change the existing balance of power are being recognized as the main threats to Russia.
<b>CIVILIZATIONISTS</b>		
<b>National Communists</b>	Gennadi Zyganov	Russia has been acknowledged as an independent socialist civilization and great power. Being a superpower; its interests are incompatible with those to the West and include the restoration of a balance of power between capitalism and socialism. Spreading the influence of Russian civilization is an important element of this thought. The imperial intentions of the West have been taken as the biggest threat to Russia..

<b>Eurasianists (hard-liners)</b>	Vladimir Zhirinovsky	Russia has been acknowledged as a land-based geopolitical empire. Its interests are different from those of the sea-powers. It includes preservation and expansion of Russian geopolitical sphere of influence. Sea-based powers have been said as the most important threats to the Russian state.
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Source: Sevim 2013

### **Eurasianists**

The fight between two approaches was not simply based on the Great October Socialist Revolution of 1917 or inspired by the belief in a better future; it was enthused by the political and philosophical arguments existing in Russia for more than last two centuries known as ‘*Slavophile*’ and ‘*Zapadniki*’. The first contains a superior feeling of Russian legacy and places its culture and tradition higher to anything non-Russian. This has been understood as the Eurasianists as well.

In fact, there are diverse perspectives of Eurasianists approach and “Eurasianism has succeeded in reconciling the often contradictory philosophies of communism, religious orthodoxy and national fundamentalism” (Misra 2001); while, the meaning and declared objective in the current debate of Eurasianism is to restore the dominance of Russia in the region that comprises both Asia and Europe. However, O’Loughlin (2000) explains and distinguishes various Eurasianist orientations into following four streams:

- i. *“Hard-line Eurasianists - Representatives of this view are Alexander Dugin, the Russian nationalist and editor of the geopolitical journal Elementy, and Vladimir Zhirinovsky, a national-patriotic member of the Duma and three times a candidate for presidency. Dugin contrasts the Atlanticist (sea powers) and Eurasianist (land powers) world that according to him have a totally different orientation in geopolitical and civilisational terms. He defines his geopolitical mapping as a Pax Eurasiatica, is considered a Great-Russian and has been a passionate agitator of a crusader’s mentality against the Islamist threat. He also agitated against the Baltic States, Poland, Turkey and other frontier nations around Russia. Zhirinovsky calls upon the US, Europe, China and Japan to join Russia and form a world of pan-regions.*
- ii. *National-patriotic -- Gennady Zyuganov follows the communist version of the national-patriotic ideology. Zyuganov holds the Westernisers (Gorbachev, Yakovlev, Shevardnadze, Yeltsin and Kozyrev) responsible for Russia’s fall in living standards and power status. He believes that the West wants to marginalize Russia.*

- iii. *Democratic Statism combines Western liberalism and Russian neo-nationalism. The proponents of this view acknowledge that Russia has to cooperate with the West, but simultaneously consider Central Eurasia or the near-abroad as central to Russia's security. To regain influence in the region they stress the building of alliances, the use of military force and economic relations.*
- iv. *Russian nationalism and Eurasianism is exemplified by Alexander Solzhenitsyn who rejects Western materialism and criticizes its lack of spirituality. Solzhenitsyn calls for domestic order and spiritual harmony as Russian geographic destiny extending as far as Siberia."*

As far as new foreign policy approach is concerned, it had taken a shift to the West when Gorbachev came to the power. However, it was a continued process through the period of Boris Yeltsin. Development in Chechnya made huge impact on the foreign policy of approach of Russia. However, in spite of poor economy of the state, Russia managed to retain the territorial integrity. It did not allow Chechnya to be separated from the main land of Russian Federation. Initially, the dominance of neo-liberalist approach made various changes in the economy, which greatly impacted the common citizenry. They got a poor experience of new policies and lived comparatively a pauperized life. It finally led to the distress and discontent in the society.

Finally, the new foreign policy approach found a changed stand with the ascendancy of Vladimir Putin as President. He laid emphasis on Westernization but with own choices of freedom to decide. It looks contradictory that he allowed American forces to make their presence and expand impact in the Central Asian region after an unfortunate event of 9/11 in the U.S. It was a great gesture of cooperation with the western block against any act of terrorism. Unfortunately, it was not continued in the long run and second term of Presidency found difficult to cooperate in the same spirit due to color revolution and expansionist approach of NATO in the Near Abroad. United States was serious about its military presence and existence in the Central Asian states. It finally provoked Russia to go against the unilateral approach of America. Russia did use some diplomatic tools and energy strength to remove American military bases from the Central Asian states. At this juncture, Russia had not only healed its economy due to high market of oil, but also shown potential support to neighboring and other regional states.



However, when Medvedev came to power and got elected as the President, it raised a new hope to pro-western groups in Russia as well as in the West. But, unfortunately, within five months of his election Georgian crisis happened in 2008 August, where full length force was used in the battle field. This was an stark signal to the Western world that Russia would not accept any expansionist move of the West through Georgia or for any other matter through Ukraine. This was shown as their national interests and policy priorities. This is significant to understand that the whole development could not be understood with one approach like Eurasianist or Atlanticist. Therefore, entire foreign policy approach and process was called by Putin himself as the 'third way'. It is certainly a different approach to be understood and explained in terms of dominant leaders where personality has a leading role to play.

It is also true that there are various political groups in Russia and has their domestic as well as foreign policy concerns. Their approaches have influenced the process and foreign policy orientations regarding the world during 1990s and 2000s. In this context, the initial years of the disintegration have been influenced by various political approaches. Policy makers' effort was to accommodate different possible directions to formulate a new foreign policy (Jackson 2003). However, various approaches have been divided as Eurasianists and Westernists (Atlanticists) and these concepts have attempted to explain the orientations of Russian foreign policy (Smolansky 1997) as well as sought the analysis to seek the best available ways to further its national interests. On the other hand, various terms have been given to explain different approaches as Eurasianism- National Patriotism, Slavophilism, and Romantic Nationalism-, Anarchism, Neo Liberalism, Romantic Liberalism, Authoritarianism, Conservative, the New Left, Moderate and Orthodox Marxism-Leninism (Pursiainen & Patomaki 2004). These political thoughts among the Russian intelligentsia have further been categorized in Eurasianism, Westernism, and Pragmatism (Duncan 2002).

### **Neo-Eurasianism (Slavophilism)**

This approach does not hold national geopolitical situation beyond a certain limit and prefers to project a unique and imperial character in its substance. It is inspired by nationalist traditions. It advocates a different kind of sovereignty for the people of former Soviet Republics as well as nationalities and various ethnic groups of Russia

(Chaudet 2009). However, it holds disappointment for the Western cautious approach toward Russia when Moscow remained glued to its age old institutions. It provided substantial help to rebuild and restructure the same. Neo-Eurasianists were not infavour of getting any assistance from the west and considered it as interference in their institutions. They wanted to develop their political, defense, or economic institutions in their own way (Chaudet 2009). They advocated for socio-economic reforms and emphasized on modernization.

In this way their aim was to develop Russia as a stable and strong state. In its approach, military power was considered as one of the legitimate instruments to further Russian interests and achieving various goals of the foreign policy of the state (Szaszdi 2008). Laruelle argues that “there exists a cultural unity and a community of historical destiny that is shared by Russians and the peoples of the post-Soviet space, if not also by other peoples of Asia; that the geographic centrality of the so-called Eurasian space in the old continent entails and unavoidable political reality, namely empire; and that there are cultural invariants which can explain the deeper meaning of contemporary political events” (Laruelle 2008)<sup>1</sup>. Dugin identifies and associate the term Eurasia with ideological and political principles, rather a distinct region (geographically) or one distinct civilization. He thinks that this thought and approach provides at least one stand or platform to fight against Atlanticism (Bassin 2008).

In other words, this approach stands for challenging American global hegemony and supports regional power approaches or more succinctly a multipolar world (Parmentier 2008). It is also stated that “in the place of Nation States, new political forms must emerge, to combine the strategic unification of the large continental zones with the multi-dimensional complex system of national, cultural and economic autonomies. Some characteristics of such an organization of zones and peoples can be observed in former empires; e.g. of Alexander the Great, the Roman Empire, etc and the more recent political structures like EU and CIS” (Parmentier 2008).

The classical Eurasianism holds a radical isolationist approach (Bassin 2008), while Neo-Eurasianism is based on an entirely different one. It has a different vision for Russian stand and unique place in the new world order (Bassin 2008; Dugin 2005)

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<sup>1</sup> Regarding neo-Eurasianism, two best known thinkers are Alexander S. Panarin (1940-2003) and Alexander G. Dugin (1962).

unlike the classical Eurasianists. Dugin's perspective vis-à-vis Eurasianism updated the approach to reflect a shift in the global world order, especially after Second World War and with the end of Cold War. He opined that "a confrontation between the West and East is inevitable" and he was probably one of among those who always believed that Russia could not become a part of the Western world (Shlapentokh 2001). It is also apparent that during this period the center of gravity of West has witnessed a shift across the Atlantic to the North America. Now the United States represents as the chief opponent and Eurasia's anti-thesis.

### **Contemporary Russia and Eurasianism**

Some have divided Eurasianists approach in three separate blocks according to various dimensions; i.e. Neo-Eurasianism (Slavophilism), Pragmatic and Inter-civilisational Eurasianism (Rangsimaporn 2006). Since the policies of President Putin has been focused on balancing with the West and taking concerns of the East as well, he is rightly acknowledged as a Pragmatic Eurasianist. He does not negate the significance of the Western approaches, but at the same time highlights linkages of Russian culture with Europe. While, some others have argued that Putin's approach falls in the Neo-Eurasianist corner. In this approach rhetoric is an important instrument to construct the desired thought process and Putin has been pursuing the goal successfully till now. An ideological justification is required to highlight the spirit of a multi-ethnic Russian state, which is considered as a pre-modern in various ways (Shlapentokh 2007) by western scholars.

Some have understood Neo-Eurasianism as an approach which deals with the geopolitics rather than politics. It has given significance to similar values (social and political) with Asia and Central Asia in particular, while rejecting commonalities with the West (Rangsimaporn 2006). This group of scholars found Russian geopolitical positioning and the idea of civilisational Eurasianist identity as the basis for economic development as well as integrating element with the East Asian region. It also helps Russia to unite its strategic and political relations with Asia. It is also argued that Russia's Eurasian civilisational characters pave the way to build international and new inter-civilisational relations (Titarenko 2001). It is certainly founded on the fundamental principles of mutual influence, co-development, preservation of diversity of civilization, and lastly to solve various problems amicably with cooperation.

When Putin came to power, it was expected that Russia would proceed on the Eurasian path; but 9/11 changed the course of action and Putin started to follow a pragmatic and balanced foreign policy approach wherein until 2005, it was observed that Americans expanded their geographical horizon in the Russian near abroad. In 2005, American geopolitical turnaround in the region had given an opportunity to Russia to strengthening relations with the geostrategically important Central Asian states. Russia did it intelligently and filled the gap created by the reversal of Americans. It was also expected that Russian diplomatic success in the region would further eliminate the American influence from all Central Asian states. A new vibrant and offensive geopolitical move was hoped against the U.S. (Shlapentokh 2005). This hope was based on Putin's actions where he had shown a clear cut bend toward Eurasian approach. He applauded Lev Gumilev during the celebration of the city of Kazan's millennium anniversary on August 26. He was a great philosopher and historian as well as founder of the modern Eurasianists movement (Shlapentokh 2005). Putin's rhetorical move to adopting the Eurasian approach was strengthened by his speech and saying wherein he put forward "*the ideas of Lev Gumilev, who founded Neo-Eurasianism based on the idea of a united Eurasia in opposition to the trans-Atlantic West*" (Torbakov 2004).

### **Atlanticists (Westernists)**

Atlanticists and Eurasianists approaches focus on various issues such as whether Russia belongs to a class of its own or not, whether is it isolated from Europe, the issue of its Orthodox Christianity, is it a European nation like others, and the entire subject puts a puzzle that what is Russia (Kortunov 1999). Its political traditions have been conceptualized as Civilizationism (cultural dimension is dominant), Statism (focuses on strong and independent state), and Westernism which is commonly discussed in details all the time (Tsygankov & Tsygankov 2008).

This approach has been rooted in the idea of common Europe. In the contemporary debate, the followers of this approach were led by Andrei Kozyrev, who was the former foreign minister. It has lured many followers of the 'New Thinking' propounded by Mikhail Gorbachev. The whole idea was entranced upon a thought where 'common European home' was taken as the paramount idea and emphasis was given on to incorporate the Soviet Union into one entity with the other European

states (Smolansky 1997). This idea has close proximity with the west. It goes with two simultaneous thought processes. On the one hand it is committed to the relations with the West along with the idea of returning to the civilisational relationships and its integration with the world economy; on the other hand, it maintains Russian post-imperial power status in the European world order (Sakwa 1996).

However, liberal internationalists or Westernizers believe and support in building Russia on the basis of Western European values, norms, and approaches. They advocate a modern industrial economy and military power like the Western Europe. According to this approach, Russian security concerns, problems, challenges, and complications regarding the West are deeply associated with the confrontation and structure created and built by the system of Soviet Union. Its economy, in particular, was not strong enough to play any substantial role in that structure. Thus, end of the Cold War and disintegration has removed any serious security threat and challenges (Prizel 2004). However, on the other hand, Rajan Menon argues that Russian elites have shown a Neo-Imperialist approach who could be characterized in four categories:

### Neo-Imperialists

<b>First</b>	Having institutional affinity and inclination especially from national security bureaucracies- primarily armed forces, intelligence and other security services
<b>Second</b>	Influential in society like intellectuals, politicians, journalists who are nostalgic and having a wish for an empire or Russian superpower status
<b>Third</b>	Focused on Eurasia; i.e. Russian southern periphery
<b>Fourth</b>	Favour reforms, support democracy and democratization of policy making along with market economy; but strategic orientation is focused on the Russian dominance in the FSRs and

He identifies Boris Yeltsin and Kozyrev as having neo-imperialist approaches. However, the ‘Concept of Russian Federation Foreign Policy’ which was circulated by Kozyrev himself in the Supreme Soviet upholds the Westernists approach and made good amount of influence in the future.

Therefore, it is apparent that factors such as history, geography, identity, worldview, perception of self, disintegration of the USSR, threats, ideology and mission, borders, FSU policy and connects/relations and so on drive the foreign policy of Russia:

### Foreign Policy Drivers Which Influence the Process

Issues	Pragmatism	Westernism	Fundamentalism
	↓	↓	↓
<b>History</b>	Significant	Less valued	Vital
<b>Geography</b>	Eurasian	Western	Eurasian
<b>Identity</b>	Linguistic relations- crucial	Civil liberties- essential	Ethnic value (akin)- central
<b>Worldview</b>	Focus on Balance of Power	Focus on peaceful & non-aggression	Aggressive & having perception to be surrounded by enemies
<b>Perception (self)</b>	Great power: focus on self interests	Normal power status	Great Power: spirit of empire
	Negative	Positive	Deeply negative & blaming the West
<b>Threats</b>	Forces to destabilize FSU and harm national interests	Communism	Pan Turkic/West
<b>Russian ideology/mission</b>	Geopolitical leanings & uniqueness	No specific goal	Historical or could be divine
<b>Russian borders</b>	Russia & parts of FSU	Russian Federation	Russian Federation & parts of FSU
<b>FSU connect &amp; relations</b>	Very important	Less significant	Vital
<b>Policy toward FSU</b>	Protection of Russian interests; supporting rights of ethnic & linguistic minority/diaspora in near abroad	Non-interference, Supporting sovereignty & equality of states	Future reincorporation of certain areas or FSU; isolationism
<b>Foreign Policy Directions</b>	Own way	Bend to the West	Isolationism or Expansionism



<b>Domestic Politics</b>	Liberal democratic values	Liberal democratic values	Not conducive to Liberal democracy
<b>Economy</b>	Market reforms having domestic concerns or own model	Market reforms on the Western model	Not conducive to free market orientations

The fundamental question before all those groups involved in the foreign policy making was whether to follow the western political ideals and economic model to develop the new Russian state and society or to adopt its own path to acquire a great power status in a new world order where it is considered as one of the fragile and weak states other than its nuclear power. Some of them certainly were against the old imperial approach as well as methods of foreign policy making who rejected the idea of expansionism and revisionist state. However, acquiring the great power status was the dominant argument in various political sections and elite groups.

The extreme pro-Westernists political elites have emphasized the need to get western support to adopt liberal reformist approach in building a new financial structure and domestic political norms. It was, by all means, based on good relations with the West. “Russia’s move toward the West would be a lucrative decision, as well as nicely matching the psychological orientations of those individuals who cherish the idea of Russia’s great mission. By going West again, we will rescue the entire European project and ourselves” (Kovadiyev 2005). People of this leaning advocated the Russian integration with the European Union, NATO, and other institutions of the West, while believing that (it is important):

*“The paradox is that Russia continued to implement Western-style initiatives in the East. Industrialization, its policies in Central Asia and in the Caucasus, in Afghanistan and in Chechnya- these were instances of Westernization, in terms of reproduced matrixes, not methods...To avoid the worst, Russia must look westwards. Russia’s readiness to join the West’s two major structures, NATO and EU, will attest to its earnest intentions. Since joining the EU would inevitably be a dragged-out process for many reasons, NATO remains the only choice, at least its political wing” (Kovadiyev 2005).*

While, there are elites who are in opposition to the western model of open market and democracy. They are scared of the independence of Russian decision making process

and administrative as well as political value system. It is believed that integration with the western model and institutions would bring compromise to the freedom of Russia. However, Kovadiayev has cited an example of France in the NATO to mitigate this logic. He argued that “joining this organization does not menace our sovereignty in any way. The forty-year long instance set by France, and the NATO members’ refusal to send a collective contingent to Iraq, proves that the bloc offers a broad road for freedom. Nor should we demonize the procedure of decision-making within NATO, since cooperativeness and diktat are quite different things”(Kovadiayev 2005).

In this debate, there are some other points of views which lead to a moderate position. It advocates a peculiar third approach for the Russian foreign policy makers. On the one hand, as a Eurasianist Dugin advocates that “Russia was not a European but a Eurasian country, ‘a synthesis of Eastern, Asian and West European characteristics’ that ‘should be compared with Europe itself or with India as a civilization” (White 2011). On the other hand, the idea of Eurasianist got strengthened during mid-90s when Russian approach to move toward East European states tuned matching to its aggressive foreign policy efforts and conducive to construct a new national identity. It had justified the policies and foreign policy efforts of a newly emerged state to build and renew historical ties with the Commonwealth of Independent States and other neighboring countries (Jackson 2003). While the West and America in particular:

*“had ended its unspoken agreement not to intervene on the territory of the former Soviet Union at the end of the Cold War and had declared a ‘geopolitical jihad’; it was currently moving into the Northern Caucasus and the Volga basin, using the same ‘orange’ methods it had perfected elsewhere in the region. As a result, Russian influence in post-Soviet space had become ‘even more tightly constricted’ and the prospect of Eurasian integration had become ‘even more problematic’. Now ‘orange revolutions’ in Belarus and Kazakhstan were the immediate objective, with the same intention: ‘to prevent the reintegration of’ Soviet sphere of influence” (White 2011).*

Thus, fundamentalist Nationalists took the initiative to emphasize on a multipolar world and started seeking support of those who reject the dominance of the U.S. The so-called ‘benign empire’ and ‘hegemony of one’ or ‘unipolarity’ had become the main focus of this approach.

## Security Concerns of the Russian Federation

In this backdrop, it is clear that various security concepts and policy drafts of the Russian Federation are also important to understand the new foreign policy construct. Previous approach was seriously concerned with the extended territorial control and nuclear arsenals of the U.S. Though, it is not completely removed but diluted badly. Force structure and its requirements have been changed (Bassin 2008) due to end of the Cold War. The newly born state has to face newer challenges. It cannot force its legacy to rest in oblivion and move ahead with new concepts and values. It is still a great military power and holds potential to become unavoidable nation in the world system, which is fragile and facing unconventional problems. This situation has been supported by the Russian Military Doctrine which was approved on 2<sup>nd</sup> November 1993 (edict No. 1833)<sup>2</sup> and provides a glimpse of fragility as well as sense of insecurity to the nation. Therefore, the security dimension is an important part of the foreign policy construct. The document has mentioned various “basic existing and potential sources of external military danger for the Russian Federation” (Military Doctrine 1993) as following:

▪ <i>“the territorial claims of other states on the Russian Federation and its allies;</i>
▪ <i>existing and potential local wars and armed conflicts, particularly those in the immediate vicinity of the Russian borders;</i>
▪ <i>the possibility of the use (including the unsanctioned use) of nuclear and other types of weapons of mass destruction which a number of states have in service;</i>
▪ <i>the proliferation of nuclear and other types of weapons of mass destruction, their delivery systems, and the latest military production techniques in conjunction with the attempts by certain countries, organizations, and terrorist groups to realize their military and political aspirations;</i>
▪ <i>the possibility of strategic stability being undermined as a result of the violation of international accords in the sphere of arms limitation and reduction and of the qualitative and quantitative buildup of armaments by other countries;</i>
▪ <i>attempts to interfere in the internal affairs of and destabilize the internal political situation in the Russian Federation;</i>

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<sup>2</sup>“The Basic Provisions of the Military Doctrine of the Russian Federation” Boris Yeltsin approved in November 1993. <http://fas.org/nuke/guide/russia/doctrine/russia-mil-doc.html>

<ul style="list-style-type: none"> <li>▪ <i>the suppression of the rights, freedoms, and legitimate interests of citizens of the Russian Federation in foreign states;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>attacks on military installations of the Russian Federation Armed Forces deployed on the territory of foreign states;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>the expansion of military blocs and alliances to the detriment of the interests of the Russian Federation's military security;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>international terrorism</i>”(Military Doctrine 1993).</li> </ul>

The Russian Military Doctrine further “goes on to identify factors which help transform a military danger into an immediate military threat to the Russian Federation”:

<ul style="list-style-type: none"> <li>▪ <i>“the buildup of groupings of troops (forces) on the borders of the Russian Federation to the point where they disrupt the prevailing correlation of forces;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>attacks on facilities and installations on the state border of the Russian Federation and on the borders of its allies and the launching of border conflicts and armed provocations;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>the training of armed formations and groups on the territory of other states which are intended to be transferred to the territory of the Russian Federation and its allies;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>the actions of other countries which hinder the functioning of Russian systems for the support of the strategic nuclear forces and of state and military command and control of, above all, their space component;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>the introduction of foreign troops in the territory of neighboring states of the Russian Federation (if this is not connected with measures to restore or maintain peace in accordance with a decision of the UN Security Council or a regional organ of collective security with the agreement of the Russian Federation)” (Military Doctrine 1993).</i></li> </ul>

In this doctrine, regarding the nuclear weapons, it is said that Russia has the right to use these weapons for itself “in response to use of nuclear and other kinds of weapons of mass destruction against it and its allies, and in response to wide-scale aggression using weapons in situations critical to the national security of the Russian Federation and its allies” (Draft Russian Military Doctrine 2000). The limited use of these

weapons has been set out in the National Security Concept just four months earlier. In 1993, a major change has come in the use of nuclear weapons policy when going away from the past it was said that it could be used at the outset of the war; i.e. the first use of them<sup>3</sup>. However, previously it was restricted only to the severe attacks which threaten the sovereignty and survival of the state (Sokov 2004). It is also significant that for the first time it was acknowledged that some internal conflicts in the CIS region could spread the threat to Russia as well. More importantly, in the next doctrine ‘allies’ were not given significance; e.g. Serbia was being considered as an ally but was left out.<sup>4</sup> Hass (2004) rightly pointed out that weak and fading international security mechanism was considered as a destabilizing element by the policy makers of Russia.

However, the draft military doctrine document of 2000 updates the 1993 doctrine. The military security was acknowledged as “the sum total of forces, means and resources at its disposal”. It reiterates about threats and attempts to list all those factors which Russia has perceived as potential threats. It is concerned about the world system and its basic nature. Accordingly:

*“It states support for a multipolar world, in preference to a unipolar world dominated by a single superpower that is quick to resort to military force and bypasses the UN and other international security bodies when it feels like it. Russia's commitment to its nuclear deterrent is confirmed, but tempered by a no-first-strike policy and the stated desire for the eventual global abolition of nuclear weapons” (Military Doctrine 2000)<sup>5</sup>.*

The new doctrine identifies some basic external threats to the state as:

<ul style="list-style-type: none"> <li>▪ <i>“claims on the Russian Federation;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>in Russian Federation internal affairs;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>to ignore (or infringe on) Russian Federation interests in resolving international security problems and to oppose strengthening [of the Russian Federation] as one</i></li> </ul>

<sup>3</sup> “Until then, the official Soviet policy, which was set in the 1970s and confirmed in 1982, allowed for the use of nuclear weapons only in response to a nuclear attack”.

<sup>4</sup> Russia has considered Serbia as its ally due to reason of the Kosovo air campaign of the NATO in 1999 and left “allies” out.

<sup>5</sup> British Broadcasting Corporation, BBC Worldwide Monitoring - October 11, 1999; The “Draft Russian Military Doctrine” was approved on 21 April 2000 by the Russian President Vladimir Putin. Original source: 'Krasnaya Zvezda', Moscow, in Russian, October 9, 1999, pages 3,4. <http://fas.org/nuke/guide/russia/doctrine/991009-draft-doctrine.htm>

<i>of the influential centres of a multipolar world;</i>
<ul style="list-style-type: none"> <li>▪ <i>of armed conflicts, above all near borders of the Russian Federation and its allies;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>creation (build-up) of groupings of troops (forces) leading to a disturbance of the existing balance of forces near borders of the Russian Federation and of its allies and in seas adjoining their territory;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>of military blocs and alliances to the detriment of military security of the Russian Federation and its allies;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>of foreign troops (without UN Security Council sanction) to the territory of contiguous states friendly with the Russian Federation;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>equipment, support and training of armed units and groups on the territory of other states with the goal of redeploying them for operations on the territory of the Russian Federation and its allies;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>attacks (armed provocations) against Russian Federation military installations located on the territory of foreign states as well as against installations and structures on the Russian Federation State Border and on the borders of its allies;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>aimed at undermining global and regional stability, including by hindering the operation of Russian state and military command and control systems, systems supporting the functioning and combat stability of strategic nuclear forces, and missile attack warning, ABM defence, and space surveillance systems; [and hindering the operation] of nuclear munitions storage facilities, installations of atomic power engineering and of the atomic and chemical industry, and other potentially dangerous installations;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>(information-technical, information-psychological etc.) operations hostile toward the Russian Federation and its allies;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>discrimination against and suppression of rights, freedoms and lawful interests of Russian Federation citizens in foreign states;</i></li> </ul>
<ul style="list-style-type: none"> <li>▪ <i>terrorism” (Military Doctrine 2000).</i></li> </ul>

The new military doctrine of 2010 (February 5) had devised the national interests of Russia (Hass 2010) as:

- In the desire of expanding the circle of partner-states, the common interests was designed;
- Made focus on the formation of the Russian Federation Armed forces which might be used operationally outside of the



Russian territory for Russian interests and security and safety of its citizens as well as to maintain security and international peace;

- Focus was made on the formation and training of special armed forces to preserve economic interests of the Russian Federation.

The new doctrine has defined military threats and dangers to Russia as:

- *“World development at the present stage is characterized by a weakening of ideological confrontation, a lowering of the level of economic, political, and military influence of certain states (groups of states) and alliances and an increase in the influence of other states with ambitions for all-embracing domination, multipolarity, and the globalization of diverse processes”* (Military Doctrine 2010).
- *“Many regional conflicts remain unresolved. There is a continuing tendency towards a strong-arm resolution of these conflicts, including in regions bordering on the Russian Federation. The existing international security architecture (system), including its international-legal mechanisms, does not ensure equal security for all states”* (Military Doctrine 2010).
- *“That said, despite the decline in the likelihood of a large-scale war involving the use of conventional means of attack and nuclear weapons being unleashed against the Russian Federation, in a number of areas military dangers to the Russian Federation are intensifying”* (Military Doctrine 2010).

While, military doctrine further stated about the major external military threats as: “a) the desire to endow the force potential of the North Atlantic Treaty Organization (NATO) with global functions carried out in violation of the norms of international law and to move the military infrastructure of NATO member countries closer to the borders of the Russian Federation, including by expanding the bloc; b) the attempts to destabilize the situation in individual states and regions and to undermine strategic stability; c) the deployment (buildup) of troop contingents of foreign states (groups of states) on the territories of states contiguous with the Russian Federation and its allies and also in adjacent waters; d) the creation and deployment of strategic missile defense systems undermining global stability and violating the established correlation of forces in the nuclear-missile sphere, and also the militarization of outer space and the deployment of strategic nonnuclear precision weapon systems; e) territorial claims against the Russian Federation and its allies and interference in their internal affairs; f) the proliferation of weapons of mass destruction, missiles, and missile technologies,

and the increase in the number of states possessing nuclear weapons; g) the violation of international accords by individual states, and also noncompliance with previously concluded international treaties in the field of arms limitation and reduction; h) the use of military force on the territories of states contiguous with the Russian Federation in violation of the UN Charter and other norms of international law; i) the presence (emergence) of seats of armed conflict and the escalation of such conflicts on the territories of states contiguous with the Russian Federation and its allies; j) the spread of international terrorism; k) the emergence of seats of interethnic (interfaith) tension, the activity of international armed radical groupings in areas adjacent to the state border of the Russian Federation and the borders of its allies, the presence of territorial contradictions and the growth of separatism and violent (religious) extremism in individual parts of the world” (Military Doctrine 2010).

<b>Foreign energy policy -- Consideration of Russia’s national interests in the context of the developing system of world energy markets operation</b>		
<p>Development of the concept and program of the energy markets reorganization for reflecting fundamental factors of the demand and supply and decreasing the role of short- term factors and speculative behavior. Elaboration of initiative proposals for updating the existing and formulating new international legal documents in the energy sector, including development of internationally-recognized rules of transit and establishment of the mechanism for transit risks insurance</p>	<p>Development and co-ordination of the documents on the rules of energy markets functioning (in the format of corresponding international organizations), the rules of energy companies access to the infrastructure and activity types on the world energy markets (both on bilateral and multilateral basis)</p>	<p>Unification and harmonization of the fundamental regulatory and legal principles of the national legislation and international law, regulating cooperation on the world energy markets</p>
<p>Settlement of the legal status problems in disputed regions, including Arctic, Caspian and South China Seas, etc. Complex monitoring of the international energy</p>	<p>Elaboration of the framework system of legal regulations in the energy sector, aimed at increasing the stability of the world energy</p>	<p>Establishment of effective system of legal instruments ensuring the balance of interests of the countries which export, import and provide transit of</p>

<p>cooperation. Overcoming of negative consequences of the world economic crisis and decreasing the risks on the energy markets</p>	<p>markets</p>	<p>fuel and energy resources</p>
<p><b>Social policy in the energy sector-- Provision of reliable energy supply to the country's population at socially affordable prices</b></p>		
<p>Increase in the reliability of energy supply to the population, communal housing and budgetary institutions based on the following: Improvement of the regulatory and legal framework aimed at increase in the responsibility of energy supply to the population; elimination of departmental energy supply to the population at the expense of large industrial enterprises and organizations. Enhancement of the regulation of retail energy prices (gas, electricity, heating) for the population taking into account development of the system of targeted social assistance and increasing quality of the system rationing the consumption of fuel and energy resources used by the population for communal needs</p>	<p>Establishment of efficient and transparent system of mechanisms controlling and regulating growth of energy prices for the population</p>	
<p>Minimization of the energy failures and cutoffs number in the communal housing Decreasing the share of household's expenditures on energy (gas, electricity, heating) to the level not exceeding 15%</p>	<p>Decreasing the share of household's expenditures on energy (gas, electricity, heating) to the level not exceeding 12–13%</p>	<p>Decreasing the share of household's expenditures on energy (gas, electricity, heating) to the level not exceeding 8–10%</p>

### **Foreign Policy Concept (1993)**

The new foreign policy approach had shown a breakup from the past in 1993. The spirit of empire took a back seat at least in the draft of foreign policy concept if not in the minds of older generation. Economy along with domestic socio-political and developmental issues got prominence in debates and policy making. Democratic values and structure of economy have become vital elements to establish new relation with the West. Yeltsin found himself in a new legislature which was different from silent and disciplined hierarchical monolithic structure (Ivanov 2001; Hass 2003; Lomagin 2005). However, as Nicholson (2001) points out, the new policy draft proclaims Russian great power status while deciding its priorities. It makes clear that territorial unity and integrity of the state is paramount which would be protected through diplomatic means. Border security and sovereignty got prominence. However, ethnic and linguistic Russians abroad were also given attention in the draft foreign policy making. External assistance to establish market economy in Russia and providing conditions to set democratic reforms were other major priorities. Russian intension to integrate CIS region with the Russian mechanism through economic prudence and entrepreneurship was a regional response to newly independent states. It was focused on Central Europe and those countries as well, which had been fighting with the similar challenges. This whole exercise and effort never missed even for once the thought of a great power role and status for Russian state in world politics.

In this background of foreign policy intentions, Vladimir Putin's "Russia At The Turn Of The Millennium" speech<sup>6</sup> was delivered on 29<sup>th</sup> December 1999 (available draft of speech is dated Dec. 30<sup>th</sup>). Other than various issues touched during the speech; he had given a glimpse of his priorities and primary directions to be followed during his tenure as the President of Russian state (Nalecz 2006). It highlighted the "New Possibilities and New Problems" of Russia at the turn of the millennium.

He focused on "deep and quick changes in the life of humankind connected with the development... (of) post-industrial society". He had shown his concerns on the new problems and possibilities, modern situation regarding Russian state and society, need to learn some lessons from the past to shape the worthy future. He further highlighted

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<sup>6</sup> Putin's Millennium Speech <http://pages.uoregon.edu/kimball/Putin.htm>

the Russian idea and gave emphasis on “the main social sections and political forces (which) have different basic values and fundamental ideological orientations”. He recalled the situation after the Great revolution of October 1917 and compared it with the post 1990s circumstances. He said that "state ideology advocated by some politicians, publicists and scholars is not quite appropriate. It creates certain associations with our recent past. Where there is a state ideology blessed and supported by the state, there is, strictly speaking, practically no room for intellectual and spiritual freedom, ideological pluralism and freedom of the press, that is, for political freedom”. He declared himself as “against the restoration of an official state ideology in Russia in any form”. He focused on the “supra-national universal values which are above social, group or ethnic interests”. However, he did not forget to value the traditions of Russia. he reminded the masses nationalism and patriotism and stated that “Patriotism is a source of the courage, staunchness and strength of our people. If we lose patriotism and national pride and dignity, which are connected with it, we will lose ourselves as a nation capable of great achievements”. It was not surprising to focus on state and statism due to his background in security services. He was intended to establish a strong state with liberal values like Britain and the United States.

He further argued that “our state and its institutes and structures have always played an exceptionally important role in the life of the country and its people. For Russians a strong state is not an anomaly which should be got rid of. Quite the contrary, they see it as a source and guarantor of order and the initiator and main driving force of any change”. He said that strong state does not necessarily mean a totalitarian state. His strong state does “value the benefits of democracy; a law based state, and personal and political freedom”. However, “at the same time, people are alarmed by the obvious weakening of state power. The public looks forward to the restoration of the guiding and regulating role of the state to a degree which is necessary, proceeding from the traditions and present state of the country”. He believes that “even the most correct economic and social policy starts misfiring while being realized due to the weakness of the state power, of the managerial bodies”. He showed his faith in the state-policy mechanism to keep Russia’s growth and recovery constant. He made strong emphasis on building a democratic state which was in turn shown as the necessity of a proven and long lasting political order. He said:

*“Russia needs a strong state power and must have it. I am not calling for totalitarianism. History proves all dictatorships; all authoritarian forms of government are transient. Only democratic systems are intransigent. Whatever the shortcomings, mankind has not devised anything superior. A strong state power in Russia is a democratic, law based, workable federative state”.*

His thoughts on economy look apparently very progressive and linked with the need of the hour. He wanted to build an economic system where public and private involvement should build the nation and a new economic structure. He was in favour of encouraging investments and combining the “market mechanisms with measures of state guidance... (as well as) target oriented loan and tax instruments and the provision of privileges against state guarantees (which in turn) would ensure an optimal balance of all economic forms of management”. He opined that:

*“Russia needs to form a wholesome system of state regulation of the economy and social sphere. I do not mean to return to a system of planning and managing the economy by fiat, where the all pervasive state was regulating all aspects of any factory's work from top to bottom. I mean to make the Russian state an efficient coordinator of the country's economic and social forces that balances out their interests, optimizes the aims and parameters of social development and creates conditions and mechanisms of their attainment... While setting the scale and planning mechanisms for the system of state regulation, we must be guided by the principle: The state must be where it is needed and as it is needed; freedom must be where it is needed and as it is required”.*

In his opinion, these efforts could “integrate the Russian economy into world economic structures”. Furthermore, He did not forget the Russian endowments and acknowledged that Russia has vast reserves of natural resources and “country has a worthy future in store for it. (It) buttress the export possibilities of the fuel and energy and raw materials complexes”. He pointed out that “we can pin hopes for a worthy future only if we prove capable of combining the universal principles of a market economy and democracy with Russian realities”. His understanding for westernization was indigenous and reflected in the context as “ Russia's westernization must be a westernization of Russia's own choosing and carried out in Russia's own way which is generally called as the “Third way” (Neumann 2005). In this context, he said that “we can hope for the future if we can organically synthesize the universal principles of market economy and democracy with the Russian reality” (Prozorov 2004). And as far as Russian reality is concerned, Putin acknowledged that “Russia is not a state symbolizing top standards of economic and social development now. And second, it is facing difficult economic and social problems”. He was not shy to

express his thoughts on the real situation in Russia. A backward and lagging economy vis-à-vis world market and need for “reviving a sense of nationhood in the post Soviet Russia”, significance of integrating domestic economy with the world market through WTO were some other issues in his speech (Nicholson 2001). At that time, a message was taken that Putin would primarily focus on three subjects; first, domestic consolidation; second, Russian national interests; and third economy and pride of the nation. These three would drive the foreign policy of Putin in years to come. This made Sakwa to refer that “Russia was and will remain a great power. It is preconditioned by the inseparable characteristics of its geopolitical, economic and cultural existence” (Sakwa 2004).

### **Foreign Policy Concept (2000)**

Since Russia was seeking a great power status; it started to count on multilateral institutions. United Nations in general and its Security Council particularly got focus and significance in the draft foreign policy concept of 2000. It was acknowledged as an alternative vis-à-vis unipolar world headed by the U.S. (Legvold 2007). The draft policy has stated that “Russia shall seek to achieve a multi-polar system of international relations that really reflects the diversity of the modern world with its great variety of interests”. Russia had no other option but to focus on a constructive substitute model of the international system to challenge the hegemony of the United States. The concept note states that “a mutual interest is the guarantee of effectiveness and reliability of such a world order. The world order of the XXI century must be based on mechanisms of collective resolution of key problems, on the priority of law and broad democratization of international relations”.

It has been stated that there are “new challenges and threats to the national interests of Russia are emerging in the international sphere. There is a growing trend towards the establishment of a unipolar structure of the world with the economic and power domination of the United States. In solving principal questions of international security, the stakes are being placed on western institutions and forums of limited composition, and on weakening the role of the U.N. Security Council”.

It is for the first time a foreign policy draft stated that Russia requires to dominate neighboring states. It implies that Russia had made up its mind to deal with the former

Soviet republics by adopting a policy of carrot and sticks. It was a policy of building a belt of favourable neighborly states around its borders. This approach was opted with the understanding that “NATO’s present-day political and military guidelines don not coincide with security interests of the Russian Federation and occasionally direct contradict them. This primarily concerns the provisions of NATO’s new strategic concept, which do not exclude the conduct of use-of-force operations outside of the zone of application of the Washington Treaty without the sanction of the UN Security Council”. Russia as “the strongest Eurasian power” emphasized in its foreign policy draft that “the (U.S.) strategy of unilateral action may destabilize the world because the use of force represents the basis for international conflict” (Cohen 2007). Now Russia was not ready to accept the hegemony in the future world order.

### **Foreign Policy Concept (2008)**

A newer foreign policy draft was adopted on July 12, 2008. Russia was acknowledged as a “great power” having a larger role in regional as well as global affairs. It was shown as a responsible and concerned global player of a new world order. Draft has focused Russian concerns about the Euro-Atlantic security. It emphasized to build a new “regional collective security and cooperation system” which would be different from the existing one. It rejects any future expansion (plan) of the NATO in all possible terms. Russia had particular concerns regarding Georgia and Ukraine vis-à-vis any further expansion of the western forces. It vehemently opposes any military presence of NATO forces in the Black Sea.

Russia further opposes any plan to build a missile-shield by the United States in the European continent (Hass 2009). The new Foreign Policy Concept of the Russian Federation (2008) focuses on building a new world order (Kosyrev 2008). Draft concept has acknowledged “the need for the international community to develop a common vision of our era (which) is becoming ever more urgent, which could only be achieved through open and honest substantive discussions of the problems confronting the mankind. What is needed is to provide favorable conditions for scientists to carry out their professional work with a view to establishing the historical truth and preventing historical issues from becoming an instrument of practical policy”. It is also stated that “Russia will continue to seek the strengthening of principles of multilateralism in international affairs, development of and architecture



of international relations that would be based on the recognition by the international community of the principles of security indivisibility in the modern world and would reflect its diversity” (Foreign Policy Concept 2008).

### **National Security Concept (1997)**

The new concept of National Security of the Russian Federation highlights four major subjects; i.e. “Russia in the world community, the national interests of Russia, threats to the national security of the Russian Federation, and ensuring the national security of the Russian Federation”. In effect, new Russia was struggling at various fronts simultaneously. If at domestic front a call for social change was of great significance; foreign and security policy priorities had equally crucial challenges. In addition, economy of the day was frustrating enough to policy makers. Interestingly, all these issues were not confined in a water-tight compartment. They were intertwined and impacted each other but difficult to know in which direction. Knowing these directions was significant for policy makers to construct a new national grand strategy where securing national territorial integrity and reviving international status in world system were two major objectives. Various alternative ways have been sought to achieve these two objectives since the initiation of a new state but 1992 (Godzimirski 2000) onwards in particular. However, internal threats found significant place in the national security strategy.

Nikita Lomagin compares the Foreign Policy Concept of 1993 and National Security Concept of 1997. He pointed out continuing concerns and repetition of priority issues of Foreign Policy Concept into the National Security Concept. Though, internal security threats were given more emphasis and acknowledged as major concerns to Russian security (Lomagin 2005). Since the collapse of Soviet Union, Russia experienced an atmosphere of confusion and disorder in all walks of life and so was mentioned in the draft of National Security Concept. The period of 92-97 was described as unstable from internal as well as external viewpoint. If power struggle between legislative and President along with the first Chechnya war in 94-96 are internal examples of crisis; civil war like situation in the Commonwealth of Independent States represents the external standpoint of threat perceptions. Neighboring states in the CIS region presented direct threats to the Russian territorial integrity. If Russia was concerned with the Balkan crisis, its neighboring states such

as Tajikistan, Georgia, and Moldova also created tensions for the policy makers. As mentioned in the draft concept of National Security, Russian government had no option but to pay grave attention to the developments in these neighboring states. These concerns and unstable conditions created new obstacles in the development of Russian “security policy into a National Security Concept (Hass 2003). The “Russian Federation National Security Blueprint” (17 December 1997) under the head of “Internal Political Sphere” mentions that:

*“The coordination of the interests of the peoples inhabiting the country, the organization of comprehensive cooperation among them, and the implementation of a responsible and balanced state nationalities policy are extremely important tasks whose solution will make it possible to ensure internal political stability and Russia's unity. The comprehensive resolution of these tasks must form the basis of internal state policy and ensure the development of the Russian Federation as a multinational democratic federative state.*

*The Russian Federation's national interests in the sphere of the fight against crime and corruption require the consolidation of the efforts of society and the state, the sharp restriction of the economic and socio-political basis of these illegal phenomena, and the elaboration of a comprehensive system of legal, special, and other measures in order to put an effective stop to crimes and offenses, ensure that the individual, society, and the state are protected from criminal encroachments, and create a system for monitoring the level of crime. The efforts of society and the state should be directed toward forming a system of effective preventive social measures and raising law-abiding citizens”<sup>7</sup>. (“Russian National Security Blueprint-17Dec.1997; Rossiiskaya Gazeta, 26 Dec 1997 pp 4-5 \ FBIS-SOV-97-364, 30 Dec 1997”.*

It is also stated that state and society should make an effort to build an effective system where preventive social measures should work and generate a law abiding citizen. Interestingly, though military power is essential for external territorial threats, however, nowadays, it is no less significant for internal matters as well. It is not much difficult to understand the use of force in border areas; however, internal insurgency also requires these forces to curb the menace of extremism or terrorism. Therefore, worth of force has not been left aside in this policy draft and it has been underlined that military power still retains its significance in the world system. The draft policy characterized the current international situation primarily as “strengthening of trends toward the formation of a multi-polar world”.

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<sup>7</sup> “Russian National Security Blue Print:<http://www.fas.org/nuke/guide/russia/doctrine/blueprint.html>”

However, in terms of state, the interests are well attached with “the constitutional system, the sovereignty and territorial integrity of Russia, the establishment of political, economic, and social stability, the unconditional implementation of laws and the maintenance of law and order, and the development of international cooperation on the basis of partnership. *The aggregate of the basic interests of the individual, society, and the state determines Russia's national interests in the sphere of the economy, in the domestic political, international, defense, and informational spheres, and in the social sphere, spiritual life, and culture*”.

**“International Perspective of Russian National Security Blueprint (1997)”**

“The Russian Federation's national interests in the international sphere require the implementation of an active foreign policy course aimed at consolidating Russia's positions as a great power -- one of the influential centers of the developing multi-polar world. The main components of this course are:

- *the formation on a voluntary basis of an integration-oriented association of CIS member states;*
- *the development of equal partnership with the other great powers -- the centers of economic and military might;*
- *the development of international cooperation in combating transnational crime and terrorism;*
- *the strengthening of those mechanisms of collective management of world political and economic processes in which Russia plays an important role, and first and foremost the strengthening of the UN Security Council.*

An undoubted priority in Russia's foreign policy course is and will remain activities to ensure the inviolability of borders and the territorial integrity of the state and to protect its constitutional system against possible encroachments by other states.

The realization of Russia's national interests in the international sphere is largely determined by the nature of relations with the leading powers and integration-oriented associations of the world community. The development of equal partnership relations with them accords with the Russian Federation's status and its foreign policy interests and is intended to strengthen global and regional security and create favorable conditions for our country's participation in world trade and in cooperation in the scientific-technical and credit and financial spheres.

It accords with Russia's national interests to develop dialogue and all-around cooperation with the countries of Central and Eastern Europe, America, the Near East, West Asia, Africa, and the Asian- Pacific region.

Russia's national interests in the international sphere also include the protection of the life, dignity, and internationally recognized civil rights and freedoms of citizens of Russia and our compatriots abroad.” (“Russian National Security Blueprint-17Dec.1997”).

### **“Foreign Policy Perspective of Russian National Security Blueprint (1997)”**

- “The pursuit of a foreign policy aimed at asserting equal partnership between world community countries and at stepping up their cooperation is a most important component in ensuring the Russian Federation's national security.”
- “Russia does not intend to enter into confrontation with any state or alliance of states whatsoever, nor does it pursue hegemonistic or expansionist goals. As an influential Eurasian power, it will support relations of partnership with all interested world community countries.”
- “The Russian Federation's foreign policy gives priority to ensuring the most important national interests, developing Russia's relations with leading states in the world, comprehensive cooperation and integration within the CIS framework, organizing effective bilateral and multilateral cooperation within the framework of the Union of Belarus and Russia and with the parties to the Treaty Between the Russian Federation, the Republic of Belarus, the Republic of Kazakhstan, and the Republic of Kyrgyzstan on the Deepening of Integration in the Economic and Humanitarian Spheres.”
- “The deepening and development of relations with CIS member states is a most important factor promoting the settlement of ethno-political and inter-ethnic conflicts, ensuring socio-political stability along Russia's borders, and ultimately preventing centrifugal phenomena within Russia itself.”
- “Russia is also interested in fully equal participation in world, European, and Asian economic and political structures. Therefore, in its striving for mutually advantageous cooperation, the Russian Federation will continue to develop constructive partnership with the United States, the EU, China, Japan, India, and other states. This is in line with the Russian Federation's political and economic interests and will ensure an opportunity for Russia's full-scale inclusion in all organizations and institutions for collective management of global political processes.”
- “The creation of a model for ensuring global, regional, and sub regional security geared to the 21st century and based on the principles of equality and indivisible security for all must become an absolute condition for the implementation of Russia's foreign policy efforts. This presupposes the creation of a fundamentally new system of European-Atlantic security in which the OSCE will play a coordinating role; the stepping up of efforts to create multilateral structures ensuring cooperation in the sphere of international security in the Asia-Pacific region and South Asia; Russia's active participation as permanent member of the UN Security Council in the settlement and prevention of regional crises and conflicts; further improvement of the regime of international arms control and non-proliferation of weapons of mass destruction and their delivery vehicles; and firm protection of the legitimate rights and interests of Russian citizens living abroad in strict compliance with the norms of international law.”
- “One important avenue for the Russian Federation's activity to ensure its national security in the foreign policy sphere is to assist in the settlement of regional and local conflicts through peace-keeping activity.”

- “In this process it is necessary to make maximum use of collective efforts along this avenue by the CIS, the United Nations, and the OSCE in the long term.”
- “Russia will firmly and consistently honor its commitments in the sphere of reduction and elimination of weapons of mass destruction and conventional armaments, will implement measures to strengthen confidence and stability and to ensure international monitoring of deliveries of military technologies and dual-purpose technologies, and will assist in the creation of zones free from weapons of mass destruction.”
- “The Russian Federation will also direct its efforts in ensuring national security in the foreign policy sphere into resolving problems of international and economic cooperation, first and foremost from the viewpoint of strengthening its positions in international financial and economic organizations” (“Russian National Security Blueprint-17Dec.1997).

### **Economy in Transition**

The collapse of Soviet Union gave birth to a new socio-political and economic structure in Russia. The most important and inspiring aspect of this change was optimism vis-à-vis western values. People were hoping to integrate Russian economy with the global market. Potential integration with the market economy had given high hopes for growth (Braguinsky & Myerson 2007) and sustainable development ahead of transition (Sanchez-Andres & Garcia-Testal 2008).

Liberal market values were getting prominence. Hope for democratic structure and open market swayed the masses (Hakamado 1999). The reality of integrating Russian economy with the market and building a new political system was far away from euphoric thoughts of many policy makers. The integration was further seen as the beginning of true European civilization in Russia. A big chunk of policy makers thought that communism was going to be rooted out from all walks of life very soon. They were further looking forward to achieve an active membership in various international agencies due to adopting new state value system. Their most significant hope was to be a part of “the single monetary system” (Robinson 1999). These integrationists laid down their basis of approach in the national interests along with realizing economic independence.

This initial thought process of Russian economic reformers was viewed by some as “revolutionary romantic” efforts<sup>8</sup> (Ulyukaev 1996). The transitory phase does not show any encouraging sign and overall good image of the Russian economy. Various economic indicators demonstrated only sense of anxiety and uneasiness. In this context, the following table (Dyker 2000; Sevim 2013) reflects a grim situation of some economic fundamentals from where reforms were started till roughly the ascendancy of Putin in power. Economic indicators from 1992 to 1998 and then 1998 to 2007 show the reality of many ups and down in the development of Russian economy. Poor indicators before the ascendancy of Putin are remarkable in the history of Russia.

### Economic Indicators

	1992	1993	1994	1995	1996	1997	1998
GDP (% change)	-14,5	-8,7	-12,7	-4,2	-3,5	0,8	-4,6
Gross fixed investment (% change)	-45	-25,8	-26	-7,5	-18,5	-5	-6,7
National saving ratio (% of GDP)	29	29,4	27,9	24,8	25,4	21,9	19,3
Budgetary balance (% of GDP)	-10,3	-7	-9,8	-5,4	-7,9	-7,1	-5
Balance of trade (\$ billion)	5,5	10,8	17,8	20,8	23,1	17,5	6,6
Balance of payments, current account (\$ billion)	4,2	6,4	8,9	7,9	12	3,6	-5,6 (9months)
Rate of inflation (Annual average %)	1,353	876	307,4	197,4	47,6	14,6	27,8

Source: Sevim (2013)

<sup>8</sup> “The First Program of Russian Economic Reforms which was a strategy document for achievement of economic independence of Russia was prepared in September – October 1991 at the Russian Soviet Federalist Socialist Republic (RSFSR) Council of Ministers state dacha... actual working on the new version of the program of Russian economic reforms thus began in April 1992” (Sevim 2013).

### Economic indicators: Domestic (1999-2007)

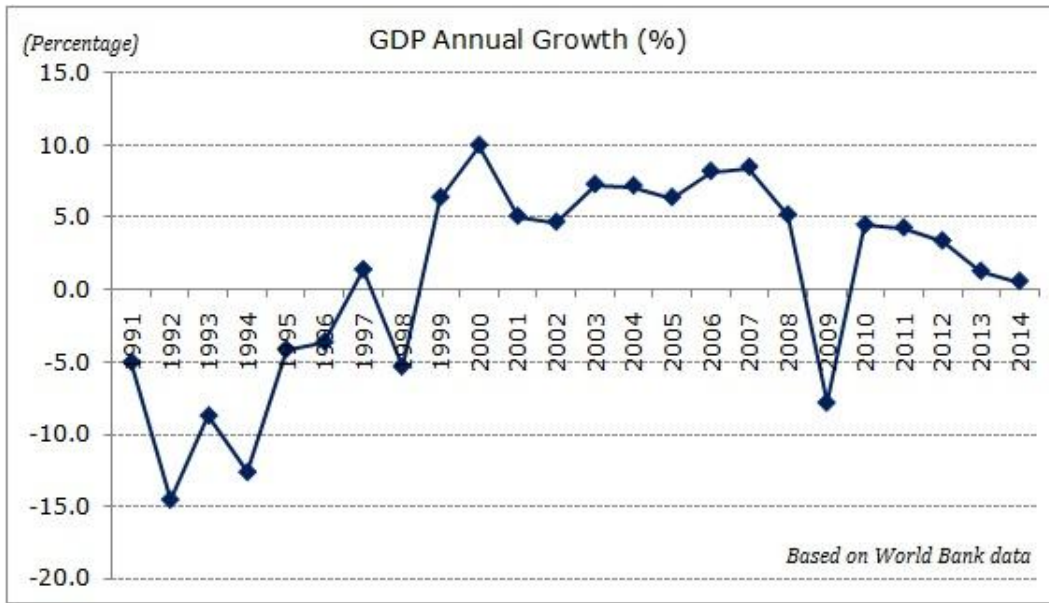
Year	Real GDP Growth	Consumer Price Index	Average Real Wages	Real Personal Disposable Income	Unemployment Rate
1999	6,4	85,7	-23,2	-8,8	12,6
2000	10	20,8	18	11,3	10,5
2001	5,1	21,5	19,9	8,7	9
2002	4,7	15,8	16,2	9,8	8,1
2003	7,3	13,7	9,8	13,5	8,6
2004	7,2	10,9	10,3	8,6	8,2
2005	6,4	12,7	12,6	11,5	7,6
2006	6,7	9,7	14,4	10,2	7,2
2007	8,1	9	16,2	12	6,2

Source: Cooper 2008; Sevim 2013

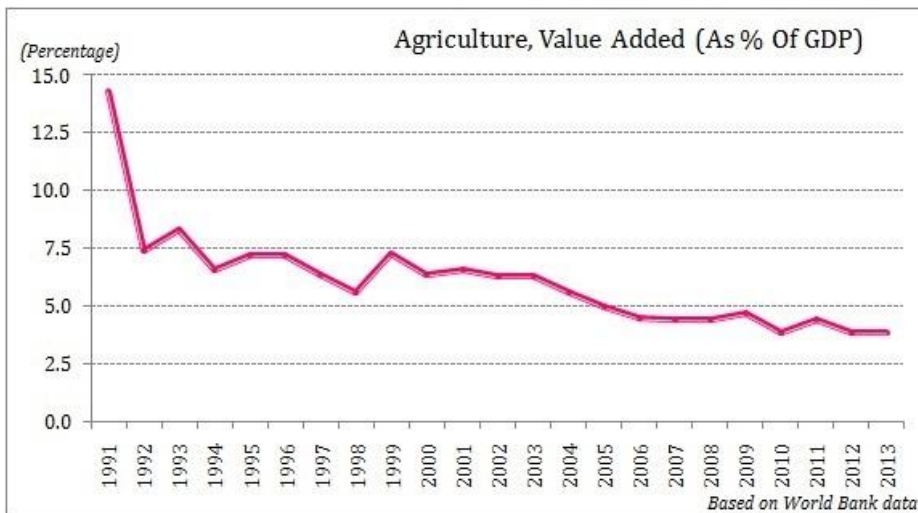
### Macroeconomic Indicators of Russia's Development

	2008	2009	2010	2011	2012	2013*	2014*
GDP at current prices, USD billion	1657.7	1224.2	1523.3	1897.9	2012.8	2112.9	2192.7
GDP growth, %	105.2	92.2	104.5	104.3	103.4	101.8	103.0
Average annual Consumer Price Index, %:	114.1	111.7	106.9	108.4	105.1	106.7	105.6
Industrial Production Index, %:	100.6	90.7	108.2	104.7	102.6	100.7	102.2
Growth of agricultural output, %	110.8	101.4	88.7	123.0	95.3	107.0	102.0
Economically active population (EAP), million	73.3	73.7	73.1	72.6	72.1	71.8	71.6
Unemployment, % of EAP	6.4	8.5	7.6	6.8	5.7	5.7	5.7
Exports, USD billion	471.6	303.4	392.7	515.4	528.0	511.4	506.2
Imports, USD billion	291.9	191.8	248.7	318.6	335.7	343.5	353.4

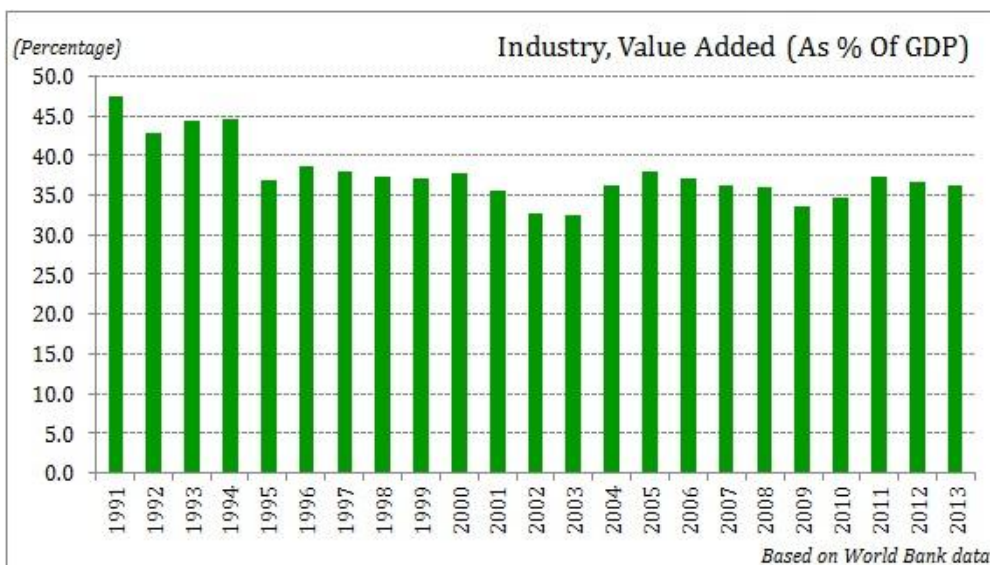
\* Estimate Source: Main indicators of the Ministry of Economic Development's "Socio-Economic Development Forecast Until 2016," prepared in September 2013, Bank of Russia



Bajpai(2015); <http://www.investopedia.com/articles/investing/120615/emerging-markets-analyzing-russias-gdp.asp>

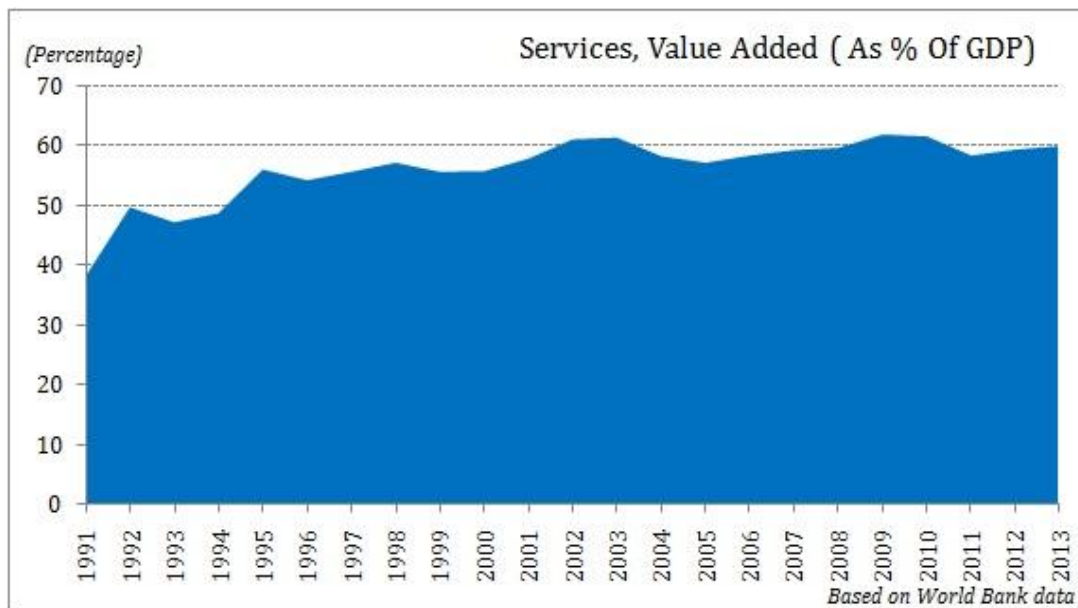


Bajpai (2015); <http://www.investopedia.com/articles/investing/120615/emerging-markets-analyzing-russias-gdp.asp>



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Bajpai (2015); <http://www.investopedia.com/articles/investing/120615/emerging-markets-analyzing-russias-gdp.asp>

It is argued that “lack of structural change” was one of the major problems during the transition period in Russian economy. Over the years banking system, investment, production and export structure remained stagnated. It has created complications during the transition of economy from planned and centralized to liberal market oriented. Constant decline in GDP and inflation which was always more than 10% added some more troubles. Cooper (2008) estimates that during the transition, Russia lost around 30% of real GDP which is comparable only with “the Great Depression of the 1930s in the United States” (Sevim 2013). The situation has provided sufficient ammunition to burst a catastrophic economic structure and devastating political system. The “national income had fallen by more than 11%, GDP by 13%, industrial production by 2.8%, agricultural output by 4.5%, oil and gas production by 11%, pig iron by 17%, and the output of the food industry by more than 10% (Ulyukaev 1996; Sevim 2013) in just a period of one year. Moreover, official figures were not reliable enough (White 2000). It was seen as an official and state sponsored statistical jugglery which was certainly not beyond doubts and suspicion. Foreign exchange along with gold reserves fell sharply. Historically, “for the first time in the entire period of existence of the Soviet state gold reserve was less than 300 tons; i.e. 289.6 tons on 1 January 1992... foreign debt amounted to 97\$ billion in 1992 to 152\$ billion in 1998. Russia's share of the world trade had fallen from 2.5 to 1.3% and ranked twelfth by the World Banks in 1997” (Ulyukaev 1996; White

2000; Sevim 2013). According to percentage of previous year, Elman calculates Russian industrial produce in between 1992-1999. It is given in the following table:

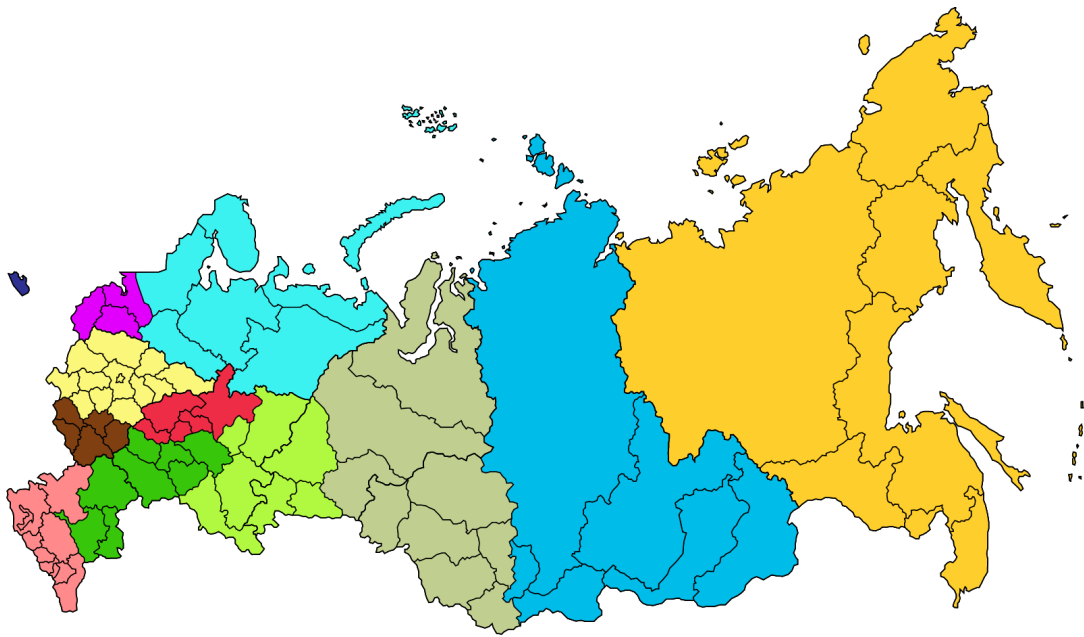
	1992	1993	1994	1995	1996	1997	1998	1999	1999 as % of 1991
Total of which	82	86	79	97	96	102	95	108	54
Extractive industries	89	90	90	99	98	103	N.A.	N.A.	N.A.
Manufacturing industries	81	85	76	96	95	102	N.A.	N.A.	N.A.
Electricity	95	95	91	97	98	98	98	100	75
Oil extraction	94	91	93	96	98	101	99	100	75
Gas	97	95	94	100	99	98	101	104	88
Ferrous metals	84	83	83	110	98	101	92	114	66
Non-ferrous metals	75	86	91	103	98	105	95	109	64
Engineering and metal-working	85	84	69	91	95	104	93	116	48
Light industry	70	77	54	70	78	98	89	120	17
Food industry	84	91	83	92	96	99	98	108	59

### Oil & Gas in Russian Economy Seven Federal Districts in Russia



Source: Gusev (2010); James Henderson (Jan 2011)

## The 12 Economic Regions of Russia



Source: James Henderson's: The Strategic Implications of Russia's Eastern Oil Resources (Jan 2011)

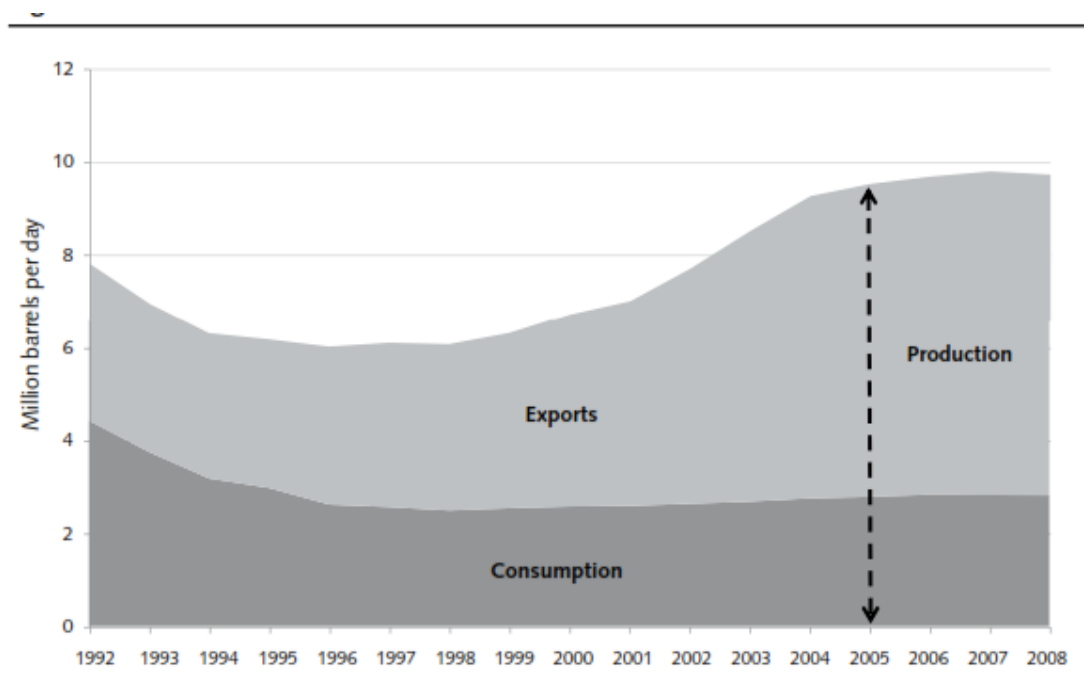
## Russia's oil and gas deposits



Source: Courtesy of Gazprom

<http://www.oilandgas360.com/russia-update-ukraine-related-sanctions-stopped-critical-og-investment/>

## Russian Petroleum Balance (1992-2008)



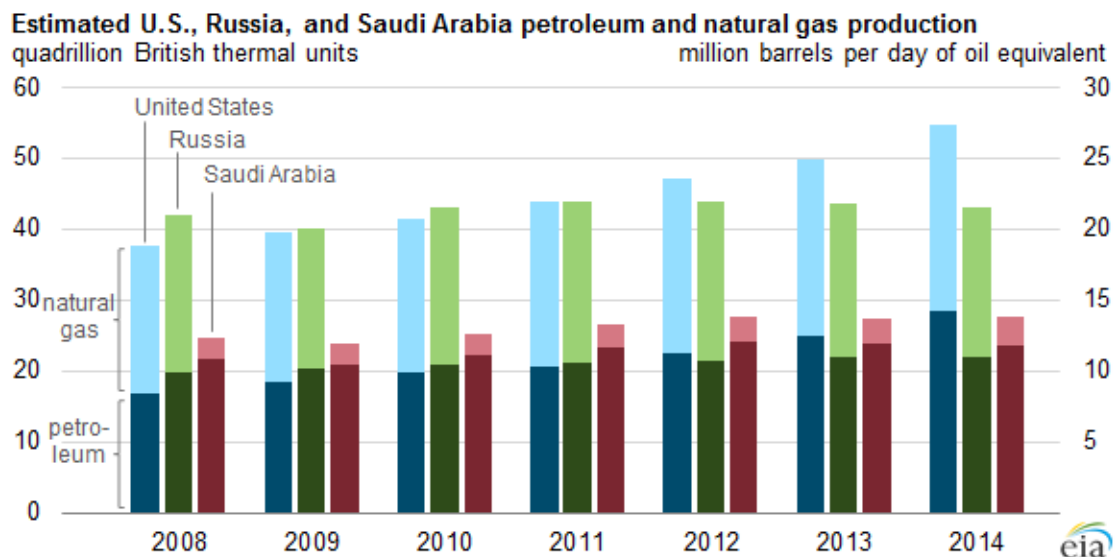
Source: Chart compiled using data from the Energy Information Administration (EIA) and Platts Oilgram. Please note that data for 2008 are provisional.

## Oil & Gas exports

	1998	1999	2000	2001	2002	2003
Oil and Gas Exports (USD billion)	27.9	31.0	52.8	52.1	56.3	74.0
Share of total exports%	32.2	36.6	46.1	46.1	46.4	49.2
Ratio to GDP %	10.4	15.8	20.3	17.0	16.3	17.1

Source: (“Oppenheimer and Maslichenko 2006; Sevim 2013”)

Russia is one of the largest reservoirs of oil and natural gas in the world. It exports largest volume of these products and compete for the first and second rank with the Saudi Arabia and the U.S. on a regular basis. A marginal difference of production and supply places its rank in three largest producers and exporter in the world energy market. At the end of very first decade of this century (2010), it had become the largest oil producer leaving Saudi Arabia on second place (BBC 2010).



<http://www.eia.gov/todayinenergy/images/2015.04.07/main.png>

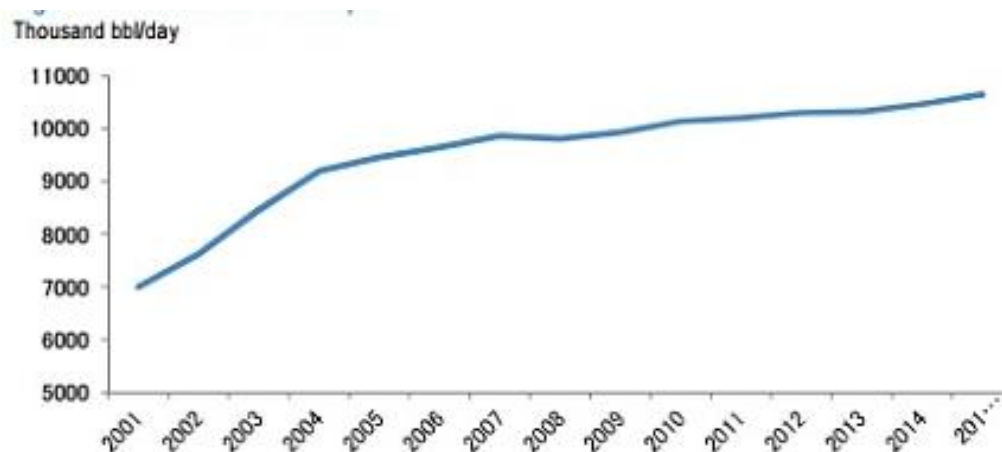
Along with other natural resources, oil and gas has been one of the most significant determinants of Russian economy. Export revenue of these two strategic commodities have provided strength to economy which in turn made Russia possible to come out of chaos and transition from Soviet era to the contemporary one. Oil and natural gas is responsible for the largest value creation in Russia's resource sector. Political economy of the country heavily depends on the transfer of its value creation to other segments of economy (Gaddy & Ickes 2005). In effect, this value transfer has supported and sustained various sectors throughout its recent past. Its financial assistance along with taking up the gauntlet of socio-economic development of the nation has remained the backbone of political system and economy. Roughly more than thirty percent of Russian revenues come from oil industry and sixty percent of exports linked with the oil prices (Erochkin 2005; Rutland 2006).

#### Russia: Energy Production & Exports

	Production		Exports (US\$billion)	
	2002	2020	2002	2020
Oil (million tons)	380	450-520	184	140-310
Oil Products (million tons)	135	146-166	75	30-50
Natural Gas (billion m3)	590	680-730	185	235-245
Coal (million tons)	253	375-445	47	55-60
Power Generation (bkWh)	892	1,215-1,365	14	30-75

Source: Ivanov 2003; Sevim 2013

## Russian crude oil output



Source: J.P. Morgan estimates, Infotek.

<http://www.telegraph.co.uk/finance/economics/11759391/Oil-and-gas-crunch-pushes-Russia-closer-to-fiscal-crisis.html>

## Russia: Oil Export (2000-2010)

Year	Total (m/t)	Value million USD	CIS (m/t)	Non CIS (m/t)	Average Price of Export USD/bbl
2000	144,4	25271,9	16,9	109,8	23,94
2001	164,5	24990,3	23,7	110,4	20,78
2002	189,5	29113,1	33	111,1	21,02
2003	228	39679	37,2	121,9	23,81
2004	260,3	59044	40,1	115,5	31,02
2005	252,5	83438	38	97,3	45,21
2006	248,4	102282,9	37,3	98,5	56,32
2007	258,6	121502,8	37,3	104,8	64,28
2008	243,1	161147	38,2	92,6	90,68
2009	247,5	100593,2	36,5	103	55,61
2010	256,7	135799,3	26,6	106,2	74,11

Source: "Russian Federal Customs Service and the Federal State Statistics Service"

### Russia: Natural Gas Exports (2000-2010)

Year	Total (bcm)	Value million USD	CIS (bcm)	Non CIS (m/t)	Average Price of Export USD/1000cm
2000	193,9	16644,1	134,0	59,9	85,84
2001	180,9	17770	131,9	48,9	98,25
2002	185,5	15897,3	134,2	51,3	85,69
2003	189,4	19980,9	142,0	47,3	105,51
2004	200,4	21853,2	145,3	55,1	109,05
2005	209,2	31670,5	161,7	47,5	151,36
2006	202,8	43806,2	161,8	41,0	216
2007	191,9	44857,4	154,4	37,5	233,66
2008	195,4	69107,1	158,4	37,0	353,69
2009	168,4	41971,4	120,5	47,9	249,27
2010	177,8	47739,3	107,4	70,4	268,48

Source: "Russian Federal Customs Service and the Federal State Statistics Service"

### Russian Crude Oil Exports by Port (Thousand barrels/day)

Port		2000	1999	1998
<b>Druzhba</b>	(Germany)	388	383	371
	(Poland)	357	290	272
	(Czech Republic)	74	97	106
	(Slovakia)	108	112	106
	(Hungary)	122	122	132
<b>Druzhba (Total)</b>		1049	1003	986
<b>Baltic Sea</b>		334	273	292
<b>Odessa</b>		51	111	165
<b>Tuapse</b>		114	103	123
<b>Novorossiysk</b>		699	603	600
<b>Grand Total</b>		2,247	2,093	2,166

Source: Petroleum Intelligence Weekly. Note: Baltic exports include Ventsils and Butinge.



### Russian Gas Exports (in bcm)

(in bcm)	2000	1999	% Change	Dec. 2000	Dec. 1999	% Change
Austria	5.1	5.4	(5.6)	0.5	0.5	0.0
Bosnia	0.3	0.2	50.0	0.1	0.0	0.0
Bulgaria	3.2	3.2	-	0.3	0.4	(25.0)
Croatia	1.2	1.2	-	0.2	0.4	(50.0)
Czech Rep.	7.5	7.8	(3.8)	0.6	0.7	(14.3)
Finland	4.3	4.3	-	0.5	0.6	(16.7)
France	12.9	13.4	(3.7)	1.2	1.2	0.0
Germany	34.1	34.9	(2.3)	2.7	3.2	(15.6)
Greece	1.6	1.5	6.7	0.2	0.1	100.0
Hungary	7.8	7.4	5.4	0.7	0.6	16.7
Italy	21.8	19.8	10.1	2.0	2.0	0.0
Macedonia	0.1	0.04	150.0	0.1	0.01	400.0
Poland	6.9	6.1	13.1	0.7	0.5	40.0
Romania	3.2	3.2	-	0.4	0.5	(20.0)
Slovakia	7.9	7.5	5.3	0.8	0.9	(11.1)
Slovenia	0.7	0.6	16.7	0.1	0.0	0.0
Switzerland	0.4	0.4	-	0.1	0.0	0.0
Turkey	10.3	8.8	17.0	1.1	0.8	37.5
Yugoslavia	1.2	1.1	9.1	0.1	0.0	0.0
<b>Total</b>	<b>130.3</b>	<b>126.8</b>	<b>2.8</b>	<b>12.1</b>	<b>12.5</b>	<b>(3.2)</b>

Source: PIRA Energy Group

The huge dependence of economy compels many to think that “the health of the country’s economy, national power, and influence in the world are directly linked to the performance of its oil and gas industry. It is ironic then, that peak oil and gas production in the USSR was reached in the late 1980s just as economic collapse brought political disintegration” (Chow 2004; Sevim 2013). It shows that oil and gas sector was the front driver to support Russia’s foreign policy as well. It has remained a responsible element for strengthening country’s status in world politics. In case of exporting countries of these commodities, high or low prices in an open market directly affects their foreign exchange reservoirs. In case of Russian energy sector, it was huge, innovative, efficient and professional but lacking market orientation and ill managed during the Soviet era. Its “central planning (Gosplan) production directives and investment constraints” were great barriers. After the disintegration, it was lagging behind in terms of capital investment, technology and of course international collaboration to compete in an open energy market (Hill & Fee 2002). Due to lack of funds in Russia, it was needed to attract foreign investments. However, in 1990s Russia was unable to do the same for developing its new oil and natural gas fields. Though, it is still required to maintain the current production level and its sustainability (Bayulgen 2006) in the long run.



It is natural and accepted phenomenon in world economy that fluctuation in the prices of energy resources are linked with the developments and taken as a major factor for recession or inflation. This link was experienced in 1974 and 1979 at a time when the world economy had shown a slowdown while inflation was out of control (Barrel and Pomerantz 2004). The empirical studies show that oil prices influence Russian GDP considerably. Estimates have shown that “permanent 10% increase in oil prices would, in the long run, lead to a 1.5-2% growth in GDP” (Beck et al 2007). While, “in the long run a 10% permanent increase (decrease) in international oil prices are associated with a 2.2% growth (fall) in the level of Russian GDP”. In this way, lower prices in the market could reduce the share in the total output and in turn may cause the decreasing fiscal revenue for the state exchequer (Cukrowski 2004; Sevim 2013). However, if on the one hand, Russian GDP has become gradually more and more dependent on world oil prices; its “growth dampening effect of an appreciating real exchange rate has also increased”. It results in “the cumulative effect of a 1% increase in oil prices on GDP, which takes into account the endogenous reaction of all the either variables, is estimated to be around 0.2% (Beck et al 2007). This proves a certain and comprehensive impact on Russian GDP growth.

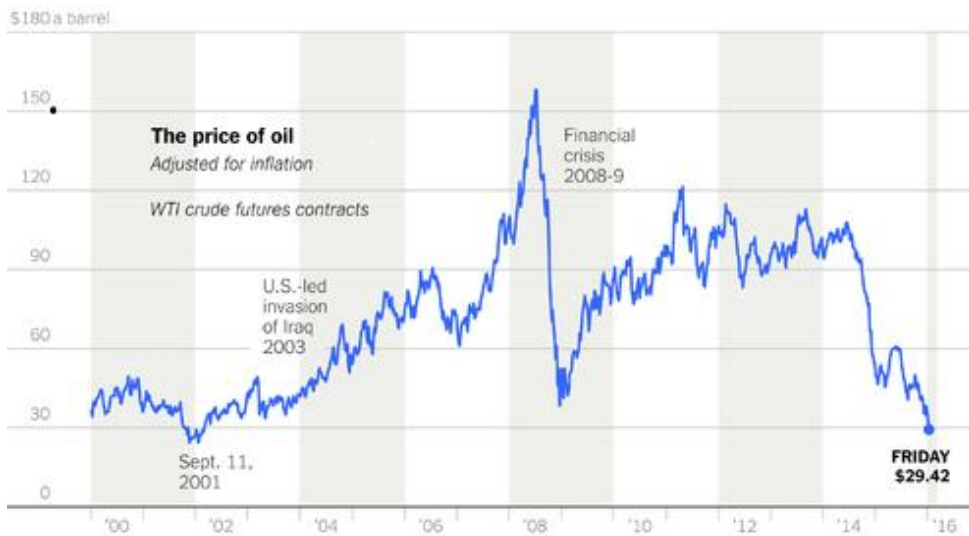
### Price of Oil



(“Real price of oil (in 2013 dollars), Jan 1947 to July 2013. Oil price: 1947-1989 based on West Texas Intermediate from [FRED](#); 1990-2013 based on Brent from [EIA](#), converted to current dollars using the [CPI](#)”).

<http://oilprice.com/Energy/Oil-Prices/Getting-Used-to-High-Oil-Prices.html>

“There was a sharp correction in the oil price in 2008, following the steady growth of the previous even years. In the course of half a year the price fell from a record high to a four year low amid the crisis in the world economy. Main factors behind oil price growth in the first half of the year were weakening of the dollar to other main currencies, OPEC’s policy of limiting supply, slower rates of production growth by independent producers, and significant growth of demand from countries in the Asia-Pacific region and the Persian Gulf. As a result, prices for oil reached a historical peak in July 2008, when the Brent price approached \$145 per barrel. However, oil prices fell dramatically in the second half of the year as the world economy entered the crisis. Brent prices had fallen to \$26.5 per barrel by the end of the year. As a result, despite the abrupt decline of prices in the second half of the year, the average price for Brent crude in 2008 was \$97.3 per barrel, which is 34.4% more than in 2007” (Legvold 2008).



“The New York Times| Source: Reuters; Bureau of Labor Statistics”  
[http://www.nytimes.com/2016/04/18/business/energy-environment/major-oil-exporters-fail-to-agree-on-production-freeze.html?\\_r=0](http://www.nytimes.com/2016/04/18/business/energy-environment/major-oil-exporters-fail-to-agree-on-production-freeze.html?_r=0)

**Oil Prices (January \$/barrel)**

Year	Price	Year	Price
2000	25,22	2006	63,57
2001	25,64	2007	54,3
2002	19,49	2008	91,92
2003	31,29	2009	44,86
2004	31,18	2010	76,37
2005	44,28	2011	96,29

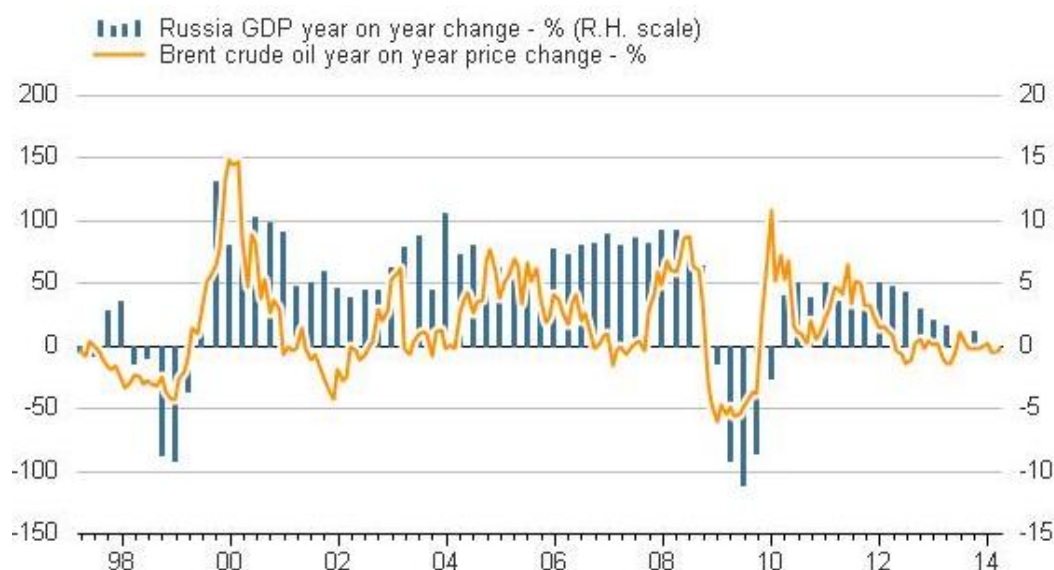
Source: Index Mundi

### Oil & Gas Sector: % of GDP Growth

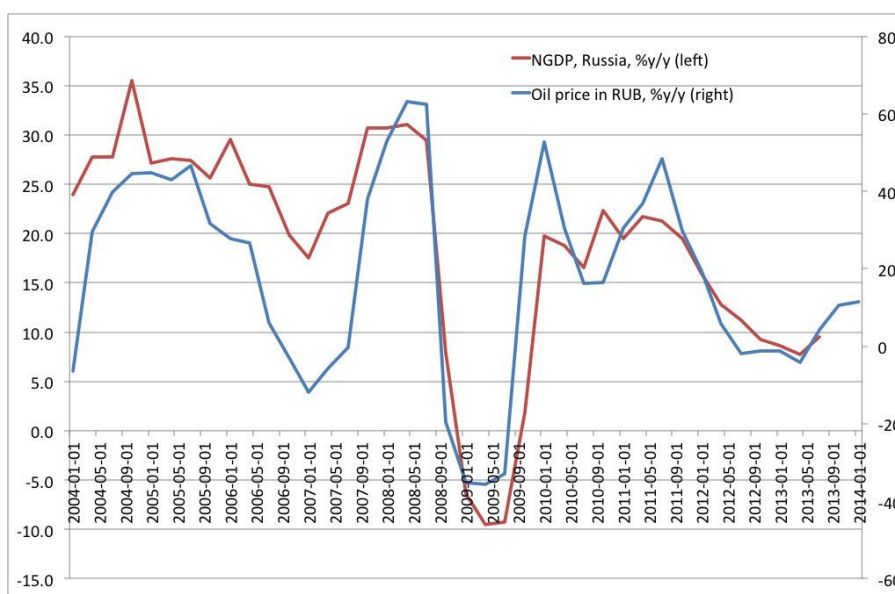
	2000	2001	2002	2003	2000-2003
Oil Sector	9,7	13,2	47,9	34,9	24,8
Gas Sector	-3,6	-9	1,7	5,9	-0,8
Oil & Gas Sector	6,1	4,2	49,6	40,8	24

Source: ("Oppenheimer and Maslichenko 2006; Sevim 2013")

### Russian GDP and the Oil Prices



Source: Thomson Reuters Datastream Reuters graphic/Vincent Flasseur 26/03/2014  
<http://seekingalpha.com/article/2287883-russian-stocks-jumping-on-the-bullish-bandwagon>



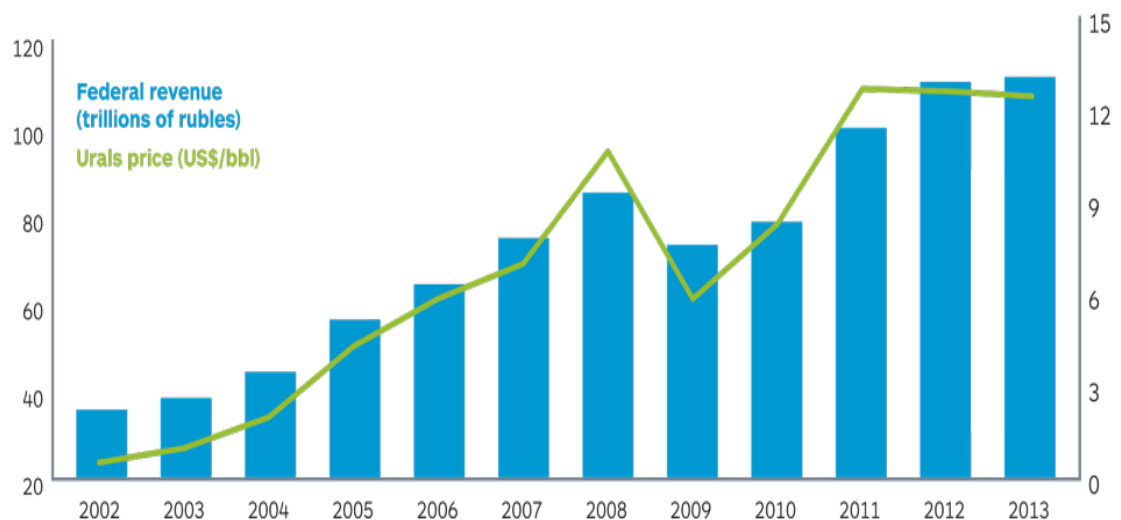
<https://politota.dirty.ru/ukraina-istoriia-dlinnogo-puti-k-ekonomicheskoi-katastrofe-3-702623/>

Though Russia was determined to diversify its economy and wanted to reduce dependence on oil and gas revenues, it was not succeeded for the same. However, in 2011, Putin said that “No matter how the situation developed in the global markets, for us it is obvious that Russia should move away from dependence on raw materials... The current favorable situation on our raw materials, hydrocarbons, metals, chemicals should not discourage anyone; serve as a pretext for delaying urgent problems”<sup>9</sup>. In spite of all these commitments, situation could not change substantially. Russian economic growth is still highly linked with the oil prices. It still has huge impacts on the well being of common residents. For example “in 2014, oil prices collapsed by 2 times, the ruble Depreciated by the same amount” (Politota2015).

In this background, it seems that economic recovery was possible only through the high prices of energy resources. Hydrocarbon prices have been sitting on the driver’s seat in Russia since long (Barnes 2005).

### **Russia’s federal government revenue gained from a decade of rising oil prices**

“Urals oil price a barrel, US \$ (left axis), Russian federal government revenue from oil, Russian rubles in trillions (right axis)”



Source: HIS and Russian Ministry of Finance <http://blog.ihs.com/q21-wheres-russia-heading>

<sup>9</sup> “[Putin's speech at the regional conference "United Russia"](http://ria.ru/economy/20110304/342203463.html#ixzz4Dodtino2)  
 РИА Новости <http://ria.ru/economy/20110304/342203463.html#ixzz4Dodtino2>  
 (04.03.2011) <http://ria.ru/economy/20110304/342203463.html>

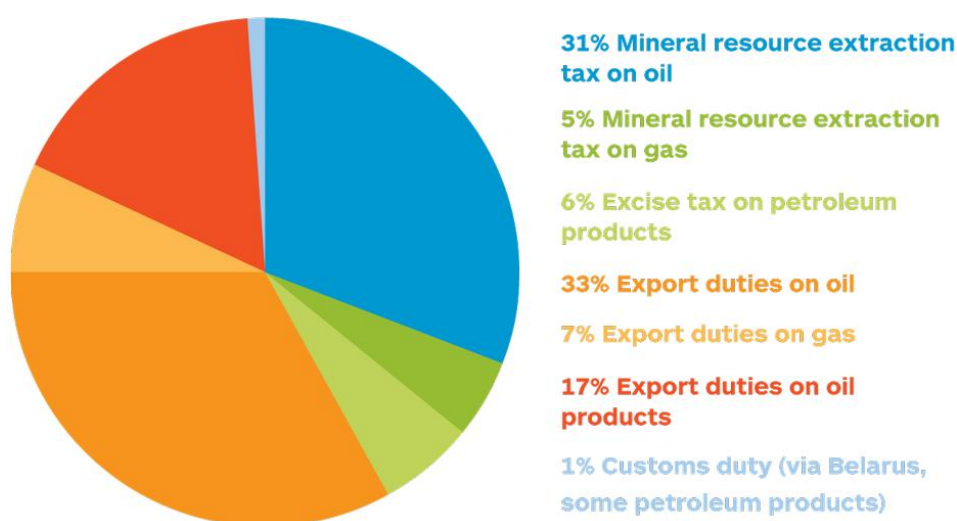
Tkachenko further adds that:

*“Public and private energy companies play a very important role in the economic transformation of many Russian regions to oil and/or gas fields located on their territories and their control of transportation means via their territories to export terminals...The huge inflow of hard currency into the state budget due to energy exports gives Moscow the opportunity to pay back all Soviet and post-Soviet foreign debts, to enlarge the country’s SF and the currency reserves of the Central Bank of Russia, to maintain a non-deficit budget for many years, and guarantee the stability of the ruble’s exchange rate. In one way or another, it can be said that the whole Russian population, its business community, and federal or regional authorities benefit from the national energy sector” (Tkachenko & Cooper 2008; Sevim 2013).*

As far as Russian Federal budget sources are concerned, revenue contributions from oil resources “rose from 9.1% of GDP in 1998 to 20% in 2002” (Barnes 2005). This shows that oil industry now holds very significant strength to pushing the dynamo of Russian development. This “occurred initially through the effect of devaluation in raising the ruble value of oil exports – which indeed had constituted the major prior case for ruble devaluation irrespective of the august financial crisis. Subsequently the high level of international oil prices had an equal effect. Over the years in between 1998 to 2003 oil and gas production has maintained its 20-25% of GDP” (Oppenheimer and Maslichenko 2006).

#### **As oil prices fall, so will Russia’s tax revenue**

“Hydrocarbon-sector tax revenue in Russian federal budget by type” (2013)



Source: Russian Federal State Statistics Services <http://blog.ihs.com/q21-wheres-russia-heading>

Interestingly, it is found that Russian success of macroeconomic planning and strategies were not based on expectations that high oil prices would remain a constant trend. This thought helped them to formulate a practical strategy and moves during “the first recovery of oil prices in 1999 until the end of 2004”. The Economic Survey of the Russian Federation (2006) argues that “it is important to recognize that the adjustment to sustained high oil prices creates problems of its own, with respect to both monetary and fiscal policy” (OECD Policy Brief 2006; Sevim 2013). However, it is also true that high oil prices in 2001 strengthened Russian economy and made it comfortable to face many challenges such as state coffers received more currency which in turn enabled the state to manage its budgetary allocations more easily. Paying wages as well as pensions had become easy for the government. However, the most significant at the world stage, this oil power gave Russia an ease to repay international debt and obligations (Hill & Fee 2002). High prices in the world energy market had given confidence to the investors and to Russian energy sector in particular. Buoyant environment of oil market had changed the grim situation of transitional period where investors had shaky minds for Russian oil industry which in turn faced lack of investment. Now it jumped from around “25% of industrial investment before the crisis to around 35% from 2000 onwards... growth of oil-sector investment was led by companies controlled by the state or by oil industry insiders: by 2000 their investment was already 70% above 1998 levels” (Ahrend 2006; Sevim 2013). It finally helped Russian GDP rates miraculously which is apparent from the following table:

**GDP Rates (1995-2010)**

Year	Gross Domestic Product, Constant Prices		Year	Gross Domestic Product, Constant Prices
1995	-4.1		2003	7.3
1996	-3.6		2004	7.2
1997	1.4		2005	6.4
1998	-5.3		2006	7.4
1999	6.4		2007	8.1
<b>2000</b>	<b>10</b>		2008	6.8
2001	5.1		2009	-7.9
2002	4.7		2010	4

Index Mundi

In 2006 Russia's Federal Budget, based on IMF calculations, had "a fiscal surplus equivalent to 7.4% of GDP; however, if oil-related revenues are excluded, the budget would have been in a deficit equivalent to 3.8% of GDP" (Cooper 2008; Sevim 2013). The oil and gas or overall natural resource trade is more apparent in Russia's foreign trade. During the high oil prices, Russia secured large amount of foreign exchange and managed its large balance of payment (BoP) and other surpluses. The huge inflow of foreign exchange increased the ruble supply as well. Though, in 2007 inflow started to decline, "a sharp increase in inward investment kept the total currency inflow high" (Hanson 2007). Overdependence on energy revenues and natural resource in particular has remained a matter of concern for policy makers. As Putin was of the view that it should be minimized; but "at least today, (energy is) the most important motive force of world economic progress. The present and future prosperity of Russia depends directly on the place we occupy in the global energy context" (Legvold 2008).

Russian policy makers are well aware about the fact that high oil prices will not remain a constant phenomenon. This though has been seen in various policy drafts earlier as well. The same spirit was depicted in a plan released by the Ministry of Economic Development and Trade on the 6<sup>th</sup> august, 2008. It "called for a general crude oil slowdown in the years out to 2030 that would be outpaced by the domestic oil consumption" (Rodova & Shiryayevskaya 2008; Ebel 2009). On the other hand, natural gas export is not less important object for the Russian budget revenues in general and energy revenue mix in particular. However, it has only limited avenues to diversify its market and content in short term. Other than LNG supply to various regions, Russian natural gas export depends on transnational boundaries through its large pipeline networks (Paltsev 2011). The strength of pipeline network was experienced again and again by the Russian policy makers in geopolitics as well as in the economy. For example, during 1998-2005, natural gas sector was transformed "from a commercially loss-making nightmare to a modestly profitable business" (Stern 2005), where Gazprom and its regulated price mechanism played a significant role. The state-owned natural gas monopoly has grown enormously during the Putin's regime. Its strength and monopolized market contracts made Putin confident and comfortable to transform the company as a significant factor in the foreign policy making of Russia. Gazprom provides huge foreign exchange to the Russia budget and takes domestic

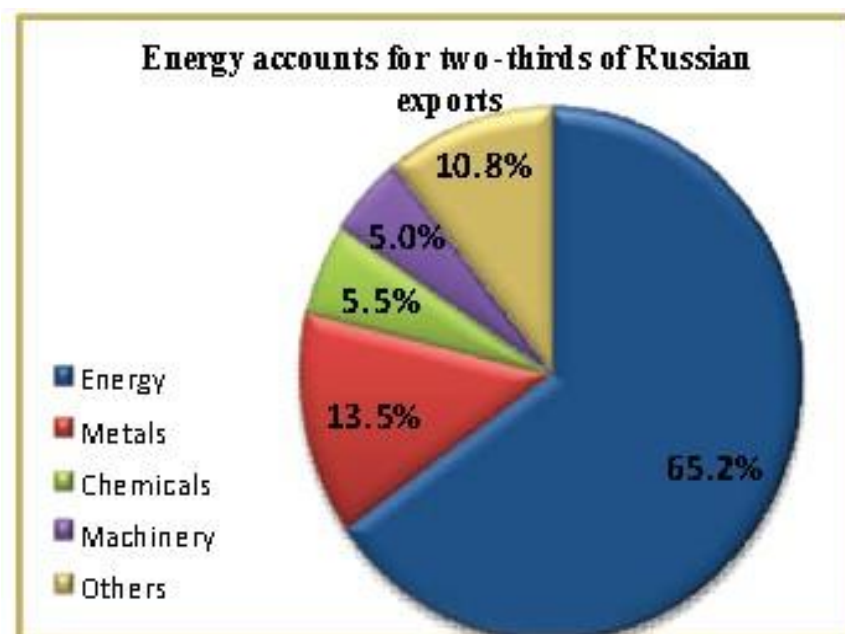
social responsibilities. Its export revenues are a reliable source of income due to stable gas market in terms of Russian long term supplies. Export of natural gas, up to some extent, is different from oil trade and even in its conventional supply. It is almost not linked with the oil prices, which recently many players have started to link with, and mostly it is free from impacts of spot market. Finally, it has no obligations to the Organization of Petroleum Exporting Countries. All these attribute make natural gas trade different from oil trade and in turn make different impact on Russian economy along with providing helping hands to the foreign policy makers. In this way, Russia has almost a free hand in making a price mechanism according to its national and market interests. Due to nature and demand of commodity, Russia has an upper hand in dealing with its consumers and may finalize different prices with different consumers. Russian geopolitics and geostrategic move also get some rooms in these trade relations. Last decade is an exemplar to this phenomenon. It has not only managed to earn huge income from this trade but also established and increased its status in world politics. As in the first decade of 21<sup>st</sup> century, Gazprom established itself as one of the most significant player in the Russian economy through around “8% of Russia's GDP, one-fifth of its exports and one-fifth of its market capitalization” (Aslund 2010). It has become the world's largest natural gas exporter to energy market “with more than 220 bcm in 2010 and followed by Norway (99 bcm), Canada (95 bcm), Algeria (60 bcm) and Qatar (57 bcm) in top five countries” (Index Mundi 2010).

Interestingly, the pipeline networks which (if) create troubles in diversification plans; at the same time provides confidence of demand security to the Russian gas industry as well. It is on the other way round Russia, which is liable to maintain supply to the existing and long term consumers. Sometimes it faces problems of underdeveloped infrastructure and inadequate investments and in turn consumers get skeptical of regular and sufficient supply. For example, in mid 2000s, consumer states had got worried about their supply because of the expected potential shortage of exports due to same reasons. However, shale gas revolution and new LNG supply to the market has made Russia seriously worried of competition and shrinking market share even at its conventional trading centers in the European market.



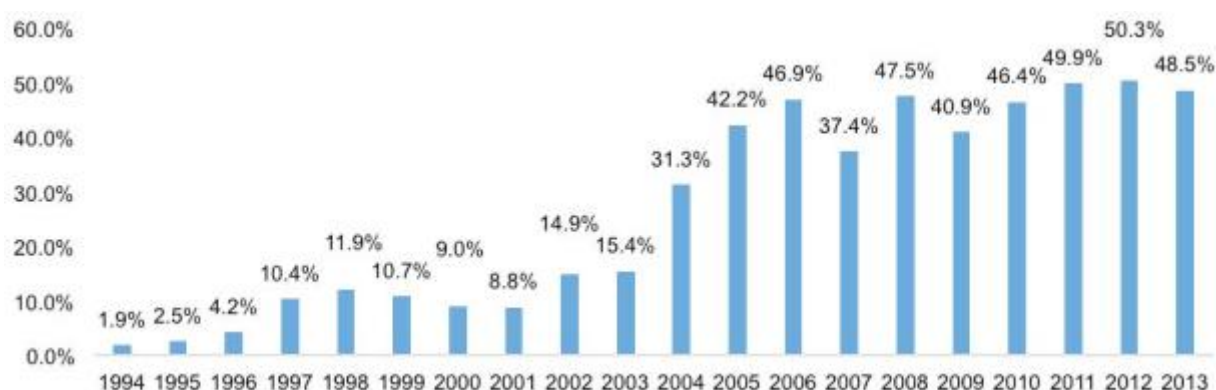
However, Russian worry does not end with the market competition and requirement of funds to invest in future and existing projects to upgrade and explore; it needs energy sector proceeds to manage its budget and depending economic growth. Any negative trend in the energy sector yields may land the country in a complex situation. The huge dependence on commodity exports is a problem for the government. It is accepted by the administration that “in spite of numerous changes in the Russian economy, Russia is still too dependent on primarily commodity exports” (Mikhail Kasyanov- PM of Russian Federation- January 2004; Larsson 2006). Data shows that current depending situation is not the historical trade reality of Russian Federation vis-à-vis Federal Budget. It was developed along with price rise of energy resources. The trend caught the pace from 2002 onwards which got its height in 2012 when it had become 50.3% of the total Federal Budget Revenues. The problem with the policy makers is that the share of oil and gas was risen with the price rise, but it could not fall accordingly when prices went down in the market. It is also a fact that relatively production also went up along the side of price rise. It is certainly a dreaded figure for any country wherein one source of exports capture more than 65% share of the total exports (BRIC Spotlight 2011). It makes that country by all means vulnerable to any crisis either of economic or geopolitical one. It would be in trouble either price goes down or meager demand situation takes place.

### Energy contribution in Russian Exports (2010)



<http://www.thomaswhite.com/explore-the-world/bric-spotlight/2010/russia-oil-and-gas.aspx>

## Share of the oil and gas in Federal Budget Revenues



Source: State Treasury, Ministry of Finance by Tatiana Mitrova (Russian Academy of Sciences).

In 90s the vulnerability of dependence was seen as a fact when production of oil and gas was declined along with decreasing prices in the market. On the other hand, in the transition phase, due to tendency of privatization, state companies suffered at the cost of private ventures. Decision makers had their focus on privatization and liberal market values. As a rule and tendency to maximization of profit, private companies did not focus required attention on national interests. Their focus on their own development created a new antagonistic environment among government (state), society, and external hands. Up to end of the last century, it had become clear that new administration is not going to bear the existing situation and would take some strong measures to support and encourage state owned companies in the extractive sector. Ascendency of Putin and rising prices of natural resources in the world market paved the way for using energy sector to help restore economy and focus on national interests on its priority (Dellecke and Gomart 2011). Government had decided to use this power not only to further national interests in the world politics, but also secured assets on foreign lands and elevated the status of Russia in the international relations.

However, huge share of oil and gas in exports and large share of revenues in the Federal Budget gives an impression of inflicting tendencies of Dutch Disease in Russian economy. It is a concept where a “combination of booming resource sector, a rising currency and a resulting decline in the competitiveness of non-resource sectors has been referred to as Dutch Disease” (Macdonald 2007). As far as Russia is concerned, some of the symptoms regarding Dutch disease has been acknowledged as

the overvalued currency, impact of fluctuations in prices of natural resources on export proceeds (instability) and in turn “creating exchange rate volatility” (Gotz 2005-06). It is stated that there are measures to reduce the intensity of this problem. The impacted country should “diversify the economy and holding back the appreciation of exchange rate through fiscal and monetary policies” (Algieri 2011). Discussing the case of Russian economy some argues that four elements of disease could be highlighted as “a slowdown in manufacturing output, a booming non-tradable sector, an increase in real wages and real exchange rate appreciation” (Beck et al 2007). They further argue that:

*“The prominent role of raw material in Russia's exports and the significant real appreciation of the Russian ruble, may lead to concerns about the competitiveness of the non-oil industrial sector. The high importance of mineral extraction for Russia's economy makes the country susceptible to the Dutch disease phenomenon. The term Dutch disease refers to a situation in which new discoveries of natural resources or, as in the case of Russia, sharp rise in commodity prices lead to an increase in the equilibrium real exchange rate, thus undermining the competitiveness by the other tradable sectors in the economy” (Beck et al 2007).*

On the other hand, some scholars have the opinion that Russian economy is very much immune to this concept. According to them high exchange rate was the main reason behind the 1990s crisis which was “maintained by the competitive exports of fuels. By this high exchange rate, imports of consumer goods and manufactured goods were promoted, resulting in a reduction in the production of domestic manufacturing industries” (Tabata 2006). But it is also true that increasing oil prices and accordingly export revenues, local currency was being “gradually appreciated in real terms since 1999”. It resulted in the impression that “Russian economy is immune from Dutch disease” (Tabata 2006). This shows that it could be debated at length that whether Russian economy is prone to this concept or not but the “evidence of real appreciation, a declining manufacturing sector, an expanding service sector, and rapid real wage growth” demands more analysis to establish them as the necessary factors to inflict the concept on Russia. We do not have concrete evidences and study that “these are not caused by other factors. Nevertheless, the risk of Dutch disease exists and warrants close monitoring” (Oomes and Kalcheva 2007).

As we see that 2002 onwards, share of oil and natural gas in Russian Federal Budget Revenues increased dramatically. The dependence has increased from 14.9% in 2002

to 50.3% in 2012. It was 1.9% in 1994 and 2.5% in 1995. Furthermore, data shows that “real exchange rate has accelerated, the prices of services increased relative to tradable prices, the manufacturing growth slowed down, while the service sector performed well, the employment shifted to service sector” (Borko 2007). Most of the scholars have focused on one symptom, i.e. “rapid appreciation of the real exchange rate” which is likely to be associated with the “natural resource booms” (Ahrend et al 2008). A shift from the manufacturing to growing service sector is very much structural and policy oriented goals. It happens in transitional economies. It cannot be given credit as the basis of the concept dominating or going to umbrella Russian economy as a whole. It could be due to over development of one sector or neglect to others as well. Of course, overdependence on natural resources does have some negative impacts on other sectors and creating problems in Russian economy on the whole. It has made negative impacts on economic development but it is mainly because of lack of market oriented financial institutions and certainly underdeveloped market mechanism in new Russia.

In fact, these developments may cause **resource nationalism** in Russia. It is a tendency to get maximum of the extractive industry by the state. It exercises various ways and means to extend their control over the exploitation of natural resources. The government of resource-rich nations value and utilize natural endowments to strengthen the domestic political positioning. However, when it comes to the energy sector, it does become more complex and significant. States formulate their energy strategy by keeping this phenomenon into serious consideration. It is always reflected in their foreign policy behavior as well. In fact, contrary to the philosophy of free-market doctrine, states are involved in market regulation through various means. A growing and dominant tendency of state capitalism in the energy sector is a reality.

Though, there is no consensus on a definition of resource nationalism in available literature, yet drivers and actions show evidence of some universal features. On the basis of motivational factors, it has been acknowledged that resource nationalism is a tendency to get a maximum of the extractive industry by the state. It is equally applicable and valid for revenue control of natural resources. Focusing on petroleum exporting nations foreign policy behavior, Park et al defines resource nationalism “as the verbal and/or behavioral assertion of national interests and control in the extractive industries” (1976). Its increasing use to control natural resources for the

advancement of policy goals regarding economy as well as foreign policy is apparent in the new resource market and diplomacy (Stanislaw 2008). Walther (2007) defines the concept as “governments wanting to make the most of their national endowment”.

Sometimes it is “a situation where producer countries have moved to maximize revenue from present oil and gas production, while altering the terms of investment for future output” (Price 2006; MEES 2006). It has been “limiting the operations of private international oil companies, and asserting greater national control over natural resource developments” (Stevens 2008). However, consumer country resource nationalism involves governments attempting to control raw material sources outside their borders in an attempt to prevent monopoly or collusion (Blackburn et al 2008:11). However, many natural resources-rich states do fall in the trap of resource curse (Paradox of Plenty) due to resource based economic policies. Prof. Michael L. Ross (2011) has accepted this phenomenon as a “mostly political” rather than the economic one. He argues that it could “be an unmitigated blessing” if “governed by wise and benevolent technocrats”. In case of Russia, there is a question to answer that “Would Russia really be better off without her abundance of oil, gas and coal?”

Russia has been taking a new shape since 1985. Perestroika (restructuring), glasnost (openness), uskorenie (acceleration), demokratizatsiya (democratic values), new thinking, free-market (Laissez-faire) activities and privatization came to Russian experience. However, it was upsetting rather than encouraging one for many in the administration in general. After ten years of devastating experience, President Putin moved to extend and strengthen state control over economic activities. This finally turned state not only into a strong regulatory body but also as a giant entrepreneur. The energy industry was one of the most lucrative sectors that could help Russia to regain its status. Therefore, government started to exercise different measures to extend control over natural resources and related industries. State was determined to get a hold of maximum in extractive industries. Strategic commodities, especially oil and gas, were decisive and essential to re-establish Russian say in a world of geopolitics and geo-economics. Therefore, need of the time compelled and inspired Russia to go for resource nationalism.

It has been experienced that hydrocarbon abundant nations (HANs) have peculiar conflicting and cooperative relations. Their hydrocarbon resources shape their foreign

policy behavior. These commodities have been acknowledged as commercial and strategic in these states. Russia also has these attributes. It has been blessed by the abundance of natural resources, especially hydrocarbons. In addition, Russians have developed their science and technology at great excellence. Their innovations are an additional strength. Its reflections in their military-industrial complexes make them different from other energy resource rich nations. They are well advanced unlike many other HANs. Their technical know-how in up and down streams of petroleum industry is greater than many other oil and gas rich states. They have an opportunity to exploit their excellence through developing these endowments. Recent rising demands of energy in developing nations are providing additional potential markets. The future energy demand projections have assured them to achieve a pivotal status in world energy market and politics. This future scenario and recent hydrocarbon prices have inspired them to make their recent assertive behavior. Vivoda (2009) says that high and rising oil prices allowed Russia “to reach more favorable investment conditions”.

Russia was placed as the biggest natural gas producer, ahead of the U.S. (IEA 2011), and second leading producer of total petroleum liquids in 2011, second only to the Saudi Arabia, but ahead of the U.S. (EIA U.S. 2011). It is the third major primary energy<sup>10</sup> producer while China and United States are the first and second largest producer states respectively in the world (Indexmundi 2013; TSP-data 2013). However, in 2006 it was the largest oil and gas producer. This energy scenario offers Russia a distinct and dominant position in the world energy market and associates it with the phrase ‘energy superpower’. In fact, it represents a source of national power that is flexible and exploitable, which states wish to grab. Therefore, Russia could use its vast reserves to rebuild some of the geopolitical heft that vanished with the collapse of the Soviet Union in 1991 (White 2005; Lo 2008; BP2007; Oil & Gas Journal 2008; EIA 2007; Stulberg 2007).

Energy is not only central to Russia’s economic strength but also crucial to its global relations. It receives 65% of foreign-exchange from energy supplies while two-thirds of federal budget drives from fossil fuels. It has derived more than 80% of the export

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<sup>10</sup> “Primary energy is the form of energy found in nature that has not been subjected to any conversion or transformation process. It is the energy contained in raw fuels, and other forms that is received as input to a system. It is both non-renewable and renewable. In energetics, a primary energy source (PES) refers to the energy forms required by the energy sector to generate the supply of energy carriers used by human society”.

earnings in 2010 from oil, fuel, natural gas, and minerals. This vast majority of export earning underpins state authority domestically and affords influence externally (Stanislaw 2008; Abdelal & Mitrova 2013). This situation interweaves economics, domestic politics, and foreign policy in a complex mix. In fact, some of the politics of energy is warping diplomacy in certain parts of the world. Russian neighborhood has experienced this politics in a much acute manner, e.g. Ukrainian crisis is nothing else but all about politics (Luft 2006; Parker 2006; McFaul 2006; Rice 2006/08; Oil & Gas Journal 2008). Experiences show that direct control over energy resources affords a formidable power in world politics.

Russia is aware of the fact that new energy world order is having a particular focus on emerging markets where consumer nations have a bend of foreign policies toward producer states. It has also been experienced that hydrocarbon abundant nations (HANs) have peculiar conflicting and cooperative relations unlike others. Their hydrocarbon resources have been shaping their foreign policy behavior since they have turned into exporters of these commercial and strategic commodities (Park et al 1976). Russia has these attributes as well. They are well advanced in technical know-how of upstream and downstream petroleum industry unlike many other HANs. Moreover, energy projections, rising demands and prices have inspired Russia to make assertive behavior in its foreign energy relations. In spite of this assertion, Vivoda (2009/11) has shown that high and rising oil prices allowed them “to reach more favorable investment conditions” as well. Whereas, the crisis (2008) propelled Russia to formulate a new long-term energy-strategy that targets a comprehensive energy policy, enhancing domestic sustained development and a multi-polar world order as well (Shadrina 2010). Lastly, Russian oil refineries have been installed with the Soviet military and foreign policy considerations, it produces huge amount of residual oil and diesel fuel but far less quantity of gasoline which is hardly sufficient for even domestic demands. The residue conversion method is also inadequate and poor in comparison with Europe and America. This situation forced Russia to lay down a plan for “large oil complexes comprising enterprises on production and refinery of oil and associated petroleum gas, as well as oil chemical and gas chemical facilities in new oil-producing regions.” It is aimed at increasing the oil processing depth, advanced growth rate, and improved quality of oil products. It also aims to catch the world-refinery-indicators to utilize all advanced processes of refining

industry. Deep oil refining development and optimization of oil refining volumes inside the country has been given priority where export delivery of a part of oil products and volume of crude oil export (with priority delivery of a part of it to oil refineries situated abroad and belonging to Russian companies) have also got focus.

During the course of action, along with the expansion of primary oil refining facilities, many new oil chemical complexes are also to be constructed in Russia. However, “modernization expansion of capacities and construction of oil refineries and oil chemical complexes, independent from vertically integrated oil companies” are being planned. While, the “reconstruction and modernization of oil refineries are aimed at priority development of technological complexes for deepening oil refining and reduction in specific intensity of oil consumption per unit of end products”. It further focuses on the introduction of modern technologies of catalytic reforming of gasoline fraction, hydrotreater of diesel and jet fuels, isomerization and alkylation.

Since energy has remained a significant geopolitical factor from its discovery to current era; it has pushed many international organizations to rest on these resources. Governments have taken various measures to ensure safe and affordable supply. They are involved in a complex market mechanism to build a delivery system. Flynt Leverett (2006-07) talks about “a shifting oil geopolitics” and has focused on the axis of oil that is a real strategic problem. He pointed out that “long-term trend is going toward higher prices” and “real story, however, is rooted in energy and Russia’s rising market power...and Russia’s state-owned pipeline system”. Strong control over resources provides market power. It is a “source of political power and strategic influence”. Nations have a tendency to “increasingly inclined to use” the same frequently. Hence, resource nationalism is directly related to three important factors of geopolitics, i.e. market power, political power and strategic influence. This proves the urgency and importance to understand resource nationalism. In this context, Ian Bremmer (2012) says that state control “is a dead end”. It is a threat to democracy and a free market. It’s neither substitute nor “the future of capitalism”.



In this context, this study raises some **research questions** such as: *what are the major sources of energy for the Russian Federation; how has energy influenced the foreign policy behavior of Russia; what are the reasons for the increasing state control in energy sector; how is energy an important factor in determining Russia's relation with the EU; or how is Russia trying to diversify its market by developing pipelines to the East?*

Since the strategic nature of oil and gas has made them vital determinants of foreign policy in major producing and consuming states; the subject matter of study looks at the strategic value of those commodities vis-à-vis foreign policy of the Russian Federation. It aims at analyzing Russian energy strategy and its role in the foreign policy approach. The study attempts to understand the complex linkages between energy resources and foreign policy issues through an investigation of several queries to get some insights regarding foreign energy policy issues and related strategy in Russia. To achieve the purpose, this inquiry **hypothesizes** the whole context as: *high oil and gas prices in the world energy market motivated Russia to reorient its energy strategy. It has not only encouraged increased state control in oil and gas sector but also influenced foreign policy and helped Russia to secure best price deals and assets ownership abroad. Growing energy demands of East Asian countries, especially of China, Japan, and Korea, provide Russia a better bargaining power in dealing with the West. While Europe remains the main market for Russian energy, the East Asian states have become the major target for energy diversification plans of Russia.*

During the investigation, the study keeps its objective to find out all linkages between hydrocarbon resources and foreign policy in concern. To find out answers of aforementioned research questions as well as to test those hypotheses; this research specifically focuses on an investigation regarding the role of energy in the foreign policy behavior of Russian state. It explores some geopolitical motives of state where energy has a pivotal role. It also aims to understand the causes of frequent conflicts (causal mechanism) over energy issues between Russia and the neighboring states. The study analyzes methods of diversification of energy acquisition and markets along with examining motives behind the nationalization of oil and gas sector.

During the course of this examination, it was observed that various indicators of economy are highly dependent on the value of natural resources in Russia where oil and natural gas export is significant in particular. Thus, it was important to see how long Russian economy would remain dependent on its huge export of energy resources. On the other hand, accordingly, Russia has been changing its foreign policy priorities since the advent of President Putin. He has focused on the foreign energy policy in particular. It was systematically explained in the concept of Energy strategy Paper up to 2030 for the first time in details. To find out appropriate explanations of research questions and accomplishing various objectives, it was imperative to focus on three fundamental concerns of energy resources vis-à-vis its instrumentality in the foreign policy of Russia; i.e. previous, existing, and potential energy conflicts; demand and supply security of energy resources; and finally political as well as economic risks attached to the energy resources in terms of energy diplomacy.

Any specific energy issue regarding these concerns provides insight and directions to analyze and understand energy foreign policy of a large producer state, and especially when a major power aspires to achieve its lost economy and status. The link between energy and foreign policy as a subject matter of this study offers various steps for policy making in different conflictual and harmonious political situations as well as in economic alliances. Energy issues encompass bilateral, regional, and global equations and concerns. Thus, the study opens some doors to understand them at all three levels. However, before analyzing the subject matter of this study, it was imperative to identify various factors which influence the foreign policy of Russia such as identity, security, internal and external threat, threat perception, culture and legacy and so on.

### **Research Methods**

The study requires longitudinal and cross-sectional data to help investigate the structure, order, and patterns of new energy world order. Data can reveal some patterns in the foreign policy approach regarding the instrumentality of energy. However, to examine the data, all hydrocarbons-related events are defined as actions related to energy issues undertaken by major actors involved in the international energy market; i.e. actors engagement in import-export, transit and transport, exploration and discovery, processing or distribution of energy resources. An issue is

usually associated with conflict of interests, problems, or any subject of interests that can become a source or goal of political activity.

The *events* comprise characteristics that may include *the content (types of action and issues); the degree of hostility and/or cooperation; the target to which the action was directed;* and above all *the particular issue involved in an event.* Therefore, an energy issue includes any *matter, subject, or point* related to activities of major actors in energy-market/industry or significantly affects these activities. It could involve *the use or potential use* of energy industry as an instrument of foreign policy. Moreover, *intensity and frequency* of actions taken by Gazprom, Rosneft and Lukoil or issues of supply and agreements of upstream and downstream projects are significant.

A good amount of longitudinal and cross-sectional primary and secondary data is available on the subject. The study has made use of first hand information, insights and perspectives shared by many Russian, Japanese, Chinese, Korean, and American scholars during formal and informal talks, debates, and interviews with the author of this research thesis. Views of many Indian experts served the purpose to understand different dimensions shared by them. All has been used to analyze the data accordingly.

The Russian Ministry of Energy and Industry (for Energy Strategy of Russia for the period up to 2020/30 like documents), Security Council of the Russian Federation (for National Security Concepts and Strategies of Russian Federation), The Ministry of Foreign Affairs of the Russian Federation (for Concept of Foreign Policy of the Russian Federation, 2000/08/13) and so on provide data in terms of statements, speeches, policy documents, official records on the subject. Russian International Affairs Council, Russia in global affairs, Valdai club, RIA Novosti, Russian English media such as rt.com (Russia Today) TV Network and various web sites of Russian multinationals provide data on policy and issues. Policy drafts of Gazprom, Rosneft's Code of Business Ethics and other documents, publication houses like Russia 'Beyond The Headlines' published by Rossiyskaya Gazeta are other sources.

Moreover, various think tanks all over the world are working on Russian energy sources provide research publications and analyze various dimensions attached to them. This literature holds vital analytical value for energy and foreign policy issues.

Institutions such as The Oxford Institute for Energy Studies, Center for Energy Studies (James A. Baker III Institute for Public Policy) have produced literature on the subject which has deep analysis of various data sets. Their research projects like Energy policy initiatives, Russia and the Caspian states in the global energy balance, the geopolitics of natural gas, the role of national oil companies in international energy markets and the global energy market program provides detailed reports. The data from Council on Foreign Relation through its Energy and Environment program is useful. Carnegie Endowment for International Peace produces data through its program on Energy and Climate. Rand Corporation's Energy and Environment Research program and data from CRS Reports (Library of Congress) on Russian energy are significant for this study.

Analyzing the 'role of energy in the foreign policy behavior' not only removes the problem of external validity and reliability but also have the possibility of generalization. Its inter-continental existence limits the problem of limited explanatory range, which could be due to impossibility of addressing co-variation and causal effects, especially in single case study methods.

Having all those above-mentioned issues and sources in concern, this research investigates and examines the instrumentality of hydrocarbons in the foreign policy behavior of Russia. Thus, structurally, this thesis deals the subject matter in the following manner.

The first chapter is 'Introduction'. It identifies and analyzes various factors which influence the foreign policy of Russia. It focuses on various issues of identity and their impacts on diverse foreign policy approaches. Elements such as language, ethnicity, Slavic entity, reintegration and civilian state have been taken into consideration to understand the role of identity in various foreign policy approaches. Liberalist Westernists, Pragmatic Nationalists, and Fundamentalist Nationalists are found three approaches of Russian elites to formulate a New Foreign Policy. However, liberal and social democrats as Westernizers (Atlanticists), national communists and Eurasianists (hard-liners) as Civilizationists, and statist are three most important post-Soviet foreign policy perspectives. Neo-Eurasianism (Slavophilism) and Neo-Imperialists approaches have also been discussed. History, geography, identity, worldview, perception of self, disintegration of the USSR, threats, Russian

ideology/mission, Russian borders, FSU connect & relations, policy toward FSU, foreign policy directions, and domestic politics have been identified as foreign policy drivers which influence the complex process of its formation. The security concerns of Russian federation and its various policy documents are being discussed such as Foreign Policy Concept (1993), Millennium Speech which gives insights of Putin, Foreign Policy Concept (2000), Foreign Policy Concept (2008), National Security Concept (1997). The initial economic conditions at the time of disintegration and transition of structure have been discussed in length. Various economic indicators and the role of oil and gas in Russian economy have shown the background wherein Putin found his way to elevate the status of Russian state and society among world community.

Second chapter is 'Theoretical Understanding of Energy Resources'. It deals with theoretical perceptive of energy resources and energy security. It evaluates the strength of natural resources and security concerns in theoretical perspective. Various significant geostrategic regions for Russian energy, development of a new energy structure especially in Russia, constant energy politics, potential in Central Asia, Caucasus, and Caspian region have also been discussed. It also deals with nationalization of energy resources in Russia. Finally, this chapter evaluates political developments in Russian federation and explains how it reached in a commanding position from a difficult phase of crisis.

Third chapter is 'Russia's Energy and Foreign Policy'. It examines hydrocarbon resources of Russian Federation and up to some extent its role in the foreign policy making. The strength of energy resources decides the primary energy balance in a country which has been focused initially in case of Russia in the chapter. Total oil and natural gas resources provide support to Russian export and generate huge revenue. High revenue from fossil fuel exports helps Russia to pay debts and other international obligations. The study explores various estimates of hydrocarbon reserves and its share in Russian Gross Domestic Products. Further this investigation goes to examine crude oil and natural gas exports, its prices domestically and in the international markets. It focuses Russian conventional as well as new and potential destinations of exports. It helps to understand the strength of hydrocarbons export earnings and its contribution to the state budget. Lower production costs of oil and natural gas in Russia also help

strengthen the budget. It makes Russian budget in a position to bear lower oil and gas prices even in the international market. Study has focused on the breakeven prices of crude for federal budget as well. Further, the study goes to look on production costs of various important companies. The study has examined various oil and gas producing regions in detail. It also examines export infrastructure in production basins. It finds that primary regions such as West and East Siberia, Far East, Yamal peninsula, Arctic region, north Caucasus and Caspian, Urals-Volga and Timman-Pechora and Sakhalin Island are major source of supply. It also focuses on significant companies which are involved in these regions. However, oil and gas production is influenced by external factors as well; therefore, the study looks at global perspective in the oil and gas trade where politics has been found well connected with the energy resources in Russia.

Fourth chapter is 'Russia-Europe Energy Relations'. It enquires Russian hydrocarbon export relations with Europe in all directions. It examines pipeline networks to earn proceeds through total and net exports of oil and natural gas to the region. It was important to look for Russian share and percentage dependence of oil and gas in total European consumption. It helps understand Russian leverage to deal with European nations and their reliance on Russia's hydrocarbons. This chapter counters with the challenges of production and reserves of these strategic commodities, its prices and costs of every stage such as production, breakeven of production and breakeven for budgets. It further focuses on prime oil and gas pipelines to Europe, its import-export data and policy to deal with demand and supply security of producer and consuming states. It deals Russian energy foreign policy to understand the geopolitics of the region as well. It analyzes existing and proposed pipelines and international moves even American strategies regarding energy market vis-à-vis Russia. In this context, this study lightly looks at Russian trade relations with the United States as well. The nature of trade between these two nations is not healthy where Russia imports machinery and exports energy products to the U.S. markets. Their relations have been landed in a collision of energy products, foreign policy, and geopolitics. Study finds that Ukrainian crisis is only one example of this relationship. Since European energy security is vulnerable and greatly depends on Ukrainian gas transit, its interruption involves geopolitics along with trade. This crisis opens various offers, hopes, and actions to all the stakeholders. Study also finds that politics of sanctions against Russia leads to geopolitics of diversification for both sides. Though, Russia was

involved in diversifying its markets for hydrocarbons, however, the crisis pushed them for a greater pace. It is also an example of trade complication between Russian and the West. It has to be looked in global energy market perspectives.

Fifth chapter is 'Russia-East Asia Energy Relations'. It looks at Russian moves to Asian energy markets and East Asia in particular where China, Japan, and Korea are its main focus. This investigation examines Russia's new energy relations with these giants and focuses on their energy strength. It also analyzes a changed and different Asian perspective of energy security. The study finds that these nations have their own concerns about increased interdependence and security strategy. The study looks at the situation according to East Asian energy scenario where net imports of oil and composition of LNG trade is different from the West. It looks at natural gas export facilities in terms of infrastructure and potential market investments in the region. Certainly, pipeline construction is a big issue to supply natural gas. It requires huge long term investments and healthy trade and state to state relations. The study attempts to understand pricing issues and other obstacles in trade. In this context, role of new leadership was important especially of President Putin. Russian new approach to the East Asian countries for energy trade provides new opportunity and market to Russian national champions such as Gazprom and Rosneft where they have foreign subsidiaries and affiliates to develop new fields and diversify markets. It analyzes energy balance in Northeast Asia and Chinese Trade regarding LNG market along with oil and gas.

Sixth chapter deals with conclusions drawn from exhaustive examination, analysis and investigation of data available from different primary and secondary sources.

## Chapter 2

### THEORETICAL UNDERSTANDING OF ENERGY RESOURCES

The geopolitics of energy is all about access to energy resources for production or consumption, while geo-strategically, transit of energy resources is no less significant of Russia. The Energy Strategy also highlights that “current trends in this field relate to high volatility of world prices for major fuel and energy resources and aggravation of competition on traditional sale markets for Russian energy resources” (Energy Strategy of Russia for the period up to 2030). Other major components vis-à-vis energy geopolitics in international relations are the technology to produce and transit (including all kinds of transit infrastructures), logistical support and availability of supply chains, refining or processing facilities, and of course availability of market and finances or funding for new projects (Kropatcheva 2011).

Natural resources in general and energy resources particularly are crucial for economy well as military capacity for any state. States require industry and natural resources are the key input for the same. In other words, these inputs are responsible for sustainable development, and the control over those strategic commodities provides power and influence to the state. Therefore, state control over natural resources or crucial public sector units that is governed or controlled by the government maneuver various policies regarding growth and development domestically to garner legitimacy for its foreign policy moves. As far as world politics and international relations is concerned, the uneven distribution of oil and gas reserves makes various regions geo-strategically more or less valuable. A development of one region is not confined to the same. They have far reaching impacts on the lives of nearby or far off states. That is why other states do have genuine attention and concerns, diplomatically or militarily, to the concerning eventful regions (Grygiel 2006).

As far as Russian energy market prospects are concerned, Europe, Commonwealth of Independent States, and Asia-Pacific regions are of great importance regarding energy geopolitics and related implications for energy security. These three significant geostrategic regions are vital for Russian energy market and foreign policy. According to the *Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle* (2008) “one fourth of the world’s undiscovered



hydrocarbon resources and strategic sea route for energy transports exists in the Arctic region”; while, in spite of the heavy dependence on the Russian energy pipeline transport infrastructures, the role of the Caucasus region and Central Asian states as non-Russian and non-OPEC producers of oil and gas is of strategic importance. Focusing on the old connotations of Eurasian landmass and its Rimlands:

*“In the 21<sup>st</sup> century, interpretations of actions of the states have considered the ‘Rimlands’ of the Eurasian landmass to be potential stages for geopolitical competition between great powers. The actors have been looking for a common understanding and consensus from different international institutional organizations (such as G8 and the UN Security Council) and ad hoc meetings (the five littoral states get-together in Illulisat, Greenland 2008 and in Ottawa, Canada 2010 and Russia’s, France’s and Germany’s alliance against war in Iraq) for controlling Eurasian ‘Rimlands’. For Russia’s prestige it is important to be part in these international alliances with other great powers” (Huotari 2011).*

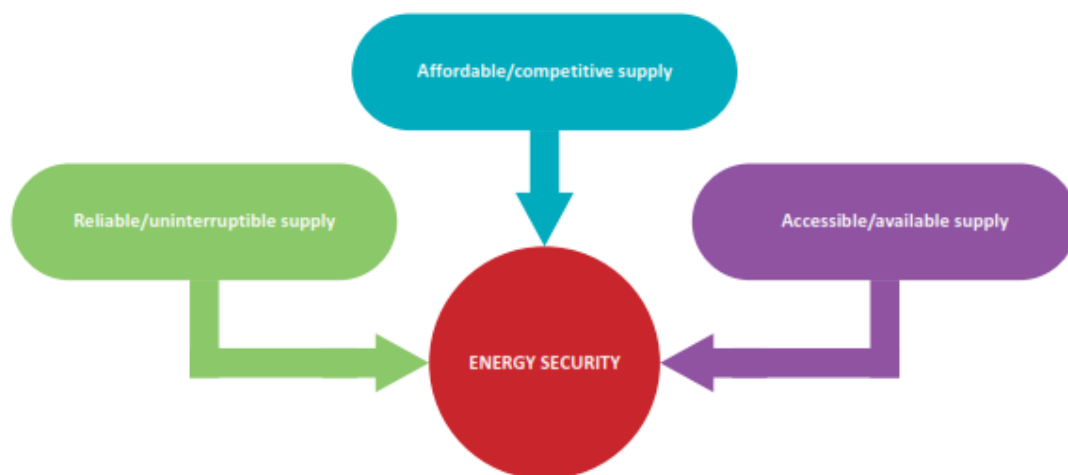
The significance of strategic resources along with the related geostrategic regions brought a worthwhile debate of energy security in the world politics. It was highlighted not only in terms of strength and development of a state, but also in relation to other states. These resources have been considered as a vital component for the survival of a state. Either state should have these resources in their territories or manage to have easy access of them. Its sufficiency provides advantage in policy making and leverage in relations with other states. In other words, it is directly related to the concept of sovereignty, and rightly has been regarded an element of independent existence in modern contemporary world. Morgenthau (1948) puts it succinctly that “A country that is self-sufficient, or nearly self-sufficient, has a great advantage over a nation that is not, because it does not depend on the will or power of other states.” In fact, Realist framework suggests that natural resources in general and energy resources particularly are power components. They are included in the foreign policy of the state and especially when a state seeks to expand its influence in other countries or regions. It is equally apparent in case of any major individual producer country or in a cartel where a league comprises different producing nations of a particular region or otherwise as well.

In this context, the concept of energy security highlights the centrality of *security* aspect, where pipelines essentially provide the justification of centrality because

mostly they are located in strategic positions. Therefore, the vital significance of security element per se provides legitimacy to the state's direct participation in the energy sector. It is involved in exploration, production, transportation, distribution and so on. As far as Russian energy supply to the Eurasian and Asia Pacific regions are concerned, the state "shows up as an actor who has a messianic task to take care (of) stable distribution and supply of energy" (Huotari 2011) resources. The broad understanding and perception of energy security has been used by the Russian state to justify its extensive control over the policy and program of the energy sector. New subjects, such as environment protection, due to global warming, or human security are taking place in the state's concept and policies of 'comprehensive' energy security. These soft security issues are paving the ways for states to involve and deal with the new situation in the name of welfare and security of its own citizenry. Russia and many other big producer states have made control over the vast energy infrastructure by giving these or many other similar justifications.

Though, historically, the security factor has been taken in terms of threat perceptions in the world energy market; however, in a way, it has been acknowledged as a (oil) supply security, which no longer provides sufficient understanding for the energy security situation of a country as a whole. Yet, it includes:

- i. reliable and uninterrupted supply,
- ii. affordable and competitive supply,
- iii. accessible and available supply (IEA 'Energy Supply Security 2014').



The International Energy Agency defines energy security in terms of supply as:

*“the uninterrupted availability of energy sources at an affordable price... Energy security has many dimensions: long-term energy security mainly deals with timely investments to supply energy in line with economic developments and sustainable environmental needs. Short-term energy security focuses on the ability of the energy system to react promptly to sudden changes within the supply-demand balance...Lack of energy security is thus linked to the negative economic and social impacts of either physical unavailability of energy, or prices that are not competitive or are overly volatile”* (IEA ‘Energy Supply Security 2014’).

On the other hand, oil and gas producer states, such as Russia, are more concerned about the ‘demand security’. Therefore, the desire to influence, explore and capture the existing as well as new markets has driven the concerns of energy security. It has impacted the world energy market along with international relations as well; and moreover, energy resources have acquired the status of being key factors in balancing the whole power equations.

However, till very recently, energy diplomacy or energy security has not been analyzed with any theoretical approach. Either, it has been incorporated as a component of national security or seen through the lenses of international security; though military security was the paramount concept where issues regarding energy resources were associated to deal with. This lacunae of theoretical approach has provided a niche to the descriptive and historical methods of analysis to explain the role and instrumentality of energy resources in the foreign policy behavior of nation states. Daniel Howard Yergin’s *‘The Prize: The Epic Quest for Oil, Money, and Power’* (1990) is a good example of descriptive method of analysis, which provides in-depth information and understanding of energy related diplomatic and security issues; however, this kind “of publications do not give any significant insight or criteria for determining variables and deeper explanation that would not be limited to single case study and would offer a practical paradigm for analyzing any relevant situation” (Česnakas 2010).

It has been emphasized that the realist approaches may provide a positive departure from the descriptive methods to study the instrumentality and other features of energy resources in the foreign policy making. In this context, “energy resources are material objects and as such belong to a materialistic ontology and positivistic epistemology”

Česnakas (2010). Therefore, the realist framework seems to be the best suited approach to analyze the subject matter of energy resources vis-à-vis foreign policy.

What is more important to consider that energy resources are vital components of state power. The maximization of these resources bestows better strength and powerful status to the states. So, the perspective of state power is associated with the energy resources and based on the ability of a state to take out of mines and transport it to the required place. It could be domestic as well as international market; however, in terms of world energy market, the global demand for these resources also plays an important role along with other factors. These additional factors lead the geopolitical energy diplomacy and energy security perspective that is rather speculative and largely based on interpretations and assumptions, which is lacking a systemic and empirical evidence and approach.

According to Luft and Korin, the perspectives relating to the energy resources as a material element of power leads to the assumption where energy resources vis-à-vis international relations could be explained through the prism of Realism and/or Idealism. They argue that:

*“Realists point out that through history, certain commodities, and in particular energy commodities, minerals, water and food have had a strategic value beyond their market price and as such they have been repeatedly used as tools of foreign policy by exporters and have been among the prime catalyst of armed conflict” (2009).*

However, Idealists acknowledge that “energy market players are rational and motivated by profit maximization...and tend to down play ideological, cultural and geopolitical drivers” (Luft & Korin 2009), which shows that they believe in an open energy market. The Idealists assumption further goes on to accept that people who are in charge of various policy execution are rational agents and their “purely rational actions are dictated by the market economy principles and profit maximization. It is unwise to use only the theory of international political economy when discussing energy resources, because these are commodities of strategic importance that could lead to armed conflicts” (Česnakas 2010).

In case of Russia, as a great power, this contains the largest territorial expansion and one of the largest oil and gas resources in the world. A new territorial addition in its

lengthened geographical expansion was not inspired by only expansionist approach of the time, but with natural resources as well. The rich minerals of Russian soil have always played a crucial role in the politics of the region. Authoritarian regimes conducted frequent wars and struggled for the economic development, which was possible through natural resources and mobilization of a good populace. This situation has paved the way for a strong sovereign as a dominant attribute in the politics of Russian state. The geographical strength and centralized structure of economy has led the Russian rulers to take on other powers for territory and natural resources. Sometimes even small forces get confronted with Russia, which was also motivated for the same. Slowly, the territorial concerns have become crucial in the Russian foreign policy, and interestingly the very policy has been shaped on the anxiety of stabilizing the borders of state (empire) through the centuries. The result was frequent army mobilization and battle with other states. The whole approach has made retarded economic growth and process of modernization (Legvold 2009). This was one of the reasons as well, why Russians had a slow economic growth in comparison with the Western democratic and capitalist states.

### **Natural Resources, Security Concerns, and Theories**

The great power status and politics of Russia has always been explained by geopolitical theories of three great scholars; i.e. Sir Halford John Mackinder, Nicholas John Spykman, and Alfred Thayer Mahan. Mackinder in his design of the World Island -‘Heartland’ theory- acknowledges that it is important to govern the Eurasian landmass to be the world power. He has highlighted various geostrategic factors like natural resources of the said region to be powerful and achieve the status and elements to get strengthened (Mackinder 1904). On the other hand, Spykman focuses the ‘Rimlands’ and the sea areas, which surround the ‘Heartland’. This theoretical understanding makes it clear that why the Central Asian region is of vital interest in the Russian security concerns, discourse, and debate. While, the third explanation is based on Mahan’s theory of ‘Sea Power’, in which the interpretation of power structure focuses on the strategic sea routes and areas to underline them for Russian economic strength and its great power status (Heininen 1991).

Russia’s geography, as the biggest inland state, helps it to be a dominant sea power. It has nearly two times longer coastal length than the American shores. To outline naval

politics, Heininen (1991) cites Sergei Gorskov, a Russian Naval officer, and highlighted the *technology models in classical geopolitics*, where Gorskov has emphasized on the utility of the navy as an economic as well as military powerhouse even during the peace time. Gorskov stressed upon power projection, which is an important military posture in power struggle for status. He highlights an attribute of navy that is to demonstrate physical strength beyond the territories of a state. However, it is also true that Russians have only two ice-free harbors, which have round the year open access to all the world's oceans and seas<sup>11</sup>. Other oceanic harbors of Russia are located in a difficult icy condition or placed at the inlet straits and they could easily be blocked (Heininen 1991; Kefferputz 2010). This has placed Russians in a disadvantageous position wherein they have to value warm water exits far more than any other great powers. Conventionally, due to vulnerability of sea routes and in view of *Heartland* theoretical approach, Russia has been considered as an *inland great power*, which is not necessarily true in current scenario when military technological advancements have drastically changed the whole defense architectural horizon; e.g. militarily, intercontinental ballistic missile system has changed the land and sea strategy and perception all over the world. Every nook and cranny of strategy is being formed in respect of technological innovations and advancements. Russia has also adopted this changed approach and projected themselves as a credible and modernized sea power. It is completely in compliance with the Maritime Doctrine of Russian Federation 2020 (Maritime Doctrine 2001), which is aimed at the re-assertion of its position with other strong and leading great sea powers. This is well appearing in the increased oceanic military patrolling around the world. The assertion is also visible in the Arctic Ocean, where Russian military patrolling is in place on a regular basis. The new sea routes are becoming possible due to the retreat of sea ice. All these positive outcomes have made Russia to establish strong feet in the region and motivated to develop and achieve commercially viable energy projects.

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<sup>11</sup> “*In the Far East, Kamtschatka, annexed in 1697, has its spring, summer, and autumn compressed into four months. Vladivostok, which became a Russian port in 1860, is ice-locked for about four months, and is situated in the almost inland Sea of Japan. Even Port Arthur, the latest acquisition, does not provide such unimpeded access to the ocean as is given by Brest, Cadiz, New York, or San Francisco, and has the additional drawback of being fully four thousand four hundred miles by the shortest railway route from the Russian capital.*”  
<http://www.globalsecurity.org/military/world/russia/warm-water-port.htm>

To analyze the geopolitical reality of energy resources, it is important to understand the location of these natural resources as well as those linking communication lines which make their commercial viability possible. The abovementioned theories explain those significant energy rich regions that are capable of production as well as transportation. The significance of energy resources to industrial societies and their security concerns assign a particular strategic value to resource locations and privileging a few over many others. Huotari (2011) cites that:

*“The dynamics of Russian energy policy becomes apparent in different geopolitical aspects to the strategic ‘Rimlands’. The ‘Rimlands’ that surrounds the Russian Heartland create the geostrategic buffer zones between the East and the West. These buffer zones are defined militarily, economically and politically”* (Elo 2009).

And, in the context of energy resources, how politics, economy, and military intertwined is apparent all through the Cold war era. The energy supply cooperation during the period was the initial point of larger geopolitical changes that ultimately resulted in the dissolution of an imperial Soviet Union (Heininen 2002). However, the Russian oil and gas supply shortages, either manufactured or the real one, in the early years of the very first decade of this century for neighboring nations evoke once again the question of links between energy resources and foreign policy. It generated many conspiracy theories in the minds of the West. Whatever moves has been taken by the Putin administration was assessed by geopolitical reasons and/or motivations (Lo 2008). Most importantly, it was believed and repeatedly blamed that Russia has been using energy resources as a foreign policy tool. Western literature highlighted and frequently used the phrase ‘*energy weapon*’ to explain and understand the foreign policy of Russia toward West in particular. This approach blamed Kremlin, especially Vladimir Putin, for achieving leverage through the energy weapon in various geopolitical problems. It was acknowledged as an instrument for practicing diplomacy by the Russians.

However, this western approach to explain the foreign policy of Russia and attempts to degenerate the commercial considerations of energy in terms of market has underestimated the value of these resources in the decision making process of the new Russian state. Though, the underestimation of this variable was not expected from the western intellectuals; very soon, the growing significance of commercial concerns got

underlined in case of Russia-Belarus price discussions, where in December 2006 gas prices were hiked for a neighboring and comparatively close nation (Lo 2008; Liuhto 2010; Casier 2011). In fact, the state establishment and the energy enterprises; e.g. Lukoil, Gazprom, or Rosneft, all were first interested in profit making, while everything else comes later for them.

Russia has been trading in energy resources for more than five decades with Europe. However, supply shortages or problem of cutting supply for geopolitical reasons has never produced a situation such as current developments. In western connotations, it is blamed vociferously that major energy enterprises of Russian state are somewhat government's limbs to extend its policies on foreign lands. In actual fact, as Stern (2005) and Nies (2008) pointed out that this relation was based on common interests. The European states needed secured energy supply for its sustainable economic growth and development, while the Soviet Union desired western finances to uphold its economy, policy, and strategy to keep great power status and position in the world politics. By all means, Russians have been dealing effectively for decades with the western markets through this western currency, wherein oil and gas earnings are the largest chunk of their market gains. The construction of oil and gas infrastructure during the Cold War era was nothing else but the necessary and mutual economic interdependence between the Soviet Union and European states. The gigantic supply-chain infrastructure linked these two regions and provided significant strength to nurture their ideology and economic stability.

### **Geostrategic Regions for Russian Energy**

From Arctic to Europe to Asia-Pacific; Russia has serious geostrategic concerns and energy prospects. Melting ice in the Arctic region has changed the old perception and scenarios. However, until 2008, even Russians had no concrete state policy for the Arctic region per se. Nonetheless, this year Russia had come with a comprehensive and focused state policy for this untapped region. It has managed to formulate its priorities vis-à-vis undiscovered energy resources and potential new transportation routes for hydrocarbons supply to the potential energy markets. Their state policy for the Arctic region was not a simple stand-alone document; rather, it had a well connected approach and fell in the line of other federal policies and strategies that were focused on reducing socio economic gaps of vastly extended and stark different



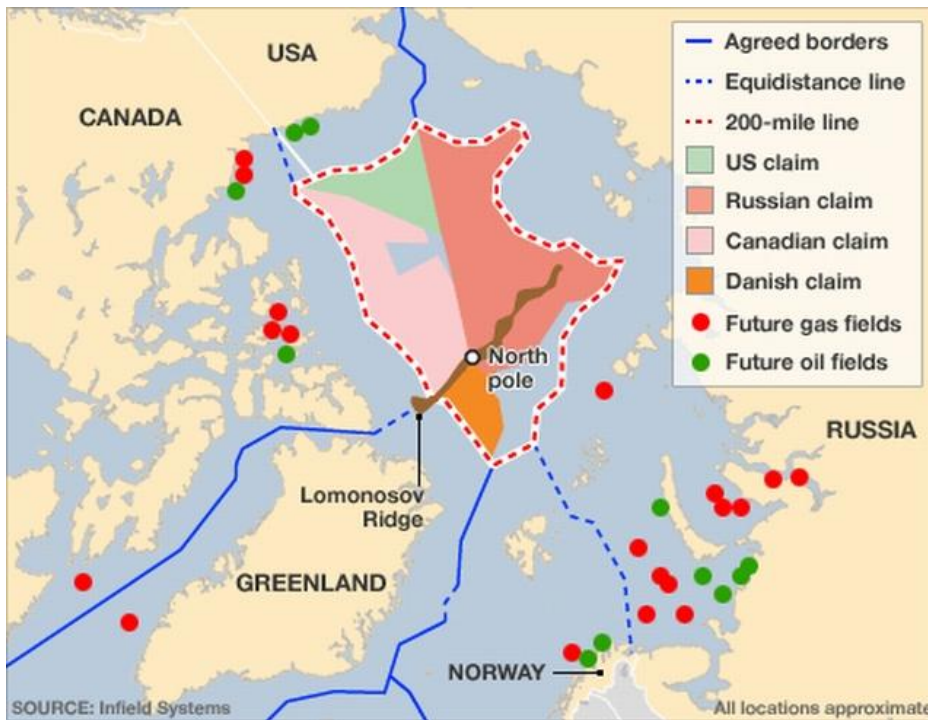
regions within the Russian Federation. It had shown new hopes for the future Russian energy industry. The optimism of new plan was to unlock great options for the huge oil and gas reservoirs in an intact area of exploration (Heininen 2011).

The Security Council of the Russian Federation (2008) and Ministry of Energy of the Russian Federation (2009) acknowledges the Arctic region as a potential significant sea trade corridor which would make shipping traffic possible between the Pacific Oceans and the Atlantic. Additionally, the said region was considered as an important primary resource base as well. The Fortune Magazine had reported on August 8, 2007 that the climate change has suddenly caused a big portion, beneath the Arctic Circle, navigable and drillable territory. It contains potential oil rich sea beds. Since, the polar icecap has been receding and the land is becoming uncovered; oil and gas giants have started to gaze the volume of natural resources in the region.

**Arctic Circumpolar Map Highlighting the Arctic Circle in Red and Key Regions and Sea Routes**

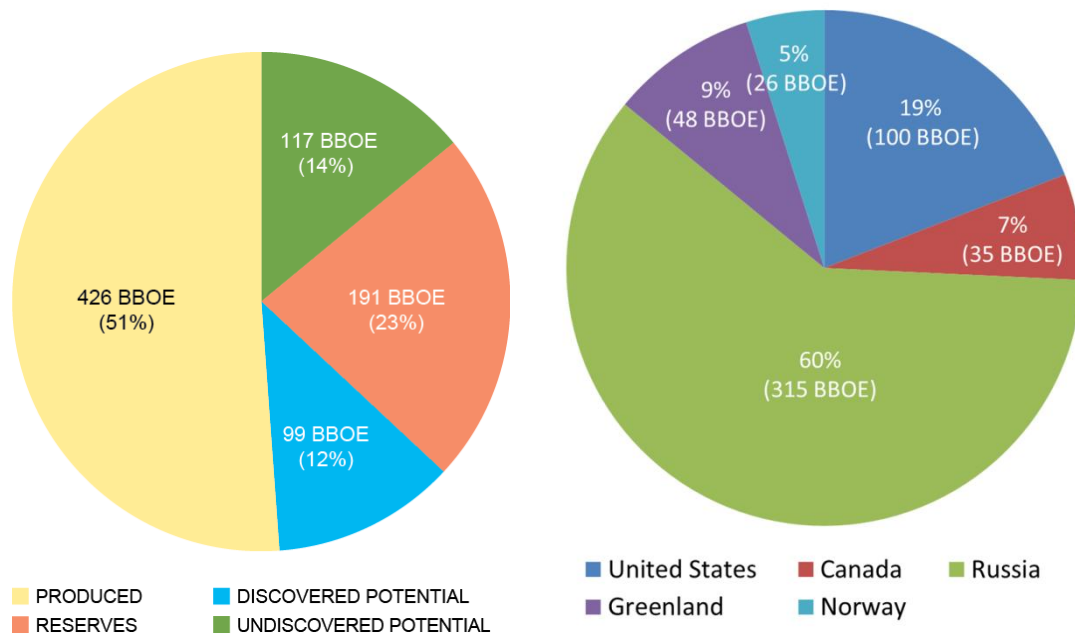


[http://www.npcarcticpotentialreport.org/pdf/Arctic\\_Potential\\_Part\\_1.pdf](http://www.npcarcticpotentialreport.org/pdf/Arctic_Potential_Part_1.pdf)



[http://static.frazpc.pl/cms/2010/09/49205648\\_arctic2\\_464x355.jpg](http://static.frazpc.pl/cms/2010/09/49205648_arctic2_464x355.jpg)

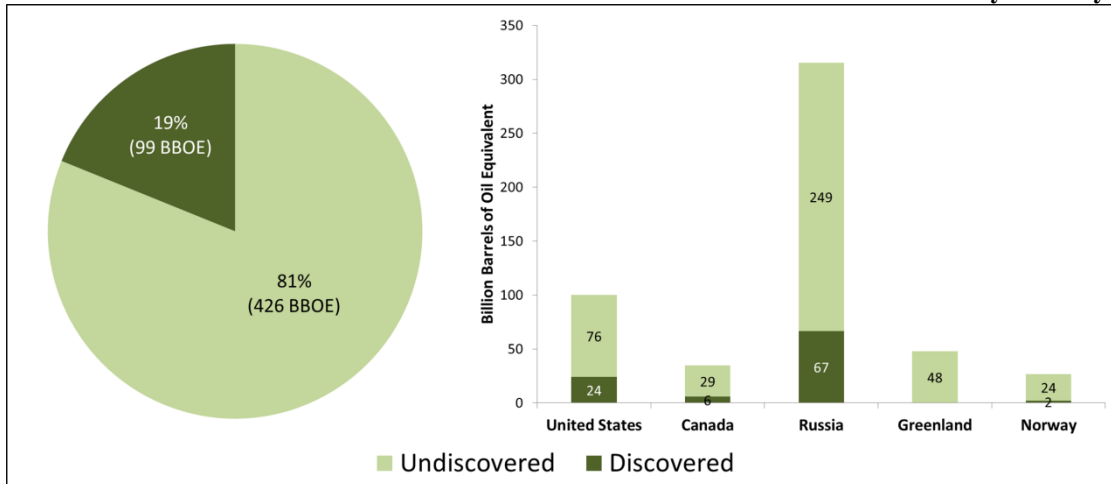
**Global Arctic Petroleum: Total Produced to Date, Current Reserves, and Estimated Resource Potential & Global Arctic Resource Potential Distributed by Country**



Source: NPC Arctic Potential Report Part-1

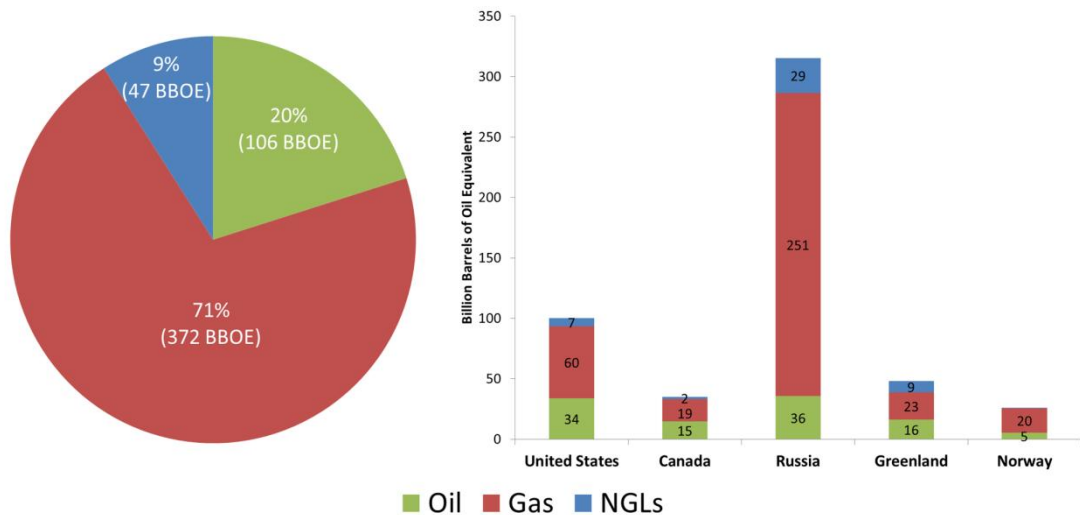
[http://www.npcarcticpotentialreport.org/pdf/Arctic\\_Potential\\_Part\\_1.pdf](http://www.npcarcticpotentialreport.org/pdf/Arctic_Potential_Part_1.pdf)

**Total Discovered and Undiscovered Arctic Resource Potential with Distribution by Country**



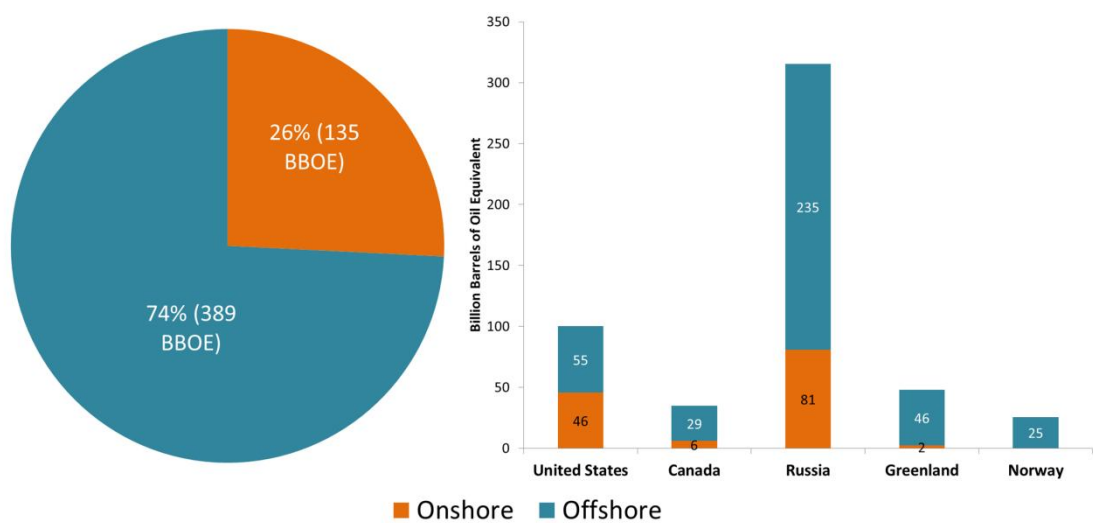
Source: NPC Arctic Potential Report Part-1

**Global Arctic Resource Potential by Petroleum Type (Oil, Natural Gas, and NGLs) with Distribution by Country**



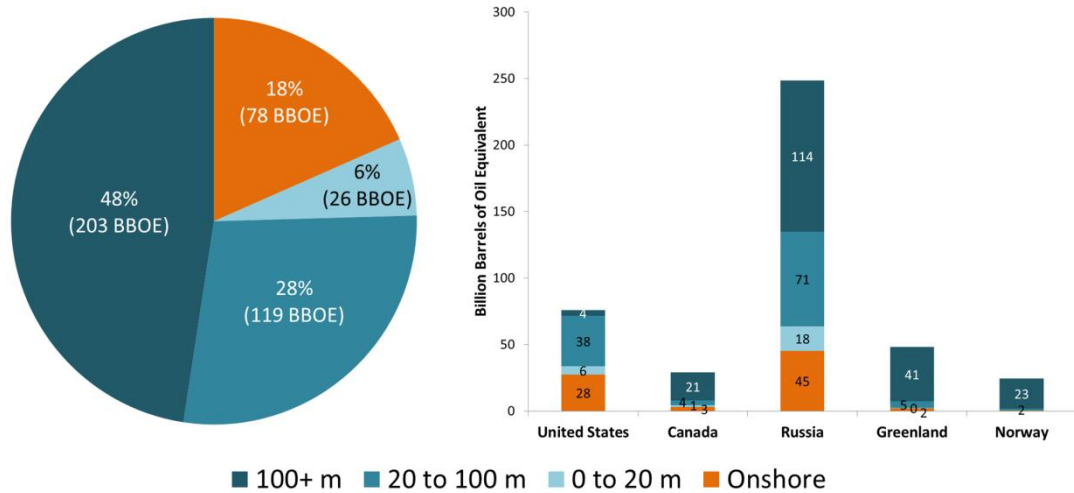
Source: NPC Arctic Potential Report Part-1

**Total Onshore and Offshore Arctic Resource Potential with Distribution by Country**



Source: NPC Arctic Potential Report Part-1

## Total Arctic Undiscovered Resource Potential by Water Depth with Distribution by Country



Source: NPC Arctic Potential Report Part-1

[http://www.npcarcticpotentialreport.org/pdf/Arctic\\_Potential\\_Part\\_1.pdf](http://www.npcarcticpotentialreport.org/pdf/Arctic_Potential_Part_1.pdf)

### Report- NPC Arctic Research Study (March 2015)

*“Russia has produced the most gas from the Arctic, more than any other country to date, and is the largest gas producer. Over 8 billion barrels of crude oil and NGLs have been produced representing almost 35% of the total Arctic liquid petroleum production. Over 550 TCF of gas have also been produced, which is almost all of the total Arctic gas production. In addition, Russia is assessed to have over 31 billion barrels of crude oil and NGLs and 906 TCF of gas in reserves. Major discoveries in the 1960s led to Russia’s first commercial Arctic production from the Nenets and Republic of Komi regions in the 1970s and 1980s.*

*Similar to Alaska, most of the current production in the Russian Arctic has been onshore, leaving the offshore largely underexplored; though there have been sizable discoveries made. One of the world’s largest gas fields, Shtokmanovskoye, discovered in the Russian Barents Sea, is estimated to have approximately 95 TCF of natural gas and 300 million barrels of condensate recoverable.*

*In addition to having the largest production of gas in the Arctic, Russia is also assessed to have the largest resource potential in the region. Russia is estimated to have 315 BBOE (60% of the Arctic resource potential), almost 80% undiscovered. Most of Russia’s endowment is assessed to be gas with only 20% being oil and NGLs in oil equivalent barrels. While Russia’s liquid resource potential may represent the minority share of its hydrocarbon portfolio, it is still the largest of any other nation in the Arctic at 65 BBOE; these large volumes suggest that Russia will likely continue to play a significant role in Arctic oil and gas production over the next 50 years.*

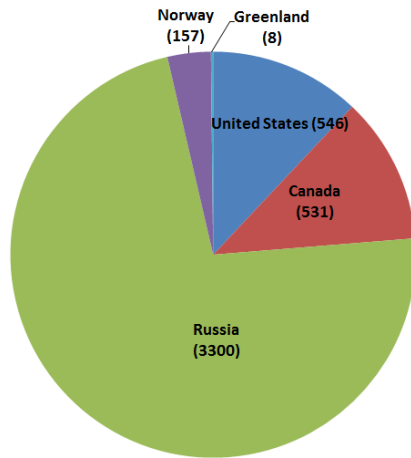
*More than 203 BBOE of Russia’s resource potential is located offshore, a large portion being gas concentrated in the Barents, Laptev, and Kara Seas. Both shallow and deep water regions in Russia’s Arctic offshore are assessed to have significant undiscovered conventional resource potential: 89 BBOE in less than 100 m and 114 BBOE in greater than 100 m. Russia’s Arctic offshore represents one of the world’s most promising and least explored offshore areas”.*

Source: NPC Arctic Potential Report Part-1

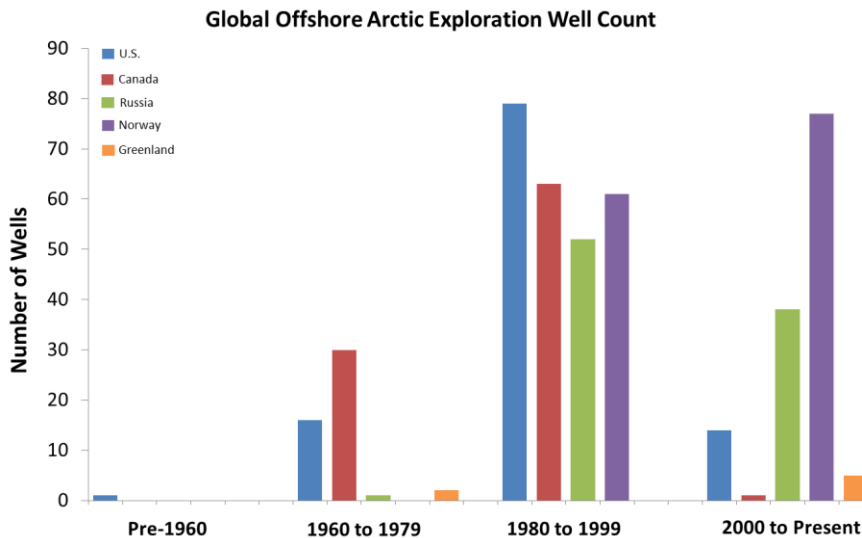
[http://www.npcarcticpotentialreport.org/pdf/Arctic\\_Potential\\_Part\\_1.pdf](http://www.npcarcticpotentialreport.org/pdf/Arctic_Potential_Part_1.pdf)

## Global Exploration Wells Drilled North of the Arctic Circle (split by country and time period)

Total Number of Exploration Wells Drilled North of the Arctic Circle



Source: NPC Arctic Potential Report Part-1

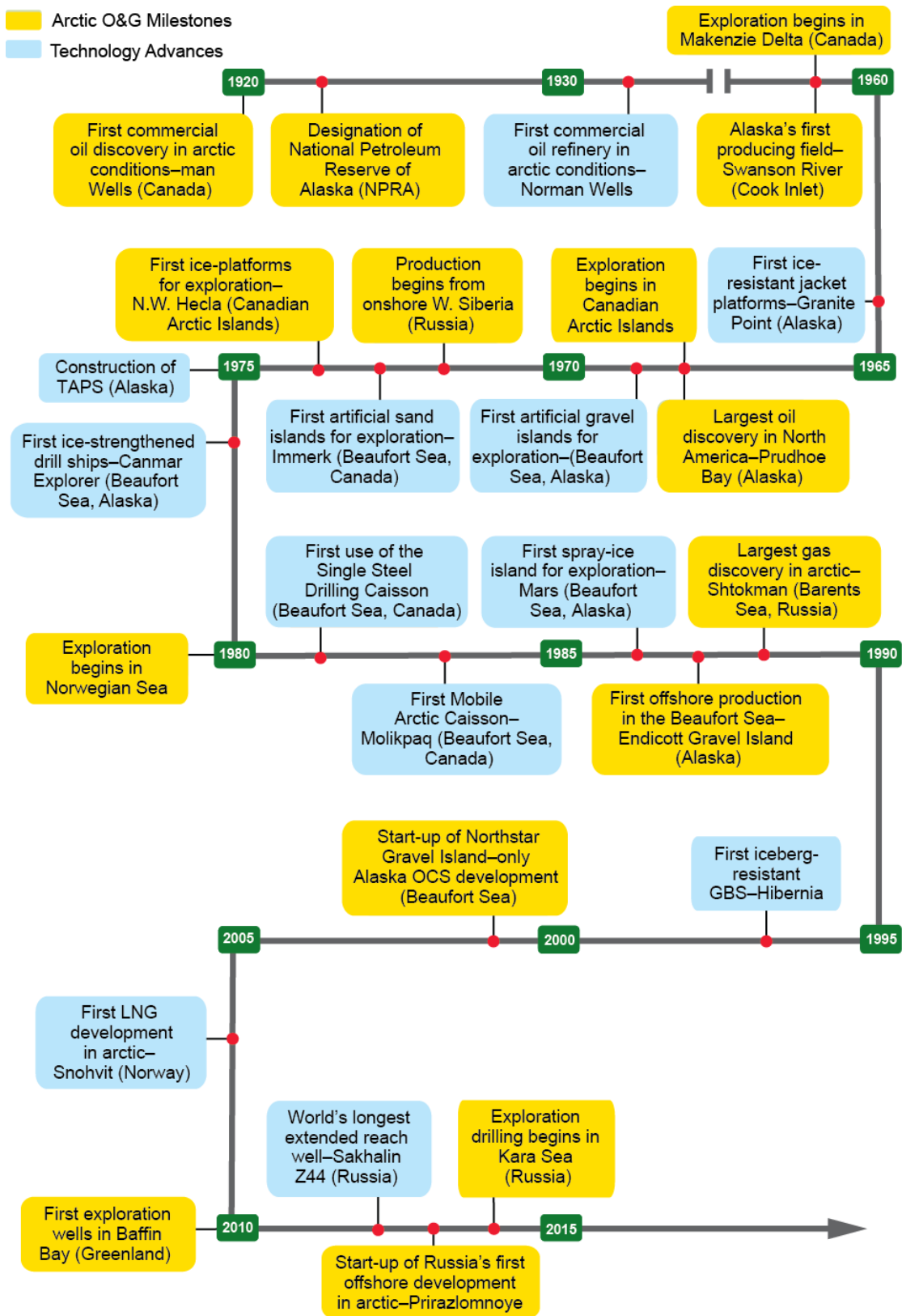


Source: NPC Arctic Potential Report Part-1  
Data for plots provided by IHS, International E&P Database.

According to an estimate of Wood Mackenzie with Fugro Robertson, the Arctic accounts for 29% of undiscovered natural gas and 10% of potential oil vis-à-vis world hydrocarbons, which roughly accounts for a total 166 billion barrels of (undiscovered or yet-to-find resources) oil and gas equivalent, whereas “*already discovered resources make up 233 billion barrels of equivalent*” (Yenikayeff & Krysiak 2007). The study and projection makes it clear that no less than 166 billion barrels undiscovered oil and gas could be explored from the near shore Arctic, but much bigger reservoir is possible in areas that are closer to the North-Pole, as has been anticipated.



## Chronology of Global Arctic Oil and Gas Milestones



[http://www.npcarcticpotentialreport.org/pdf/Arctic\\_Potential\\_Part\\_1.pdf](http://www.npcarcticpotentialreport.org/pdf/Arctic_Potential_Part_1.pdf)



[https://www.wilsoncenter.org/sites/default/files/Arctic%20Report\\_F2.pdf](https://www.wilsoncenter.org/sites/default/files/Arctic%20Report_F2.pdf)

**The Hot Zone-** The oil-rich waters around the Arctic Circle are heating up and are up for grabs. A look at some of the territorial battles ahead:

Water depth



Source: Fortune

[http://archive.fortune.com/2007/08/07/news/international/arctic\\_oil.fortune/index.htm?postversion=2007080810](http://archive.fortune.com/2007/08/07/news/international/arctic_oil.fortune/index.htm?postversion=2007080810)  
International Mapping

- 1- U.S. Continental Shelf: if the U.S. ratified the Law of the Sea treaty, it could claim territory here roughly half the size of Alaska.
- 2- Chukchi Sea: Shell has plans to explore here. But since Russia is claiming nearly half the Arctic Ocean, it may run into trouble.
- 3- Beaufort Sea: A 100-square mile area in this body of water is said to be rich with oil and gas, but it's in dispute, so not one has bid on a drilling lease offered by both Canada and the U.S.
- 4- Lomonosov Ridge: This giant undersea landmass extends from Russia to Greenland, and the two countries are fighting over it. In June, Russia said its scientists found evidence of a 70 billion barrel deposit and claimed rights to the whole ridge.

However, the U.S. Geological Survey and Statoil - a Norwegian oil company- project more optimistic data and stated that the region holds 25% of globally yet-to-find hydrocarbons, where *Future of the Arctic* shows that these reserves are predominantly contained with natural gas and constitutes 85% of the yet-to-find resources along with 74% of the undiscovered potential (Yenikieff & Krysiak 2007).



<http://www.dailymail.co.uk/news/article-2389895/Climate-change-shortcut-Chinese-cargo-ship-attempts-sail-China-Europe-Northeast-Passage.html>

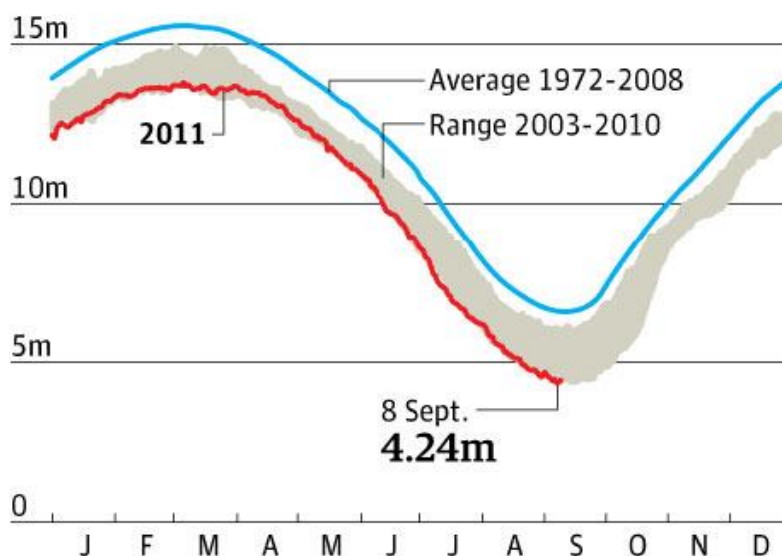


While, “some say up to 25% of the world’s undiscovered oil and natural gas may lie below the thawing ice.” In early June 2007, the Russian scientists had made a claim that:

*“they found evidence of 70 billion barrels of oil and natural gas reserves on the Lomonosov Ridge, a huge rock formation that extends through the North Pole from Siberia to Greenland... Russia has slapped a claim on nearly half the Arctic -- a territory of half a million square miles – and granted a monopoly to its own companies to exploit it” (Demos 2007).*

The Guardian (September 2011) reported that the temperature at the Arctic has risen more than twice as fast as the average global rise over the past half-century and the “Arctic sea ice is melting at its fastest pace in almost 40 years” and the Northwest Passage has becoming ice-free which could result the polar region be unfrozen in next thirty years. However, in 2011 both North-West and North-East passages have mostly become ice-free, which is twice since 2008. Even in August 2011 “the 74,000-tonne STI Heritage tanker passed through the North-east Passage with the assistance of ice breakers in just eight days on its way from Houston, Texas to Thailand”. This kind of melting has not been recorded since 1972 and not experienced for the last eight thousand years. At this pace, nearly an ice free Arctic in summer is likely in the next three decades, which is “up to forty years earlier than was anticipated in the last Intergovernmental Panel on Climate Change assessment report.”

### Extent of Arctic sea ice, square km



SOURCE: UNIVERSITY OF BREMEN

<http://www.webcitation.org/6AA8X81xZ>

In September 2011, the findings of the Colorado based the U.S. National Snow and Ice Data Center in Boulder was reported by the Reuters, which stated that it was the second lowest ice coverage on the Arctic Sea, while the lowest was recorded in 2007. Another report by the University of Bremen in Germany said sea-ice coverage on September 8 fell below the 2007 minimum. Furthermore, an academic study released by the U.S. Geological Survey also discussed about changes occurred due to melting of ice in the region (Reuters 2014). In fact, the floating ice melts and re-freezes naturally year-on- year; however, the pace of change; i.e. twice as great as it was in 1972, in a generation is shocking. It is a decline of roughly 10% a decade (Guardian 2011).

New possible sea lanes of communications are pushing simultaneously forward a fresh hope for new energy supply markets and fear for a changed geostrategic rivalry in the region per se and beyond. Guardian (2011) has reported that the North-East route will link the Atlantic to the Pacific and likely to turn into favorites to commercial ship operators. It would save thousands of miles of voyages and set free form tolls of Suez Canal as well. However, options and potential Trans Arctic sea lanes to carry energy resources have tempted many non Arctic stakeholders as well to make efforts to get benefits of these developments. China is one of these nations which have followed development carefully in the region to exploit the resources and new routes because it has great dependence on foreign trade and energy imports (Jakobson 2010).

Thus, other than direct Arctic stakeholders, non-Arctic states are also concerned about their interests. On the other hand, Russia and Canada are cautious about the possible expansion of the Arctic Council, which would delegate non-Arctic states more power and rights in the decision making process (Lanteigne 2014). They are simply concerned because the significant aspect of this region, which has captured the attention and developed keen interests in recent years, could be trade route rivalry and fight for the resource exploration. Moreover, Russian sources have estimated that most of the Arctic energy resources are located in their Arctic territories, i.e. Russian continental shelf.

Other than the mining of hydrocarbon resources, the development of the Northern sea routes is one of the basic aims of the Russian Arctic policy. The potential sea lanes

are becoming focal point and being perceived significant modes of transportation from the insular regions of Arctic as well as other coastal areas for the Russian energy resources, especially to supply oil and gas for potential and established open world energy markets (Zysk 2010). Moreover, it has been taken as:

*“the possibility of expanded maritime trade routes in the region as more of the Arctic Ocean becomes ice-free during the summer months... With the melting of the ice in the Arctic region, sea routes that previously would have been impassable by all vessels save for modified icebreakers are becoming increasingly viable. This would introduce the possibility of shorter and less expensive transit times between key markets, especially between Europe and East Asia”* (Lanteigne 2014).

It is also important that along with direct stakeholders, which includes eight Arctic states (Arctic Council); i.e. Canada, Denmark<sup>12</sup> (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States<sup>13</sup>; non-Arctic States are also grappling with many issues related to the Arctic region such as climate change and maritime security, scientific cooperation for the development of the region and its governance, indigenous and general health affairs, economic development in general and particularly business, and above all energy prospects and its distribution (Lanteigne 2014).

The second important region regarding Russia’s energy foreign policy making is the Asia-Pacific. It has been focusing on this regional oil and gas market. The aim is to ascertain Russian presence through increased oil and natural gas exports and fulfilling the growing regional energy demands for sustainable development in new developing and old developed nations. Up to 2030, it is intended, in general, to increase natural gas exports from zero% to roughly 20% (Ministry of Energy of the Russian Federation 2009), and the *Energy Strategy of Russia for the Period up to 2030* (2010) aims to increase oil export at a much faster rate to the Asia-Pacific region. The oil export is expected to increase 20% - 30% in a given time span; though, earlier it was not very encouraging in spite of many sincere efforts and the focused energy market consumed only 8% in 2008.

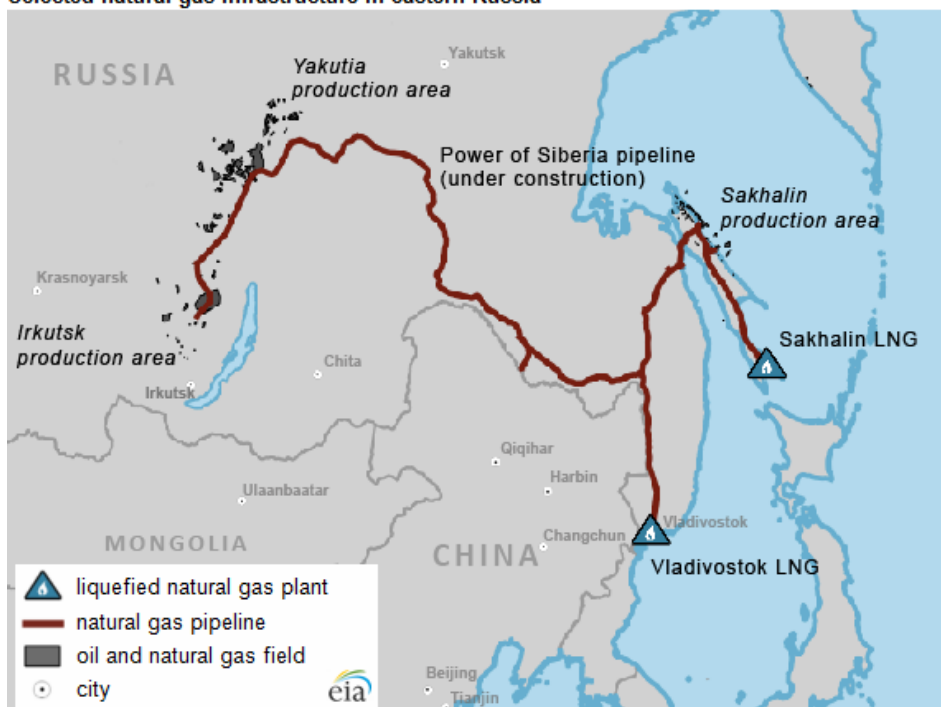
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<sup>12</sup> “The Kingdom of Denmark is centrally located in the Arctic and three parts of the Realm are – Denmark, Greenland and the Faroe Islands”. <http://um.dk/en/foreign-policy/the-arctic/>

<sup>13</sup> “In 1982, the United Nations Convention on the Law of the Sea went into effect, a treaty that defined ocean boundaries and set up regulations for ship traffic. The U.S. signed the treaty in 1994, but the Senate refused to ratify it, opposing the idea of UN sovereignty”. [http://archive.fortune.com/2007/08/07/news/international/arctic\\_oil.fortune/index.htm?postversion=2007080810](http://archive.fortune.com/2007/08/07/news/international/arctic_oil.fortune/index.htm?postversion=2007080810)

Since, Russian Far East and the eastern Siberia is not only geopolitically important regions vis-à-vis Chinese perspective; it is economically backward and needs to be modernized. Foreign as well as domestic investments are required to alleviate regional backwardness, established industrial infrastructure, and to provide modern amenities to the region (Itoh 2011). All this could make energy export possible to the Asia-Pacific region which in turn would create an Asia-card against the countries of the European Union. Though, in short term, it is not going to make any vital impact on the bargaining power of the Russian state; however the united and combined energy infrastructure of the eastern and western Russia would certainly increase the negotiating power of the state manifold in the new energy world order. So, even if Russian strategic goals of the eastern vector policy could be acquired through the new modernization plans and increased energy export to the Asia-Pacific regions, China requires a special attention in its energy foreign policy to rebalance the regional power equations economically as well as geopolitically.

**Selected natural gas infrastructure in eastern Russia**



Source: <http://www.eia.gov/todayinenergy/images/2014.08.20/chart2.png>

Though, apparently, it seems that energy relationship between China and Russia could be based on the natural bonding. If Russia produces and exports most of the oil and natural gas in the world, Chinese are the biggest consumers of the same. However, Russia's geopolitics and energy relations with China are not only critical in the contemporary world order; these are complex and entwined as well. In spite of

having long borders and possibility to transport energy resources through pipelines, things are not easy to follow. Recently, the biggest Sino-Russian energy contract – The Power of Siberia - has been finalized, which had taken more than ten years of serious negotiations to get finally concluded.

## Russia to supply natural gas to China

In 2007 Russia initiated a gas production, transportation and supply system in Eastern Siberia and the far east, taking into account potential gas exports to China and other Asia-Pacific countries. Russia has signed a 30-year deal, on Wednesday, with China.



SOURCE: Gazprom

AP

Source: <http://hamodia.com/hamod-uploads/2014/05/1-Russia-GR.jpg>



TRISH McALASTER / THE GLOBE AND MAIL » SOURCES: GAZPROM, GRAPHIC NEWS

Source: <http://classroomediton.ca/wp-content/uploads/2014/05/pipeline-image.png>

## Russia-China gas pipeline

Russia has signed a gas agreement with China said to be worth US\$400 billion (S\$501 billion) during a two-day visit by Russian President Vladimir Putin that ended on May 22.



STRAITS TIMES GRAPHIC ADAPTED FROM REUTERS

Source: <http://www.straitstimes.com/sites/straitstimes.com/files/20140522/RussiaChinaGas140522.png>

The Yakutia-Khabarovsk-Vladivostok natural gas pipeline in the Eastern Siberia is to transport natural gas from Yakutia to Primorsky Krai and the Far-East nations. The complexities and national security/interests concerns of these great powers are fundamentally dissimilar and evolved differently due to their legacy, current focus, national priorities, and approaches vis-à-vis energy resources per se and the new energy world order.

For Russia, energy resources are the instrument of power and influence by itself. It can command and sway many other dimensions of power and strength of the state. The economy, politics, military, technology, and even culture and norms could be influenced by the power of these resources (Lo 2008). The Russian legacy of power or at least an impression of the Soviet era lies in the strength of nuclear weapons, but (un)fortunately it did not remain greatly relevant at a time when many nuclear power states, more or less, have the same technology and strength, or could retaliate even if they do not possess the same amount of nuclear weaponry. Thus, having vast resources of oil and gas has provided the sense of power-equivalent of those weapons or technology in a new world order to the Russian state.

On the other hand, energy resources have different value for Chinese and it is more attached to their sustainable development agenda rather being an instrument to fulfill the geopolitical objectives and ambitions. But, at the same time, it has acknowledged and included energy resources in its foreign policy making to exercise its moves assertively in the foreign lands. It has been going on at least for the last two decades; and even if these resources are not directly an instrument to achieve the geopolitical goals for the country, they are one of the dominant factors of Chinese foreign policy, specially wherever oil and gas is found and being explored with a possibility to transport them to main land of China.

In this context, there is a basic difference in Chinese and Russian understanding and perception of energy security. If Chinese idea of energy security stands for ‘security of supply’, it signifies the ‘security of demand’ for Russia. Since, roughly two thirds of Russian exports come from oil and natural gas, which contributes over a quarter of GDP as well (Liuhto 2010), it is more concerned with export of these resources to established conventional energy markets and looks for new avenues for the future and any emergent contingencies. The huge dependence of Russia’s economy on these resources compels it to look for long term safe deals for exporting oil and gas to protect not only commercial but strategic interests as well. It is an essential for Russian energy sector interests either in the Far East or in the European region.

On the other hand, the biggest concern of China is to maintain constant supply of energy for the sustainable development. Its energy security is significantly focused on the threats of reduction or interruption in the regular supply chain as well as prices of energy resources in the world energy market (EIA 2010; Andrews-Speed & Dannreuther 2011). All these three risks are not far away or completely detached from geopolitics of the nation states. The reduction in supply of energy depends not only on the availability of resources, but also on market as well as geopolitical developments. Moreover, the reduction may lead to a situation of disruption and cause slowdown or halt of industrial development. Many independent –geopolitical or of market-variables may cause the supply disruption to a country or region on a whole. And finally, the risk of swinging prices of energy resources in an open market affects the financial health of a country, and a weak financial situation per se could lead to the reduction in supply of energy resources. Again, various independent variables could



play the tacit role to fluctuate the energy prices. They can influence the price mechanism even in an open energy market and thrust geopolitical aims and aspirations of the regional or great powers upon existing and potential agreements.

Therefore, China has adopted the strategy of diversification of importing energy resources from all over the world. Even Russia's neighborhood has not been left untouched by the new Chinese strategy to import energy resources. However, the Central Asian energy strategy of China has created some new challenges for the Russian policy makers. It has not only strengthen financially these energy producing states, but also provided new and long term reliable avenues for their energy produces together with a strong geopolitical great power as a business partner in an ever fluctuating energy market.

On the contrary to Asia Pacific and Arctic regions where Russia has been mainly engaged in export and production; the Caucasus and Central Asian regions find Russian presence largely in the transit of energy resources. These various trade statuses put Russia in a position to adopt different roles in diverse regions and make changes in the foreign policy behavior in a particular region and situation. This independent variable - various roles in diverse regions - has always been a factor of influence in the foreign policy of Russia among those abovementioned regions. The Central Asian role (as a gatekeeper) allows Russians to control the transport of energy resources between the European states and the mainland China. This dominance has pushed Central Asian states to adopt a new strategy to reduce the dependence on Russian network. They have started to establish bilateral relationship by concluding new agreements to export energy resources through alternative pipeline networks. One such example is the Nabucco- West pipeline project (Turkey-Austria pipeline), which goes from the Turkish-Bulgarian territories to the Austrian borders.



<http://www.objectivemind.org/en/focus/perspectives/nabucco-hot-air-instead-of-natural-gas/>



## The Proposed Nabucco Gas Pipeline



The Nabucco pipeline project was seen as a potential rival of the South Stream project<sup>14</sup>.



Source: [https://commons.wikimedia.org/wiki/File:Nabucco\\_Gas\\_Pipeline-fr.svg](https://commons.wikimedia.org/wiki/File:Nabucco_Gas_Pipeline-fr.svg)

It was aimed at the diversification of gas suppliers as well as delivery routes to Europe. Since, it reduces the European dependence on the Russian energy resources; it was supported by the U.S. and some member states of the European Union. Iraq was the main expected supplier, while Turkmenistan, Azerbaijan, and Egypt were thought to be potential supplier. While, Russia needs technological and financial assistance from the West to exploit the Arctic energy resources, which requires more policy changes in the energy sector to attract foreign investment in a difficult region.

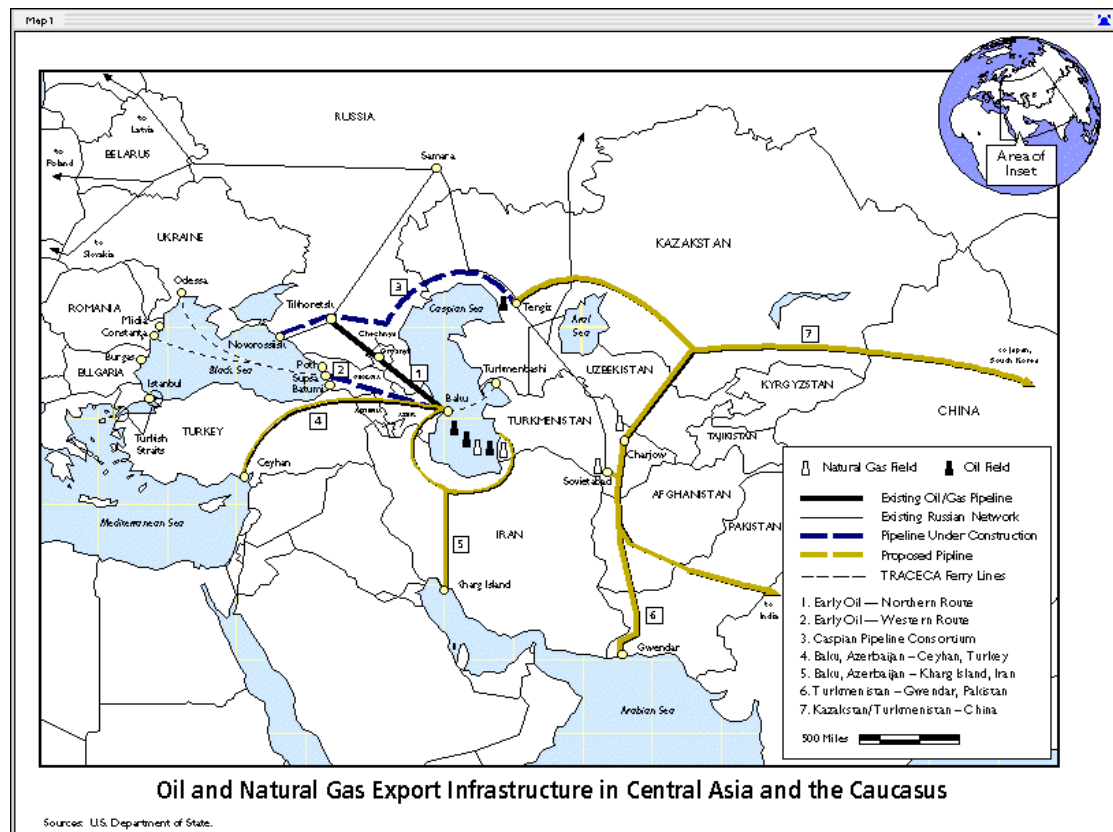
<sup>14</sup> An abandoned pipeline project, which was conceived to transport natural gas through the Black Sea, from Russia to Bulgaria and through Serbia, Hungary and Slovenia to Austria.

Over the last few years, Russia has been facing some new market challenges in the Central Asia, where China has come up to acquire oil and natural gas of the region with an aggressive strategy. The attractive gas prices offered by the Chinese companies have created a new competition for the Russian energy companies. For Russia, this particular region is not only important for energy resources or its market purposes; it is equally or rather more significant in Russia's 'grand geopolitical strategy'. Central Asia has its own geostrategic purpose for the Russian sphere of influence. It is worth noticing that the region is rich in natural gas, while Russia has also made effective efforts for trading its own energy resources to the main land China. Thus, the feasibility of potential contracts for new supply has become not only competitive, but also comparative subject due to Chinese involvement in the Central Asian energy resources. Turkmen gas is just one example to upset the Russian strategists, where new gas agreements with China have motivated the Central Asian states to bargain with Russia to collect higher rates for its energy resources.

Whilst, over a period of time, Tajikistan, whose primary natural gas supply comes from Uzbekistan, has suffered repeatedly due to disruption in regular supply, especially in 2012. It is an energy starved nation where shortages of supply has created "a situation that results in up to 70% of the population suffering from severe power outages each winter, imposes an estimated annual economic hit of around 3% of GDP" (Collins & White 2013). However, the most interesting part of this trouble was that it was neither because of short supply or lower production, nor due to high Uzbek domestic demands; the problem started as a result of new market for Uzbekistan and increased demand from Chinese in particular. Therefore, it is remarkable that even domestic and internal regional supply imbalances have been occurring as a result of external factors and mainly due to Chinese growing market for Central Asian energy resources.

In other words, oil and gas producing states of Central Asia have started to diversify their market ties for their energy resources. This diversification is linked with the existing pipeline networks of Russia, which makes these states excessively dependent on the Russian transport infrastructure. Therefore, Central Asian states are preparing themselves to set up a transport infrastructure to supply energy resources, which would be free from Russian routes and dominance or governed by their own rules.

The whole diversification is based on the idea to reduce dependence on Russia's large pipeline networks. Since, geo-strategically, the whole region is significant for Russian Grand strategy; any geographical or market diversification of energy resources is not free from geopolitics of the region and forces involved in them. Indeed, other than Russia and China, the U.S. is the third significant player in the region, which has not only strategic goals, but also governed by the energy market dynamics in the long run.



Source: [https://philebersole.files.wordpress.com/2014/05/centralasian\\_pipelines.gif](https://philebersole.files.wordpress.com/2014/05/centralasian_pipelines.gif)

Therefore, it seems that the region is sinking again in the age old power struggle of supremacy. However, this time, the dynamics and bargaining power of the regional players is very different from the 19<sup>th</sup> century power struggle of great powers. The reeking of power struggle is not confined only to the Central Asian states; it goes on to the South East region of the Europe and the Caucasus as well. The whole region is either abundant in energy resources or holding supply chain infrastructures, which is directly responsible for exporting energy resources from Russia to various European states and the region per se. This is why; the very region has been targeted repeatedly by the great powers for power struggle from the 19<sup>th</sup> century. Geo-strategically, the power struggle of Caucasus and the Central Asian region immensely depends on the transport infrastructures of energy resources and natural resources by itself.

Russia is known for its extensive pipeline networks in the region and holds the responsibility to distribute or exporting energy resources of Central Asian states. Since, the Central Asian states are enormously depending on their exports of energy resources; the dominance in and hold of supply infrastructure provides strength to the Russian foreign policy and exercise its comparative strong negotiating powers. All this improves their positioning in respect of the Central Asian states and even with Belarus and Ukraine as well, which holds maximum supply chain of oil and gas of Russia to the European states (Shadrina 2010; Liuhto 2010; Casier 2011). But, on the other hand, massive dependence of Russian oil and gas supply to the European states through Ukraine and Belarus makes the Russian Federation badly vulnerable to disruption of regular supply of energy and gives special negotiating power to these two states.

However, if the crucial dependence of the European states to receive the hydrocarbons and get supply the same from Russian companies has provided Ukraine and Belarus a bargaining status, now the same situation has compelled the Russia and the European Union to start extensive diversification for uninterrupted supply of energy resources. Moreover, since, maximum Russian energy export routes passing through these two states, they have the opportunity to divert the supply through the 'reverse supply' mechanism, which is a long drawn contest among supplier and transit states. The transit states can use the reverse supply for their internal domestic purposes or redistributing the stock, which is originally transported for the European states (Pirani, et al. 2009; Balmaceda 2009).

Historically, the whole pipeline transit mechanism was built in the Soviet era, when both the countries – Russia and Ukraine – were part of the Soviet Union. The transit system binds these states as a supply and transit nations. Either the required supply pressure in the pipelines or complete disruption, both may lead further disruption of supply to the external transits, especially to the European countries (Kropatcheva 2011). So, the whole area between China and Belarus has a reason to compete and the great powers have been positioning for their strongholds (Juntunen 2009) in the region.

Another crucial geo-strategic region for the Russian Federation is the Commonwealth of Independent States (CIS)<sup>15</sup>.



<http://www.worldatlas.com/aatlas/infopage/cis.htm>

[http://en.wikipedia.org/wiki/Commonwealth\\_of\\_Independent\\_States](http://en.wikipedia.org/wiki/Commonwealth_of_Independent_States)

The region consists of fifteen former Soviet states, including Baltic States. These are independent sovereign states; however, as far as Russia's geo-strategic interest is concerned, they are located in the geographical extent of Russian *sphere of influence*. Having geopolitical concerns of world order, the region holds legitimate and vital interests of the Russian state (Medvedev 2008). The progress and development of this whole region cannot be disassociated with the diverse role of the Russia and especially in the energy sector. It holds the largest reservoirs of energy resources and does act as a significant producer and consumer, importer and exporter, as well as a transit state. This simultaneous role makes Russia an essential and integrated part of the region, where bilateral and regional concerns of growth and advancement are influenced and linked with its special national interests. In other words, if Russia has influenced the policy and progress of this region; it is also likely to be influenced by the regional or bilateral political dynamics and energy markets as well. Being a regional as well as a great power, Russian foreign policy in general and energy

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<sup>15</sup> "The Commonwealth of Independent States (CIS) is an alliance of 12 of the 15 former Republics of the Soviet Union (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan). The headquarters of the organization is in Minsk, Belarus. The three non-members are Estonia, Latvia, and Lithuania." <http://geography.about.com/library/faq/blqzcis.htm>

foreign policy in particular is influenced by the factors of international political economy. In addition with the science and technological advancements; Russia's great or regional power status does not depend only upon its geographical expansion, it is because of energy resources and its potential exports (following maps) to the new destinations as well:

## The Easy, Low-Risk Strategy

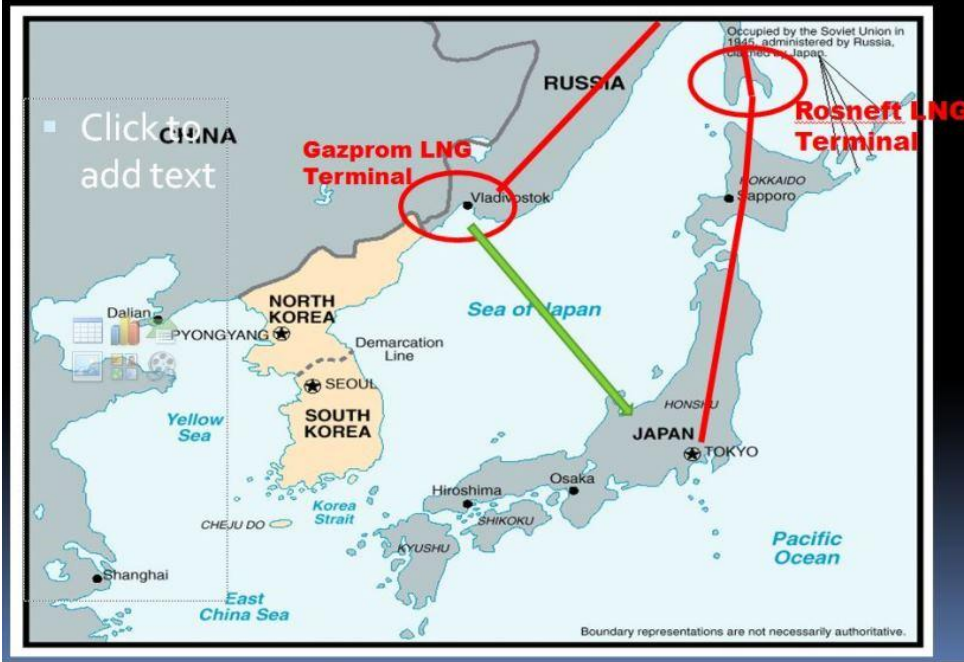


## The Japan Strategy: Gazprom & Rosneft



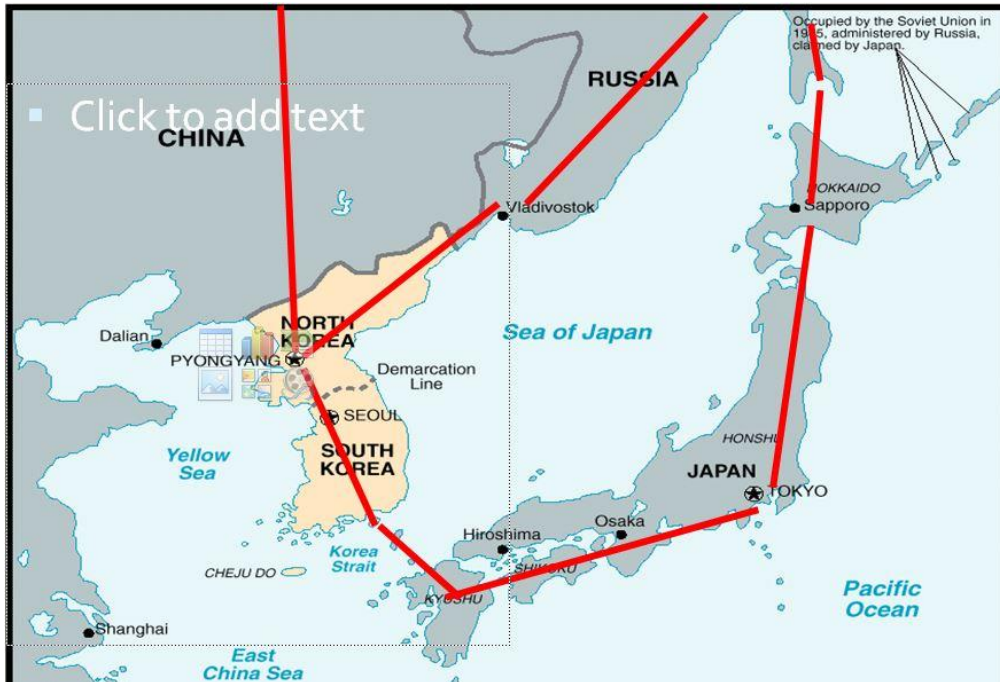


# Japan Pipeline: Step 2



# The High-Risk Strategy: Through North Korea to Busan





Therefore, its policies and moves could not be seen in isolation. They are subject to scrutiny against the strategies of other major powers, either those powers are interested and involved in the neighboring states of the Russian Federation or not.

However, other than energy concerns, the Russian interests in its *near abroad* is coupled with the geostrategic reasons. The changes in alliances could make power shift in the region, which would lead regional as well as geopolitical instability in terms of geostrategic global order. In spite of having various political changes in the region on the whole and among the nations themselves, due to overall and long common legacy of the Soviet system, these countries have some common elements of economic relations, where geography plays a certain role to achieve some common goals. The Soviet era oil and gas networks are still strong to produce, consume, and transit energy resources of the region. This vast infrastructure connects these countries economically and makes them largely interdependent on natural as well as energy resources. Though, recently, many states have started to develop new ways to exploit these resources, but it is not easy to achieve quickly or in the short terms.

Since, countries belong to this region are fairly dependent on the Russian imports of energy resources, and additionally, Russia controls gigantic export supply chain for the same; apparently, it seems that the huge energy reservoirs and old Soviet era supply network gives the power to use energy as a political weapon against these



states; however, in reality, it is quite limited and Russia's own dependence on energy exports to collect the required revenue for its budget, actually, balances this relation quite naturally (Pirani, et al. 2009; Balmaceda 2009).

To analyze and understand the policy changes in various areas, the study requires a policy comparison among focused geostrategic regions. Over a period of time, revisions and various amendments have improved the foreign energy policy of Russia. Domestic as well as international factors influenced the modification and changes in the policies and policy making as well. The perception and reality has been transformed vis-à-vis Russian state, all through more than a decade from now. The system was consolidated with the help of financial resources, where energy resources played a significant role to support the state and provided cushion for adventurism to the policy makers. Thus, the security concerns of *Heartland* got prominence in Russia's foreign policy making. The debate of Eurasian *Rimlands* was seen through the prism of security. This approach pushed the policy makers to set the eyes on security dynamics and pressed to formulate strategies to counter existing and potential threats to the state and its established system.

From 2000 onwards, when President Putin came to power, national and international dynamics of the energy market influenced the whole world. Market prices of oil and gas constantly took an upward trend for a long time. So, in accordance, Russia's energy policy got shaped and the role of state grew enormously both in domestic as well as international energy market. As a result, various regions secured relevance according to their strategic locations or natural resource values. Europe, Asia-Pacific, and Arctic regions were significantly more important for their energy production, transit, and consumption vis-à-vis Russian energy sector. These regions have got new sense of value as against the old understanding and viewpoint in the Russian foreign policy in general and its energy policy in particular. The idea of geopolitical rivalry to control the strategically significant Rimlands was not left out in the minds of policy makers, where the United States and its North Atlantic Treaty Organization (NATO) was still working to expand its security covers by inducting new members from the newly independent states. NATO was approaching to the vicinity of Russia's near abroad, which was a difficult situation for the policy makers to compromise and let those forces go uninterrupted in the Russia's sphere of influence.

In this backdrop, Russia started to consolidate and move aggressively in the region with the help of military might as well as energy strength. The western perception and explanation was certainly different, and the Russian moves were interpreted differently. It is said that Russia has been using its energy resources, which is considered as a *strategic asset*, as an *instrument of power- energy weapon* – to protect its national interests. Energy was being brought as an instrument in the foreign policy of Russia, which directed and shaped the behavior of Russian state. However, geopolitical and strategic objectives of the Energy Strategy of the Russian Federation focuses on the integration of Russian energy potential with the world energy market and talks about various significant organizations:

*“The strategic objective of the foreign energy policy is the maximum efficient use of the Russian energy potential for full-scale integration into the world energy market, enhancement of positions thereon and gaining the highest possible profit for the national economy...  
...Energy dialogue with the largest countries – consumers and producers of energy resources, as well as with major regional unions (European Union, Eurasian Economic Community, etc.) and international organizations (Shanghai Cooperation Organization, Organization of Petroleum Exporting Countries, Gas Exporting Countries Forum, International Energy Agency, etc.) is being actively conducted” (Energy Strategy...2030).*

The whole approach of Russian Energy Strategy shown in the section - *Foreign Energy Policy* - does not seem to satisfy the western policy phrase ‘*stick and carrot*’ in its absolute term vis-à-vis world energy market. In terms of market, any disruption due to unacceptable reasons raises questions on the credibility of being a trustworthy trade partner. In a long term trade relations recurring threats to cutoff or reduce the required supply not only put negative impacts on the supplier’s reputation, but also leads to diversification for getting a reliable supply. Therefore, the revenue or budgetary reliance on hydrocarbons supply does not allow Russia to create problems in supply by itself. They are well aware of the value and significance of the established energy trade markets. For Russians, any geopolitical contest in the region using the Cold War rhetoric does not make a sense at all. The logic nullifies any future long term contestation by conventional military means and cancels out necessary returning to some sorts of arms race as well. However, having a minimum arsenal and grounding to protect physical trade environment and sometimes sending a tough message to the existing and potential inherited factors is also required.

In this context, the whole exercise of power projection and status (strength) building has created an environment where regional as well as international organizations and established norms have to manage a fair play. Though, it is difficult to decide what is fair or foul in the international relations or world energy market where states are well involved and protect their national interests and most interestingly those interests are decided by their own parliaments or some individuals whose self interests are also entwined with them. Russia, in turn, is playing a game of individual as well as multicentre cooperation, a model which is developed and given by the West, especially by the United States, where first and foremost the national interests are being decided and having paramount priority to pursue them at all costs. Likewise, Russia has been pursuing its foreign policy objectives and making all possible efforts to collect and maximize profits from its energy trade. It has favourable and improved conditions for both, established western and potential eastern energy markets.

Over a period of time, Russia has experienced that exploiting both eastern and western energy supply potential is not feasible simply on the basis of open market strategies; e.g. Laissez-faire. State's sovereignty has a serious role to play in all those trading affairs where more than two nations are involved in finalizing the transaction. Thus, from production to the point of end user, various nation states have their own interests, involvement, and say in a complex energy trade. If some are involved in production, consumption, and transit; others could have a geostrategic security concern, which is directly linked with regional or world energy market. As energy trade is not an isolated affair from the geopolitics of great powers, the energy policy reflects the sovereign factors in the energy transportation- shipping and pipelines- routes and infrastructure building. Law of the Sea Convention is another example to support the sovereign factor in the world energy trade routes. These are well thought out concerns and incorporated in the *Energy Strategy of Russia for the period up to 2030*. Having sovereign and budgetary concerns, Russia keeps tanker fleets of oil and gas under the state ownership, while need not to say, the whole pipeline networks belong to the state directly or through public sector undertakings.

However, since the energy sector, financially as well as strategically, is more significant than others; Russia deals it with extra care and sensitivity. They are cautious about the inevitable and required foreign investment for their potential

energy resources and new areas. It is a welcome move for the world's biggest energy companies and energy starved nations as well to invest in Russian energy projects. On the other hand, in spite of the Russian readiness to open its energy sector for joint ventures and foreign investments; they are in no way ready to give up or compromise on the *control of supply networks*. The transport infrastructure is the key element of state's capacity to manage and control the energy sector and achieve the energy policy goals. Russia acknowledges transport infrastructure of energy sector as an uncompromising constituent and vital part of its national interests. To keep their national interests intact, they are planning and working hard to avoid old transit states, especially for its established European energy markets. It has laid out pipelines on new supply routes. Projects like South Stream and Nord Stream show the determination of the Russian policy makers to achieve the desired foreign energy policy objectives. However, the focused regions of this study do not have the same mode of supply. These are governed either by old traditional means of transportation; i.e. pipelines, or planned to receive supply through some new ways; i.e. tankers.

The southern regions of Eurasian *Rimlands* receive energy supply largely through pipeline networks, but oil and gas tankers have been planned in the Arctic region as the mainstay of energy resource supply chain. The vast pipeline networks have been expanded in various regions and countries since the old Soviet days and new realities of the newly independent states have brought some complications for the Russian energy supply networks. The great power politics of the United States vis-à-vis NATO and energy starved nations such as China have created a changed environment for the conventional Russian energy supply routes. There are advantages or disadvantages of the existing oil and gas pipeline networks for the Russian distant or nearby energy markets.

By all means, the existing pipeline network is a binding force for the newly independent states, but simultaneously, it makes them very dependent of energy resources on Russia. Though, the control on this huge network provides Russia a strong bargaining power with the former Soviet states; the same stops Russia from the diversification plans as well. It is not easy to expand geographically against the existing transport infrastructure, which ultimately reduces the profits of Russian state. If normal commercial gains from existing energy trade are easily available to the

Russian companies, the same supply infrastructure holds back Russia from maximum commercial achievements. In this backdrop, Russia has an option to transport its energy resources through oil and gas tankers which would provide even the far flung penetration of energy markets and Russia energy resources would make its global reach. It would otherwise provide Russia a global energy edge as well.

Ever since, Vladimir Putin came to power, energy has become more distinct in the foreign policy of Russia. The beginning of 21<sup>st</sup> century was the starting point for an unprecedented price rise in the oil and gas market. Due to strategic nature of oil and open market trading system, it has more volatile pricing mechanism. In the very first decade of this century oil prices have reached at the highest point in July 2008. The rapid rise in the world oil market made major producer states comfortable as well as skeptical. Russia, which is enormously dependent on its hydrocarbons exports, used comfortably energy leverages in the foreign policy to project its strength and achieve the lost status in the world politics. Higher prices were meant to higher revenues for the Russian state. Therefore, steep rise in prices made fast recovery possible to the Russian economy, which facilitated excessively centralized administration as well.

When the oil prices peaked -\$147.27- in July 2008 (UPI 2008; Dugan & Macdonald 2009), Russia received one of the highest bounties from oil markets, which helped reduce the budgetary and revenue dependence on energy resources in particular and natural resources in general. It further started to modernize the economy and prioritized other sectors of financial system and industry as well by enforcing new economic policies. In other way round, the process of modernization made policy makers relieved from capping (overburden) the foreign policy for maximum gains vis-à-vis energy resources, which ultimately softened the foreign policy per se. This policy change and strengthened economy eventually enhanced the prestige and credibility of administrative decision making process and inspired others to go for trade in Russian market.

The international business community's perception in respect of credibility and prestige influenced policy makers to take some bold measures and change the nature of the foreign policy. It, in effect, changed the character of the nascent Russian state, at least in short term. This time, the newly achieved economic strength was not wasted in ideological, pompous and unmindful foreign policy expenses. Rather, this

financial power of energy resources backed the foreign policy of new administration and helped establish the *power vertical*, which per se was motivated by the agenda to maximize Russian financial and economic growth.

It is also important to understand that in spite of growth and developmental agenda of various draft strategies of Russian Federation, why the security aspect of Russian policy documents have been discussed out of proportion, especially in western scholarly literature and media. All kinds of state documents; e.g. the Foreign Policy Concept, National Security Concept/Strategy, Military Doctrines, or Energy Strategy of the Russian Federation have stated various objectives of the administration; however, the occidental approach of writing was concerned, focused, and paid attention mostly on highlighting the security elements of these draft documents.

There could be two reasons of particular attention and interests in security dimensions vis-à-vis those drafts or declared policies of the Russian Federation. The first is related with the geopolitical analyses of the post-Cold War world scenarios, especially of Eastern Europe, where the geostrategic locations of newly independent states were seen through the lenses of security; while the second is deeply entrenched with the old perception and devilish approach to demean the rival states in world politics. Russia has been dealt with both angles in the western administrative and scholarly circles. Administration has taken the help of scholarly writings to support its moves, justify the deeds, and sought legitimacy to dealing with challenger states. It was a required move to construct some hostile narratives against the aggressive or competing state. In case of Russian Federation, the western approach has had some focused objectives. Whenever, it had any scrimmage with any country of the region or even with the nation that does not have a direct involvement in existing or potential energy market, the first commodity was focused to describe and analyze the strength or weaknesses of the Russian state; i.e. oil and gas. In this way, the whole approach has politicized hydrocarbons. Roughly each and every step was scrutinized by the import-export strength and weaknesses of the Russian markets. Conflicts were made linked with the existing and potential avenues of its energy exports.

The subtle agenda to politicize oil and gas industry in general and hydrocarbons market of Russia in particular left Russia with no option but to be perceived as an aggressive state of using its natural resources to fulfill its foreign policy goals by

implying these commodities in personal relations. Keeping in mind that the strategic nature of oil and gas would help construct the desired image of Russia state; attempts were made to establish the impression that Russia has been using its trading strength to satisfy foreign policy ambitions where oil and gas play crucial roles to achieve positive results. It seems that the image was created, with having a subtle agenda, to project hydrocarbon's strength of Russian state as an instrument to be used to move the gear in its favor and take the charge of starring in the world energy trade. So, the securitization of energy trade and hydrocarbon's strength of Russia transformed the whole debate, and energy was seen and explained as an instrument or weapon in world politics, especially in case of Russian foreign policy aims and ambitions. This was also an attempt to create an unfair perception and image of an unreliable energy supplier in the minds of consuming states in general, to whom Russia identifies as potential consumers of its oil and gas, along with existing client states of Russian supply in particular.

However, in any case, the policy of energy weapon is not a positive and productive strategy for Russia except for few exceptions, where the question of vital national interests, existential crisis, or severe threat perception for growth and development exists. It is neither good for the Russian conventional nor for its potential energy markets. It is (the perception) significantly attached with other industries and business sectors as well. In effect, the perception matters in the overall business environment. The confidence quotient and ease of business is required for any foreign investment, while the construct of energy weapon per se reflects the idea of Statism (the centralized or government control over economic policies and planning) or tendency of high handedness of state. Therefore, from the Russian point of view this negative construct would reduce the possibility and potential incentives, which could be achieved from other sectors of economy as well in Russia.

On the contrary to this western construct, when Vladimir Putin came to power, economy was given due weightage and it has become the primary concern for policy makers. Economy-oriented domestic and foreign policy moves played important role to dilute the western construct and induced many multi-national companies to come for business in Russia. Since, nation's economy was his prime concern, the posture and confidence of the President attracted the foreign investments in various sectors.

However, in spite of all other efforts to showcasing different sectors of economy, energy was still the best lucrative and focused sector for multi-nationals. Even the contradiction of this economic model did not stop foreign investment, where in a capitalist economic system the role of state was emboldened. The same was applied to the energy sector, wherein increased state control was brought in. As against the policy of privatization of 1990's, a strong state policy was introduced. Vladimir Putin focused on better implementation of policy measures to achieve improved results and strengthen the national interests. His foreign policy was mend for connecting Russia's economy with the world market; and in this way, linking Russian markets with the global financial system and economy. This integration was required not only to modernizing the domestic economy, but also to attract the foreign investments and technology to develop new energy avenues and projects for its future supply. However, strong state involvement in market activities, especially in its energy sector, shows that Russia is in no way going to compromise its national interests at the cost of integrating the domestic economy with the world market, nor interested in reducing its power status in world politics.

### **Roots of New Energy Structure in Russia**

The Soviet Union had built its international political sphere and structure on the ideology, military power, and energy resources. The disintegration in 1991 brought sudden and radical changes in Russia's energy policy and politics. The turbulent developments in politics and energy industry in the last decade of 20<sup>th</sup> century created foundation for the new developments and energy strategy. The political maelstrom after the demise of Soviet Union and new oil prices during the initial years of the 21<sup>st</sup> century helped Russia to shape new approach and innovative energy resource policies. It has given opportunity to get Russian state established as one of the significant players in the new energy market.

Since post-World War II, energy resources had been associated with the foreign policy. The state financing was the key element to structure the Russian energy market. Having this background, the new Russian state, which was certainly different from the previous extended-state in terms of territory and ideology, brought focus to restructuring the old premise of energy industry. Financial need of the hour and vested interests pushed the new state-apparatus to adopt some different approaches, policies,



and mechanism. Dynamics of energy resources in the body politic of Russia had taken a new shift. The demise of previous structure greatly impacted the whole energy sector, which was turned out to be central in the resurgent Russian state.

However, initial following years of the disintegration experienced a vacillating approach where political structure was the highlight of every move. Even external forces and major powers did not focus on the issue, though; the Central Asian States had various regions or belts of potential energy resources especially of oil and gas. This oblivious approach toward a potential energy region or market went on due to existing global market conditions where supply security was not an issue. But it did not take too long to catch the focus. Azerbaijan, which is historically known for its natural energy resources and other Central Asian states, had become focal point of major powers.

A specter of New Great Game was hovering around the region. International oil companies showed their interests and started to seek diplomatic connections to exploit oil and gas of a region which was directly restricted for the western world due to block politics or ideological war between the U.S. and the Soviet Union for decades. Oil and natural gas contracts of International oil companies with tiny states but full of natural resources made Russia cautious of power politics in its geopolitical belly.

New vested interests in a transitional political structure generated a class of oligarchs where the state apparatus and power was diluted for personal industrial growth. In a short span of time this class had become robust at the cost of a nascent but historically sound state. They developed an informal 'oligarch system' which had strong influence on various branches of state apparatus. This informal control on many administrative units and impacts on government policies paved the way for external powers to play their game with the newly independent states in the near abroad. North Atlantic Treaty Organization (NATO) started to manage the desire of the U.S. and expanded the Eastern flank. It was a 'dent by consent' on Russia's sphere of influence.

On the other hand, closing ceremony of the twentieth century arrived with a tough and matured administrator in Russia. Vladimir Vladimirovich Putin became the President of Russian state. Russia started to move with his Soviet background and approach. He focused on restructuring domestic mechanism as well as energy policy to strengthen

the state and exploit the opportunity to project Russia as a dominant player in the new world order and international energy market.

President Putin emerged as a strong leader and new hope for the Russian people. He focused on the energy resources in general, and oil and gas for the European energy market in particular. As the main supplier of these energy resources, Russia always had an upper hand in dealing with the European energy market. Sometimes, it is said that Russia has monopolized the European gas market. It is a dominant player even for crude oil supplies in the region. It is acknowledged in western literature that various efforts to monopolize the market are intended to control the major supply chains and routes toward the European market. Therefore, 'Baku-Tbilisi-Ceyhan' pipeline was focused to bypass Russia through Azerbaijan, Georgia, to Turkey. It was all-out opposed by the new administration.

On the other hand, Russian administration was focused on the monopolistic-dominance of natural gas supply to the European markets. It had pursued a policy of controlling the main supply routes and opposed the aggressive policies of the NATO. The new inclination of neighboring countries towards NATO was disturbing element to the new apparatus. The 'sphere of influence' was considered as a serious matter in the Russian policy formation. President Putin strongly opposed the Georgian move to become a part of the NATO, which in turn was the NATO's move to reach the Russia's borders. Russia had shown its firm intentions against the western policies. It went for a military conflict with Georgia and shown strong policy determination in dealing with the Chechnya. This situation had enthused Russia to use energy resources in its foreign policy as well.

Russia has one of the largest energy reserves and comes first in the natural gas production. It is seventh largest oil producing country. This energy strength has been acknowledged by the state in its policy draft; i.e. 'Energy Strategy of Russia to 2020' (August 2003). The draft strategy has recognized energy as "an instrument for the conduct of internal and external policy". It further ascribed its role in world energy market, which up to large extent "determines its geopolitical influence" (Russia's Energy Strategy until 2020: 2003). Even the rival United States of America has acknowledged in its Congress that Russia is willing to use energy as a foreign policy tool (Cohen 2011).

The utility and intentions regarding energy resources have been experienced in the recent past. More than thirty energy conflicts with twenty countries, in the first decade of 21<sup>st</sup> century, underline the significance of these resources in determining Russia's foreign policy behavior and its geopolitical influence. This instrument of power not only provides strength and leverage to the Russian state in world politics but also secures resources for strategic deterrence. In fact, energy as a resource and security affair has become vital in the foreign policy making and external behavior of Russia.

Moreover, the abovementioned influence, energy superpower status, and its political instrumentality were not only documented in the draft Energy strategy, but also in the President Putin's statements along with other policy drafts. Cameron (2009) recalls the President when he argues that energy "to a large extent determines the country's place in geopolitics". However, the National Security Strategy until 2020 (May 2009) of the Russian Federation acknowledges energy as a resource and security matter. It is recognized as an instrument of power that provides strength and leverage to the Russian state in world politics. It secures market and resources for strategic deterrence as well (Hass 2009; Simurdic 2009).

The strategic value lures the state to make control over these resources. Roughly, every state is involved in this process. Therefore, state control and its resultant potential use as an instrument of power for political purposes is a legitimate right for sovereign nations (Stanislaw 2008). Russia has been using this power in a significant manner with the newly independent states in its near abroad. For example, Armenia, Belarus and Ukraine (under President Kuchma) have received heavily subsidized energy supplies, while other states such as Georgia, Moldova, the Baltic States and Ukraine (under President Yushchenko) have experienced some supply troubles and punitive price increases. However, these petro-carrots and sticks have been used for different political and economic reasons (Newnham 2011). This is apparent in *The Concept of the Foreign Policy of the Russian Federation* (12 February, 2013) as well. This strategic draft has clearly mentioned various political objectives of the Russian state in terms of international economic relations. The draft objective includes ensuring equal standing in the modern international economic system and minimizing the risk associated with its integration into the global economy.

The concept draft of foreign policy (12<sup>th</sup> February, 2013) has further laid emphasis on the strengthening of strategic partnerships with major energy producing states. It actively promotes dialogue with consumer and transit countries. The policy has an assumption that “measures to ensure the security of energy supplies should be consistently complemented with reciprocal measures to ensure stable energy demand and reliable transit”. The state audaciously affirms that it does provide “state support to the Russian enterprises and companies in getting access to new markets and in development of traditional ones while counteracting discrimination against Russian investors and exporters”.

This emphasis and commitments regarding energy resources show that they do not only occupy a crucial role, but also emerged as a significant driver of diplomacy. Russia, like other hydrocarbon rich states, makes use of its control on energy resources to advance economic and other national interests through various diplomatic moves. It has been pursuing a policy composed of internal and external developments, especially focusing on its near abroad and Europe energy needs. Its various tactics take the form of oil sanctions, gas isolation, and dissuasion of western firms from investing in Baltic energy projects. It is also true that even some companies take their directions from the State, such as Zarubezneft, which does function more or less as an arm of the Russian Foreign Ministry (Grigas 2012; Hill & Fee 2002).

As far as Russian west flank is concerned, their strategy and approach gets leverage due to historical and current market situation. European existing requirements and dependence on energy resources provide Russia a better bargaining position. Having this dependence into consideration, Russia demands a considerable share in the European Union’s energy market. It also insists on legal security on the long term supply contracts and acquisitions. Moreover, it has made continued efforts to control over downstream assets of EU (Solana 2006). Therefore, signing long-term bilateral/multilateral contracts, internal/external consolidation in the upstream/downstream strategic energy infrastructure, especially of pipelines, removing competition by using petro-carrots and petro-sticks through cut-offs and subsidies (Ortung & Overland 2011; Newnham 2011), diversification, and finally inflicting strong state control by nationalization are various ways to use energy as an instrument in the foreign policy of Russia.

## **Energy Politics down the Line**

Russian energy sector in the Post Cold-War era experienced many transitions as well as consolidating phases. During the last two and a half decades, energy sector, in its length and breadth, has applied various methods to strengthen the industry; however, Russian administration as well as industry both could not avoid adopting some previous ways and means. The contrasting factors vis-à-vis business and strategic practices of the old Soviet regimes remained in practice. This was not a period of complete peace and development. A new nation was being carved out to start a journey from chaos to consolidation. Russian citizenry as well as state was seeking a cherished role and place in the world politics. Energy resources provided strength and hope to state machinery, whereupon Russia could harp on future-framework of energy trade and strategy to deal with other nations and international organizations as well.

However, the nature of dissolution and chaotic condition shows that the problem was deeply entrenched in history as well as contemporary structure of the Soviet Union. Looming uncertainties of market regulations and financial distress pushed the scary business environment. Industry, another significant subject, was also plunged into chaos. Therefore, the Russian state had to adopt some fundamental changes in policy making. Promotion of private entrepreneurship and finance was one available and reliable solution to restructure the business environment and making stability in the minds of investors. Various experiments in commerce, trade and industry policies created necessary conditions for the future governments to take new and strong steps. In fact, predecessors of Vladimir Putin made the background wherein the acceptance and justification of new initiatives and approaches to adopting a new model of growth and development did not receive any initial strong opposition among powerful groups at large. Promotion of private capital was seemed to be a welcome move to restructure financial market and industry. Slowly, President Putin came successfully out of the chaos, and established economic stability as well as shown growing performance of the Russian industry. He focused on to reorganize the state operates. State institutions got preferences. A strong system revolving around the central authority was reorganized. New power groups have been evolved but many pressure groups removed from the decision making process. A bigger role of secret agencies could also not be denied to restructure this new system.

As far as Russian energy sector is concerned, the first decade of 21<sup>st</sup> century looks different from the last decade of the previous one. However, it has fundamentally not changed. Of course, some structural changes have taken place, but the basic framework did not experience much radical changes. Even sometimes it seems that the structure of energy industry has a continuum except administrative changes and decision making features. This layout of changes came in the vital aim and policies of the state which had been renewed with strength and vigor by the new government under the leadership of the President Putin. In fact, the continuum was due to the Soviet industrial legacy of energy resources and market, while changes occurred because of new world energy market and expectations as well as demand of stability in the Russian society. So, the energy industry was going through a phase of transition where commonalities and changes of the previous structure as well as new approach to deal the situation in policy making of energy sector stayed alive side by side.

Russia had immediate challenges of shrinking regions of energy production and transit. The strong connection between economy and energy made it clear that these challenges were general in nature for the Russian economy but specific to the energy sector. Various regions and states of energy production such as Azerbaijan in the South Caucasus or Kazakhstan and Turkmenistan in the Central Asia had been seceded from the Soviet chain of energy production. While, parting of Georgia and Ukraine made huge impact on transit equations. These developments compelled Russia to adopt a policy to reorganize territorial network and push for a changed and aggressive foreign policy approach. The whole exercise was intended to secure leverage in conventional energy market to maintain and reassure a demand supply. However, these policy approaches did establish symbiotic relation of Russian energy resources and politics of state. Other than the defense industry, it was set to known as an energy state. The state budget roughly received 35% from the oil and gas revenues (Forbes 2013). This share qualifies the Russian state to identify as an energy state.

In spite of being recognized as an energy state, disintegration of the USSR impacted severely on the activities of crude oil and gas production, especially in the exploration sector. A drop by 22% (1990-91) to 36% (1992) was experienced in successive years. International assessments had shown that only 20% of infrastructure was competitive enough by the international standards at the time of collapse (Locatelli 1995).

## **Central Asia, Caucasus, & Caspian Region**

The Central Asian region is contiguous to the Middle East which is one of the largest sources of energy supply to the world market. The Central Asian states have cultural as well as territorial relations with the Middle Eastern states; especially Turkmenistan has territorial borders with Iran and Afghanistan; while Tajikistan and Uzbekistan are having territorial borders with Afghanistan. Religion is one of the cultural elements that helps connect the masses of these states psychologically. The partial Turkish and Iranian physical contiguity made the whole region sensitive to any negative development like failed operations or retreat of the Red Army due to pressure of other major power or non-state actors (e.g. Mujahideen in the case of Afghanistan). It was seen as well, when return of the Red Army from Afghanistan to the Central Asian region made a negative psychological impact, up to some extent, on the ‘Soviet national idea’, (Kerimov 1996).

Moreover, the impact of waning ideology was not restricted to this region only, it was expanded to the North (which consists of many disturbed areas of the Russian Federation) and South Caucasus region as well, where Azerbaijan, Armenia, Georgia are located. Among these three, Azerbaijan is very important for hydrocarbons. Baku, the capital of Azerbaijan, is a historical production center and was even targeted by the German forces to capture its oil fields (28 June & 24 Nov. 1942)<sup>16</sup>. The whole region is a challenge for the Russian geostrategic moves as well as its energy strategy. Oil transport pipelines, *Black Sea port terminals*, gas routes through Belarus and Ukraine, all are relevant to the Russian energy export strategy.

### **Nationalization of Energy Resources**

Energy resource rich states always talk about fair share of revenues from supply. They attempt to secure demand-security while consumer and transit states focus on supply-security (Vernon 1971; Vivoda 2009). Russia being an exporter attempts to maintain its demand-security. Therefore, it has made all its efforts to reassert state-control over pipelines, marketing channels, and on strategic energy resources. National oil and gas companies are also instrumental (Borisocheva 2007; Roettger 2007). Stark (2007)

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<sup>16</sup>‘Case Blue’ (‘Fall Blau’ in German), later on, which was renamed as ‘Operation Braunschweig’. The German Armed Forces; i.e. Wehrmacht; named for the strategic summer offensive plan in Southern Russia in 1942.

supports Vernon's theory of resource nationalism where balance of power shifts in favor of national oil companies. They become more obsessive and bellicose with their resources and entire upstream and downstream operations (Patton 2008).

The concept of energy nationalism is a popular subject in academics, especially in the context of producer states regarding the resource curse (Paradox of Plenty). Like other resource rich states, Russia is also prone to the resource curse. However, the validity of the concept has been questioned by Mearns (2012) and others. Ross (2011) argues that it develops mostly due to political rather than economic reasons. It could be an unmitigated blessing if governed by wise and benevolent technocrats. Mearns argues that Russia would really not be better off without her abundant energy resources.

Russia seems to be well aware of these academic understandings in its nationalizing process. It dates back to the 1950s when oil exporting countries started to move towards conflictual and cooperative relations, which had started to influence their foreign policy behavior as well. But the central point of logic behind the nationalizing moves was of their national interests. The energy crisis of 1973 was only another milestone in this debate (Park et al 1976; Vagin 2012; Belkin et al 2012).

Russia, in spite of its accession to the World Trade Organization, has turned itself from the covetousness of free-market approach of 1990's. Its energy strategy has taken a form of State Capitalism where state exerts control over the development of energy resources, regulation process, and the actors within the energy sector (Stulberg 2007). Since 2003 it has "reversed" its energy policies due to higher market prices. It has not only raised revenue collections but also increased direct involvement in hydrocarbon licenses. Annulment of environmental permits to Phase 2 of Shell led Sakhalin-2 project and rejection of bids of all five foreign suitors in Shtokman gas field in the Barents Sea substantiate the policy of resource nationalism in Russia.

However, in terms of Economic Security, state not only protects and increases Russia's weight by using cogwheels of global energy markets; "its energy firms and regulatory institutions work as instruments of statecraft for acquiring key technologies and controlling strategic segments such as energy" as well. Gazprom, Rosneft, Transneft, Lukoil etc. have played and continue to play an active role in Russia's foreign policy. Sometimes these firms are more vital than the Russian Ministry of



Foreign Affairs (Lo 2008). It is said that when oil and gas producer states tend to nationalize their energy resources, instability in supply lines are likely to increase (Solana & Ferrero-Waldner 2008).

However, Russia has far more vital concerns vis-à-vis supply. The increased state control through nationalization or by other means of energy resources was important for the apparatus at the fag-end of the last century. They wanted to use energy as an instrument of foreign policy. The Gazprom, which was created in 1989, first transformed into a corporation and later on it began to privatize itself in part, however, at present it has almost transformed into a public sector enterprise.

Russia has many other examples of nationalizing process. It has compelled Royal Dutch Shell to tender control of its one major project on Sakhalin Island to Gazprom; the Yukos was taken over by the state owned Rosneft (Hill & Fee 2002; BBC 2007). In fact, Shell has sold its shares to Gazprom for \$7.45 billion and ultimately gave up its operator status in Sakhalin-2. It was forced to reduce its stake from 55% to 25%. Shell and its partners Mitsui & Co. and Mitsubishi Corp. made an agreement to pay Russia to salvage the \$20 billion venture. In addition, a priority dividend would be given from 2010 onwards that would be linked to the oil prices (Chazan 2007).

An added mode of advancing state control on energy production is the renegotiation of production-sharing-agreements. This mechanism has been used for 12% of oil reserves all over the world. Those are often offshore small oil fields where not only cost of production is high but exploration prospects are also highly uncertain (Muttitt 2005). Russian state inflicted limits to expansion of the ExxonMobil's Sakahlin I contract and Gazprom took steps to take control of gas exports (Belton 2008).

### **Political developments in New Russia**

Deteriorating condition of the Soviet economy was the main concern of Mikhail Gorbachev in 1985. He was conscious about the restlessness of Russians. Abolition of Article VI in February 1990 was not the reason of a new dawn. It was the outcome of a long deliberation. It came as a symbol of demise of the old Soviet system. Stakeholders of national security policy were making strong opposition against Gorbachev. Defense establishment was the biggest soaking system of finance. It was an obstacle against any economic reform. Defense institutions apparently dominated

national security policy. Therefore, Gorbachev attempted to involve civil society and academic community in particular to contribute actively in the national security debate and planning. He emphasized a better active role of civilian in the formulation of defense policies. He was interested to put them before the western world as responsible Russian intellectuals who had a sincere desire for change.

At the 27<sup>th</sup> Party Congress in 1986, Gorbachev advocated that “Guaranteeing security appears more and more as a political problem which can be solved only through political means.” He made an effort to make use of political instruments of security, which has been given secondary status in the national security process since long. Political means had to play a crucial role in civil-military relations. It was a big blow to the national security establishment. This “now included civilian analysts as well as the military, to fill with meaning his new doctrine of ‘reasonable sufficiency,’ which was to guide Soviet security policy. The race to fill the shell of ‘reasonable sufficiency’ with meaning began between civilian proponents of downsizing the Soviet military burden and military advocates of the status quo” (Rumer 1995). People started making voices to extend better peaceful relationship with the West and reduction in defense establishment. Demand for cooperation and additional role for civil society in defense and political decision-making prompted a new thought of foreign investment and technology cooperation with the west. This was creating a situation to restructure and convert the offensive defense posture into defensive one.

On the other hand, status quo ante forces projected the threat of NATO alliances where American defense (numerical) posture was highlighted in particular. It was a simple strategy to follow and consolidate the policy of ‘offense is the best defense’. However, on the contrary, Gorbachev announced the reduction of 500,000 troops in Eastern Europe in December 1988. This move naturally changed the whole security environment and created a new motion to raise many left out issues such as opening of the Berlin Wall, participation in NATO, Soviet integration into Common European Home etc. The unification and withdrawal has shattered the whole European military operation theater. It was the central ground for more than four decades. It had created many social problems in Russia. In terms of defense, Gorbachev-Shevardnadze policy was opposed by highlighting the policy of containment by the hostile states. The question of ‘sphere of influence’ and national interests was raised as a pre-condition

for being a great power. The right-wing Communist Party and weak nationalists played dominant role against the pro-Western approach. It finally resulted in the resignation of Shevardnadze in the winter of 1990.

Though, it seems that reforms were opposed by many insiders; it was not the complete story. ‘Democratic Russia’ movement, a staunch opposition of Gorbachev led by Boris Yeltsin, supported the reforms. In fact, he had more radical and popular reform agenda. He was in favor of the dismantling of Soviet empire and converting it in a union of equal partners by the treaty. His program was known as ‘Little Russia’ to float the message ‘back to internal reconstruction’ rather wasting energy to retain the previous structure. People in general and even at the grassroot level acknowledged this thought. On the other hand, right wingers wanted to establish old Soviet days without popular support. It was a herculean task for any one. The danger of a reactionary crackdown was not completely over; though, August 1991 coup was a failure. Advisors of Gorbachev changed their allegiance toward Yeltsin by 1991. Yeltsin was clear about cooperation with the West. The choice of Yegor Gaydar, a Chicago-school monetarist brand of economist, made the intentions clear. The economic integration into world economy, privatization, and substantial slash in defense budget were the initial prime agenda. Mutual profitability became the fundamental formula of new establishment. Transfer and subsidy obligations ceased to exist for republics. However, a crucial question that whether integration should be ‘with the West’ or ‘into the West’ remained in deep consideration among policy makers and academia. Gaydar along with Kozyrev preferred the second one.

### **Russia: From Crisis to Command**

World has experienced four decades of nuclear standoff and brinkmanship that reflected a historical bipolarity in international relations. The experience of Cold War was an epic of various perception and realities. With the advent of Gorbachev, a new political order and thinking had taken place. The neo-realist spirit of Bush Doctrine had created various problems to the unipolar hegemon. Probably, some of foreign policy miscalculations resulted in the tragic event of 9/11 and paved the way for global harmony. Russia had a crucial role to play in all security architectures. The arrogant political approach without prioritizing national interests and sacrificing everything for the sake of ideology brought misfortunes for Russia. The strongman

ruling tradition in Russia was still deeply concerned with the balance of powers approach of national security. Gorbachev's attempt to change the direction of Soviet state was not entrenched in deep democratic and pluralistic patterns. Celebrating the conversion from socialism-communism to democracy was tentative and short-lived. Even Soviet satellites or Commonwealth of Independent States have rejected the idea of a neo-socialist Union in 1991. On the heap of countless problems which Russia faced, Washington advanced the idea of aide to the democratic experiment in Russia. However, in turn they opted a neo-containment policy through the expansion of NATO and subsequent expansion into Central Asia. Thus, a new set of geopolitical and foreign policy problem emerged among CIS republics. Various domestic issues challenge the Russian state. Gaider's shock therapy caused hostile responses against the establishment. This led to the 1993 confrontation between Duma forces backed by the neo-communist nationalists known as the Red- Browns and Yeltsin's presidential democratic regime. The whole world held their breath at the prospect of a Russian internal war. Despite the harsh memories of the Cold War, Russian success to democratic reforms was universally hoped for. The problems of Chechnya as well as Islamic terrorism from the former Muslim republics have served a catalyst in ushering a new Russian-American diplomatic venue of strategic cooperation. Until the American unilateral invasion of Iraq, that cooperation seemed positive and promising. The Treaty of Moscow served as a milepost for the new relationship between Washington and Moscow. It addressed long-standing nuclear disarmament issues. Russian reemergence catalyzed by economic recovery and coupled with Washington's foreign policy problems associated with invasion on Iraq led to a new stridency in Russian foreign policy.

As far as policy making in the new Russian state is concerned, the legacy of Gorbachev served a vision of new change even in the 21st century. While Yeltsin was a victim of the multiple negative impacts that Gorbachev could not reverse; Putin utilized many of the dynamics of Gorbachev. Glasnost opened the possibilities of domestic and foreign dialogue. Yeltsin, though rejecting Gorbachev's socialism, utilized his application of New Thinking to establish constructive dialogue and business. He established political channels with the West and with Americans in particular. He attempted to opening up opportunities of a newly integrated Russian eco-political age which accentuated by the strength of new and dynamic petro-dollar

economy. Building upon the legacy of change initiated by Gorbachev and Yeltsin, Putin seems determined to return Russia to ascendancy instead of devolution and return to xenophobic isolation.

Slowly, various political thoughts and policy subjects had come to open social and political discussions. In western thoughts, a free market of ideas creates a situation where monolithic national interests could be replaced by multidimensional thoughts and visions of public intellectuals. Russia focuses on post-Soviet-space, transformation in a pluralistic democratic political system and most importantly, its strategic orientation about national security and national interests.

The rise of Putin and his phrase 'Russia is back' has played an important role to shape the national security strategy. The linkages between missile defense system and Strategic Arms Reduction Treaty or between offensive and defensive systems had become new security subjects. Medvedev's notion of new security architecture for Europe focuses on Russian national security perception and new national interests. NATO's 'open door' policy and Obama's efforts to 'reset' relations with Russia have created dichotomy of relations and understanding. It was vociferously stated that Russian leadership abandoned the notion of integration 'into the West' first by Boris Yeltsin following the breakup of the Soviet Union in 1991, and 'with the West' by Putin following the aftermath of September 11, 2001 attacks. There have been a lot of discussions and debates over isolating Russia or Russia being isolated from the mainstream international system. However, Russia should not be placed in isolation vis-à-vis twenty-first century global system. It is inseparable part of the global economy and security system.

Furthermore, Putin rejected calls for a western-style democracy and put Washington on notice that Russian policy will henceforth be based on independence of action regardless of Washington's objections. This has effectively ended the temporary détente precipitated by 9/11. Russian retaliatory attack on Georgia on August 6, 2008 in response to invasions on Abkhazia and South Ossetia by Georgia served to verify Moscow's new foreign policy independence and nationalistic fervor. It had become clear that Russia would protect its Near Abroad. It was a stern warning to Washington that Medvedev and Putin would not tolerate Washington's meddling in Russia's traditional back yard either they 're-set' the relations or engage Russia in other ways.

Just few years back, many political pundits had a very different view about Russian upcoming future. They regarded Russia in terms of military as a second-class power and predicted its come back economically as next to impossible. However, the vital constituents of national power offered a great deal of corrective opportunity. Russian retreat from international arena was only a matter of time. Its recovery as a global power could be reclamation and continuing obstacle to Western interests. It depends on the West whether they engage Russia properly or play the game of containment, preventive defense and defiance, pre-emption and democracy in a new century as well. Russia looks its prestige and status in respect of Cold War and striving to get it back. That is why American policies are in serious consideration in national security strategy and other draft policy documents. Both make moves by keeping other in its mind and heart. Reciprocal approach to enhance their national power is beneficial. However, they opt for a policy of national interests which converge and collide on various issues.

Dmitri Trenin (2001) describes Russia as a fractured imperial empire facing harsh geopolitical turbulences accentuated by demographic dislocations and foreign policy pressures on all levels. Putin's efforts served to stabilize and delimit the new Russian state. Following Yeltsin's attempts to calm down Primakov and his Eurasianist thrust, Putin would continue that orientations until he could stabilize and modify Russian foreign policy at his own terms. His task has been to give notice to international community a clear working definition of what the new Russia is and what it intends to do to secure its traditional near abroad and its borderlands. In fact, Putin was caught on the horns of a security dilemma. Putin and Igor Ivanov failed to convince the international political community that the problem of Chechen independence or reintegration into Russian Federation has been solved. Trenin highlights the severity and confusion of the new post-cold war Russian regimes. Kepel focuses on internal insurgency<sup>17</sup>. Following the events of Afghanistan and Iraq, much of the traditional historic harshness and confrontational political posturing have turned to bilateral relations between these actors. Bush and Putin have tried to resurrect the rapprochement and political accommodation. High-level strategic Russian and American security interests still revolve around a common front against international terrorism and strategic cooperation on WMD (Weapons of mass destruction). Bush's

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<sup>17</sup> Kepel, Gilles (2002). "Jihad: The Trail of Political Islam".

global war on terrorism and Putin's war in Chechnya had a clear identifiable reciprocal element that predisposes both countries' foreign policy establishments to try to repair damage done in the American-Iraqi war. The unilateralism of Bush administration and client-relationship between Moscow and Baghdad were symptomatic of differences in American and Russian international positions. Both countries acted out of national security interests. However, at the strategic level, diplomatic cooperation still appears to be worth of strategic congruence and tactical cleavages. In effect, strategic security cooperation between Russia and the United States against the militant Islam has prompted commonality of purposes.

However, national security, national interests and foreign policy of a new Russian state were not completely in different and watertight compartments. These are entwined in one another. Domestic economic reforms and political transformation had their dependence on these three pillars. They had to reorganize their army with a fresh and economical budget allocation. Relations with the west and east were certainly in question. Having national security and Cold War status in consideration, they had to formulate and decide their visionary approach to advance the country and to prepare it for coming century. They felt the importance of openness and encouraged people to make their voices on national security and national interests without using the Aesopian language of Soviet era. This reflects their quest for a frog-jump and stable vision to achieve all those dreams which have been lost in past few years. This was the only way to emerge from a Soviet past. Warsaw Pact prism had been broken, territorial border realities changed, but many issues remained unresolved. In fact, many new subjects propped up. These issues were related to economy, politics, social and very crucial the psychological one. The lost status in world politics was a huge setback in the minds of Russians.

The journey from dominance to equality and sometimes below the dignity was not easy to consume. Russia attempted its best to reorganize and establish relations with the near abroad nations, distant democratic or industrialized and third world countries. Acquiring the status of a stabilizing regional actor against economically robust China was a new challenge. Cooperation appeared as the only prescription for a new growth. Europe, America and Commonwealth of Independent states were in new panorama. Thinking on a new version of Monroe doctrine, achieving the ambition of a great

power status, looking for a pragmatic financial or economic solution, and management of a forced structure are certainly difficult challenges. However, Russia's rise seems possible as Alexis de Tocqueville advanced the most fêted prophecy in political world in 1835<sup>18</sup> where he explored why America was predestined to develop into the most powerful nation in the world. Beside this, he noted Russia for a parallel and inevitable prominence for numerous of the identical *raison d'être*. Keeping marked differences of their political system and approaches in profound consideration, he concluded with a judgment fated to become illustrious: "Their starting-point is different and their courses are not the same; yet each of them seems marked out by the will of Heaven to sway the destinies of half the globe" (Porter 1993).

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<sup>18</sup> The first volume of 'Democracy in America'.



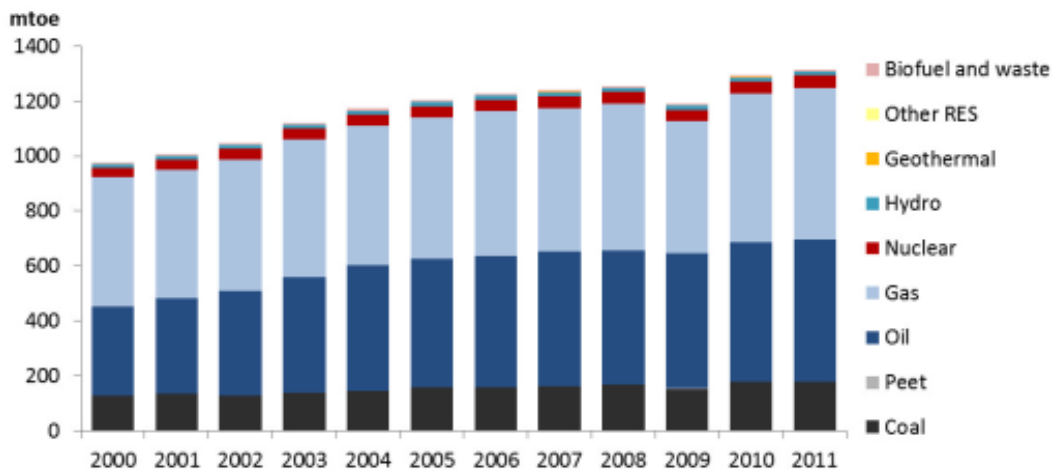
## Chapter 3

### RUSSIA'S ENERGY AND FOREIGN POLICY

#### Russia's Primary Energy Balance

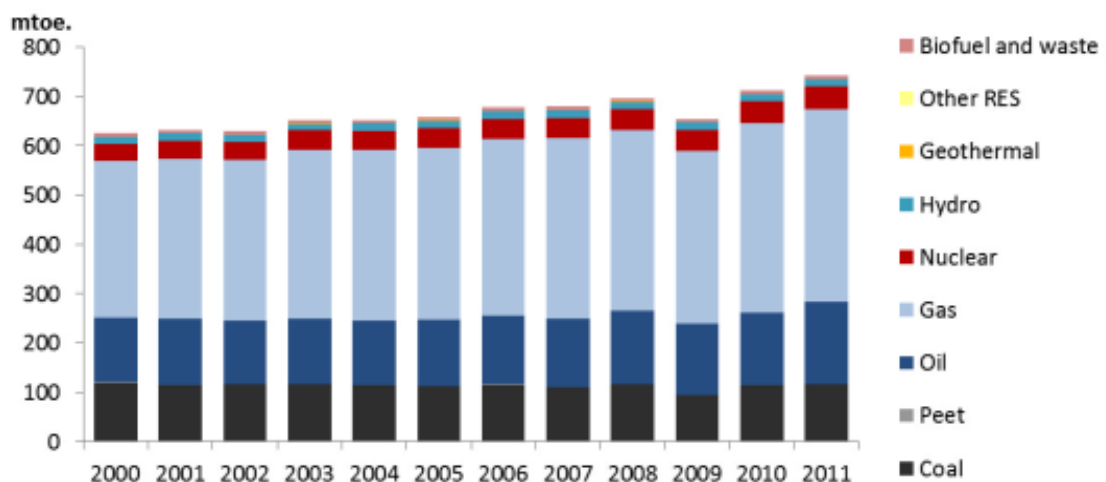
Following China and the United States, Russia is the third largest producer and consumer state of energy resources. Its consumption is 5% and production goes to 10% of total energy resources on earth. The “output of about 1300 thousand tons of oil equivalent (mtoe) (42% of which is provided by gas), allows the country to export 600 mtoe- 12% of the world's energy trade.” This energy strength backs the Russian energy super power status and makes it a global leader in the energy export market; however, the large consumption opens a huge domestic bazaar as well (Tatiana 2014).

#### Russian Primary Energy Production, 2000–2011



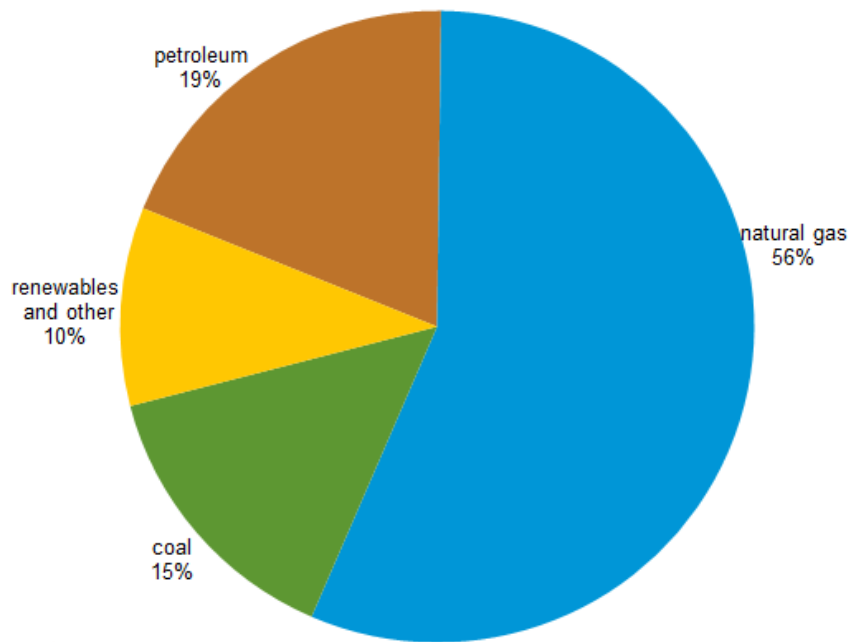
Source: IEA statistics, September 2013

#### Russian Primary Energy Consumption, 2000–2011



Source: IEA statistics, September 2013

### Russia's primary energy consumption, 2011



Source: U.S. Energy Information Administration, International Energy Statistics Database

[http://www.eia.gov/countries/analysisbriefs/Russia/images/energy\\_consumption.png](http://www.eia.gov/countries/analysisbriefs/Russia/images/energy_consumption.png)

### Russia's Exports of Energy Resources, 2005–2013

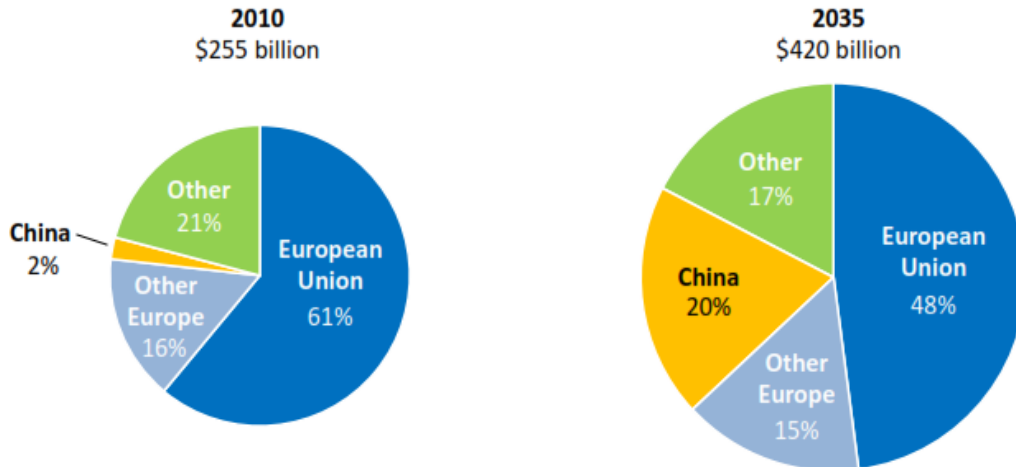
	2005	2006	2007	2008	2009	2010	2011	2012
Oil, million tons	252.5	248.4	258.6	243.1	247.5	250.7	244.5	240.0
Oil products, million tons	97.1	103.5	112.3	118.1	124.5	133.2	132.1	138.2
Natural gas (pipeline), bcm	209.2	202.8	191.9	195.4	168.4	177.8	189.7	178.7
LNG, bcm	0.0	0.0	0.0	0.0	5.1	14.6	13.9	13.1
Hard coal, million tons	79.7	91.4	98.0	97.4	105.1	115.7	110.5	130.4
Electric power, TWh	17.9	18.6	15.8	18.6	15.0	19.1	18.7	13.1

Sources: Bank of Russia, “Customs statistics of foreign trade of the Russian Federation” 2005-2013, data from OJSC Gazprom’s website (Figures include oil and gas exported to member states of the Customs Union).

The Russian economy conventionally relies on the energy sector for most of its export revenues and budgetary incomes which consolidate the GDP. The tendency has been increasing for the last two decades which has resulted dependence on hydrocarbons export far greater than before. Though, the government is committed to reduce its dependence on energy exports and setting its targets in various policy document

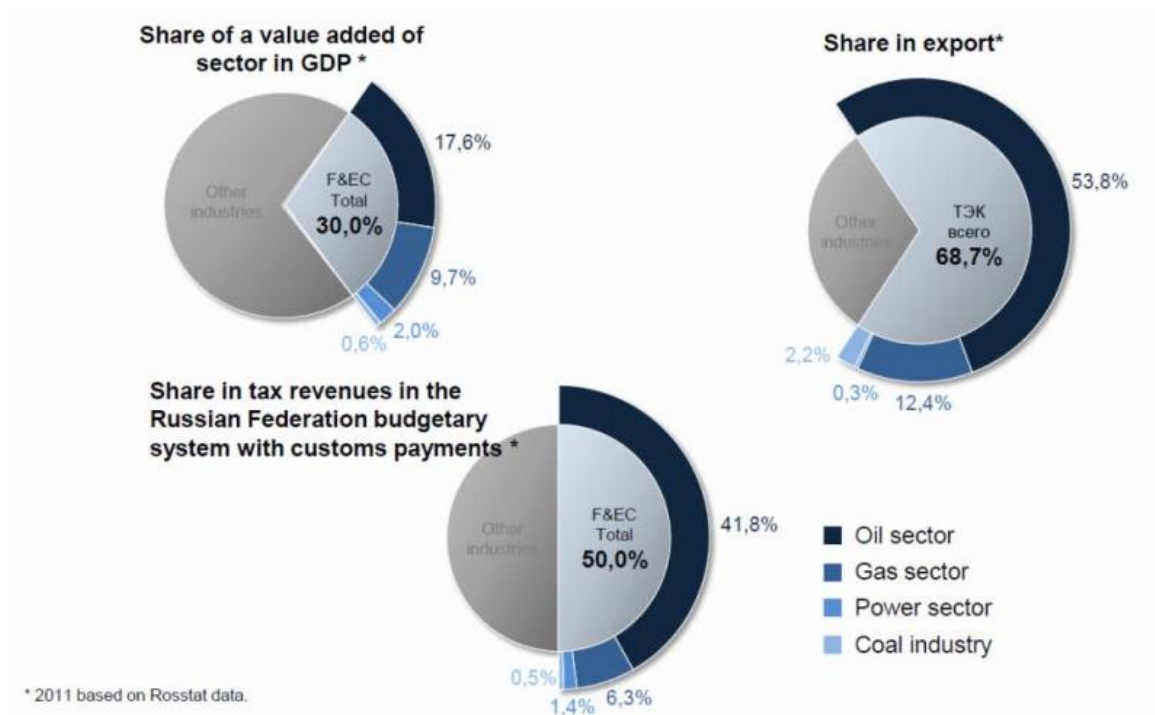
drafts. In 2011, ‘oil and related products in addition with natural gas accounted for more than 67% of export yields, while customs duties and Mineral Extraction Tax (MET) on oil and gas provided more than half of federal revenues’ (Tatiana 2014).

### Russian revenue from fossil fuel exports



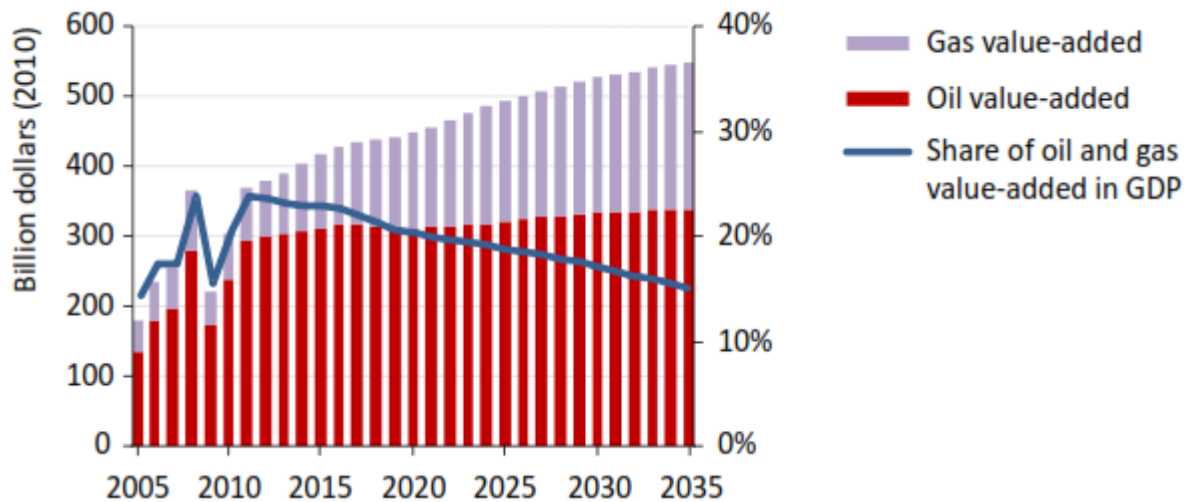
©OECD/IEA 2011: An increasing share of Russian exports go eastwards to Asia, providing Russia with diversity of markets and revenues

### Role of the Energy Sector in Russian GDP, Export, and Budget Revenues in 2011



Source: Energy Ministry, based on Rosstat data

## Estimated share of oil and gas in Russian GDP



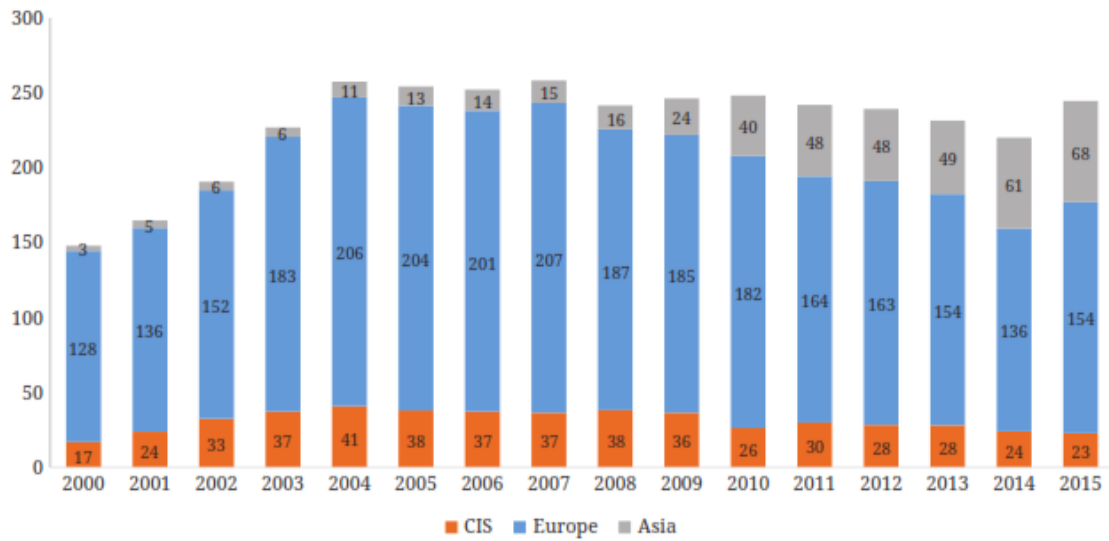
©OECD/IEA 2011: The contribution of oil and gas to Russia's GDP declines from 24% in 2011 to 15% in 2035, but this gradual decrease means that the economy remains vulnerable to external shocks

Energy resources have given a boost to the Russian economy in the very first decade; whereas the second decade started with healthy signs of growth as well. Up to now, it has produced increased oil and gas for the world energy market. In terms of total energy production around the world, Russia was the biggest natural gas producer ahead of the U.S. and second leading producer of total petroleum liquids in 2011; i.e. second to the Saudi Arabia and ahead of the United States (EIA U.S. 2011; IEA 2011). It was the third major primary energy<sup>19</sup> producer while China and the United States were the first and second respectively (Indexmundi 2013; TSP-data 2013). In fact, since 2000, the brilliant performance, as a leading producer of oil & gas, has been continued. This energy scenario offered Russia a distinct and dominant position in the world energy market, and conferred with a new phrase 'energy superpower'.

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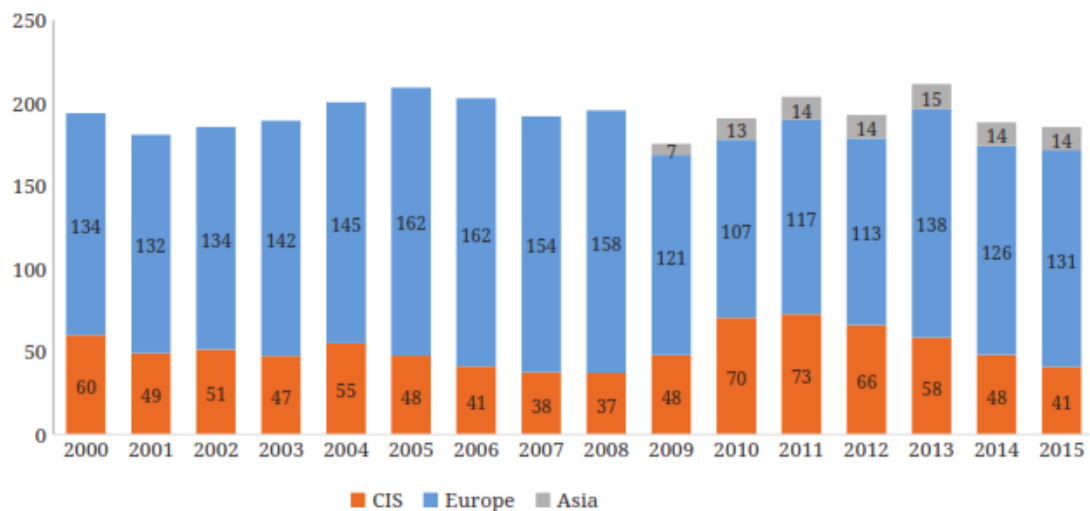
<sup>19</sup> "Primary energy is an energy form that is found in nature. It has not been subjected to any conversion or transformation process. It is energy contained in raw fuels, and other forms of energy received as input to a system. Primary energy can be non-renewable or renewable. In energetics, a primary energy source (PES) refers to the energy forms required by the energy sector to generate the supply of energy carriers used by human society".

## Russian crude oil export dynamics by destination, 2000–2015, million tons



Source: “Экспорт Российской Федерации сырой нефти за 2000–2015 годы (по данным ФТС России и Росстата),” Central Bank of the Russian Federation, last updated June 25, 2015, [http://www.cbr.ru/statistics/print.aspx?file=credit\\_statistics/crude\\_oil.htm](http://www.cbr.ru/statistics/print.aspx?file=credit_statistics/crude_oil.htm), based on Russian Custom Service data, Rosstat. CIS=Commonwealth of Independent States.

## Russian gas export dynamics by destination, 2000–2015, bcm



Source: “Экспорт Российской Федерации природного газа за 2000–2015 годы,” Central Bank of the Russian Federation, last updated June 25, 2015, [http://www.cbr.ru/statistics/print.aspx?file=credit\\_statistics/gas.htm](http://www.cbr.ru/statistics/print.aspx?file=credit_statistics/gas.htm), based on Russian Custom Service data, Gazprom.

However, Russian economy is increasingly relying on oil and gas wealth and it is because to provide revenue. States, having high natural resource level, have meager incentives to develop as well as to maintain effective bureaucratic systems of governance. In this context, revenue of natural resources undermines state institutions and dent the growth of a nation. This situation raises the weak foreign policy

institutions, which includes foreign ministry, military and intelligence services. Simultaneously, it is responsible for the depletion of foreign policy formation. In context of the Russian Federation the resultant weakness of foreign policy system is due to oil and gas. It is designed by small number of individuals which seems to be highly personality driven and characterized by poor bureaucratic advice for policy makers. For information flow/inflow, personal ties are more important than formal institutional structure. And sometimes, information and intelligence are frequently lacking and confused. This centralized system is highly prone to mistakes, misjudgments and side by side, lack in checks, balances and lastly the impartial bureaucratic advice which is provided by strong foreign policy institutions. These flaws were detrimental in policy formation during Second Chechen War (1999-2001), Georgian War (2008) and current crisis in Ukraine. To combat this institutional weakness in dealing with Russia, it is essential to focus on the understanding of the most influential acts in policy formation, negotiation with top level bureaucrats rather than lower level personnel and more understanding of main Russian Leaders' personal perceptions as well as how to understand or to reduce uncertainty.


Though, energy represents a source of national power; it is flexible as well as vulnerable political commodity in various situations. Nation states wish to grab it at every moment. Therefore, Russia could also use its vast reserves to rebuild some of the geopolitical heft that has been vanished with the collapse of the Soviet Union in 1991 (White 2005; Lo 2008; BP 2007; Oil & Gas Journal 2008; EIA 2007; Stulberg 2007). It has not only been central to the Russian economy, but also crucial to its global relations. It receives 65% of foreign-exchange from energy supplies while two-thirds of federal budget derives from fossil fuels. It has derived more than 80% of the export earnings in 2010 from oil, fuel, natural gas, and minerals.

## Composition of Russian Exports

Percentage of All Exports

	1995	2000	2002	2003	2004	2005	2006	2007
Food and agricultural (excludes textiles)	1.8	1.6	2.6	2.5	1.8	1.9	1.8	2.6
Mineral resources (including oil, gas, and coal)	42.5	53.8	55.2	57.3	57.8	64.8	65.9	64.7
Chemical industry	10.0	7.2	6.9	6.9	6.6	6.0	5.6	5.9
Leather goods and furs	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1
Wood, lumber, and timber	5.6	4.3	4.6	4.2	3.9	3.4	3.2	3.5
Textiles and footwear	1.5	0.8	0.8	0.7	0.6	0.4	0.3	0.3
Metals, precious stones, and jewelry	26.7	21.7	18.7	17.8	20.2	16.8	16.3	16.1
Machines, equipment, and transportation vehicles	10.2	8.8	9.5	9.0	7.8	5.6	5.8	5.6
Other	1.3	1.5	1.4	1.4	1.1	1.0	1.0	1.2

Sources: Federal State Statistics Service, *Rossiya i tsifryakh—2008* (Russia in figures—2008), Table 26.8, at [http://www.gks.ru/bgd/regl/b08\\_11/lss/WWW.exe/Sstg/d03/26-08.htm](http://www.gks.ru/bgd/regl/b08_11/lss/WWW.exe/Sstg/d03/26-08.htm) (August 27, 2009).

Table 2 • B 2333  heritage.org

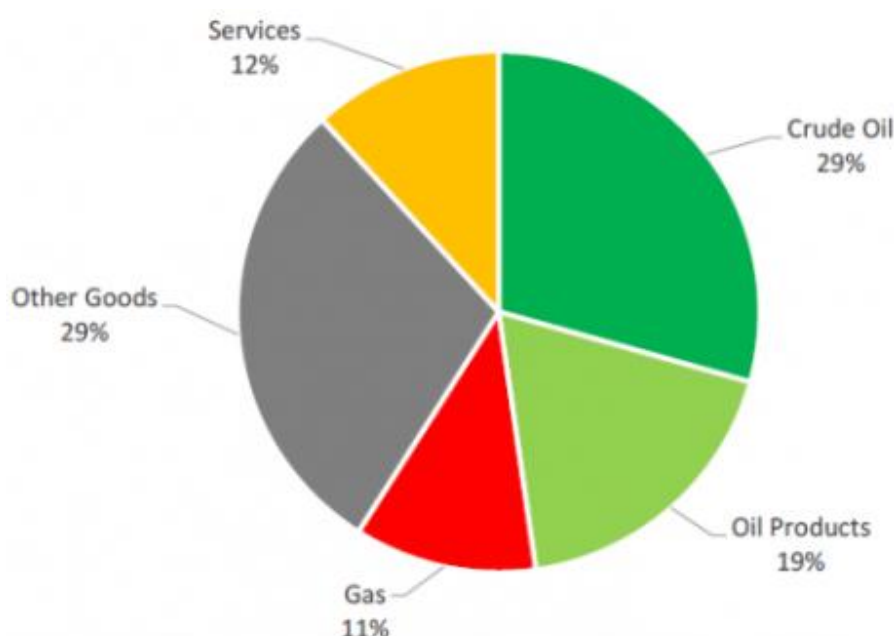
[http://www.heritage.org/~media/images/reports/2009/graphics/b2333\\_table2.ashx](http://www.heritage.org/~media/images/reports/2009/graphics/b2333_table2.ashx)

## Russian oil and gas export in 2013

Export Revenues	\$ billion in 2013	% of GDP	% of Export Revenues
Crude Oil Export	174	8%	33%
Oil Products Export	109	5%	21%
<b>Total Oil Export</b>	<b>283</b>	<b>14%</b>	<b>54%</b>
Natural Gas Pipeline Export	67	3%	13%
LNG Export	6	0%	1%
<b>Total Natural Gas Exports</b>	<b>73</b>	<b>3%</b>	<b>14%</b>
<b>Total Oil &amp; Natural Gas Export</b>	<b>356</b>	<b>17%</b>	<b>68%</b>

Source: BOFIT, Central Bank of Russia, metals & mining export revenues from Goldman Sachs.

## Contribution of oil sector to Russian exports



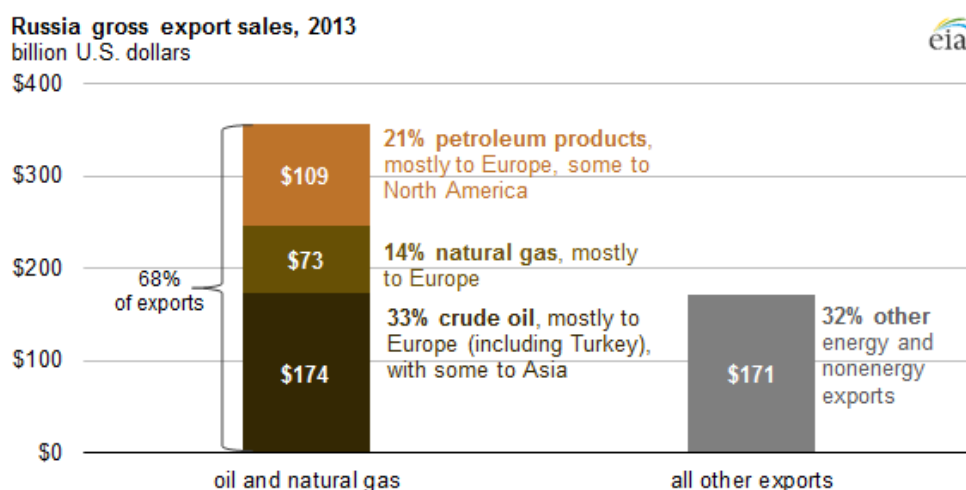
Source: Central Bank of Russia

<http://topforeignstocks.com/2015/06/01/russian-oil-production-by-company/>

“Russian oil production reached a post-Soviet record in 2012, despite predications at the beginning of the year that output would fall. Data from Russia's energy ministry in Moscow shows oil and gas production grew at least one percent last year to reach a high of 10.4 million barrels per day. Russia had established its previous post-Soviet record in 2011 when output stood at slightly more than 10 million barrels per day. The current oil output rate outpaces that of Saudi Arabia and secures Russia's position as the world's biggest oil producer. The oil and gas sector accounted for roughly half of all budget revenues in Russia” (<http://www.globalsecurity.org/military/world/russia/energy.htm>).

## Russian Earnings from Energy Exports

In 2013, Russia has exported 33% of crude oil, mostly to Europe, including Turkey with some parts to Asia as well; 14% natural gas (including liquefied natural gas) mostly to Europe; 21% petroleum products mostly to Europe, though some portion to the North America as well; and 32% other energy and non-energy products. This accounts 68% of exports from crude oil, natural gas, and petroleum products. Here petroleum products costs \$109 billion, and crude oil and natural gas earned \$246 billion. The most interesting aspect of this trade is that Russia still earns more from its crude oil export (\$174billion) compared to its natural gas export (\$73 billion). This vast majority of export earning underpins state authority domestically and affords influence externally (Stanislaw 2008; Abdelal & Mitrova 2013; EIA July 23, 2014).



**Source:** U.S. Energy Information Administration, Russia Federal Customs Service

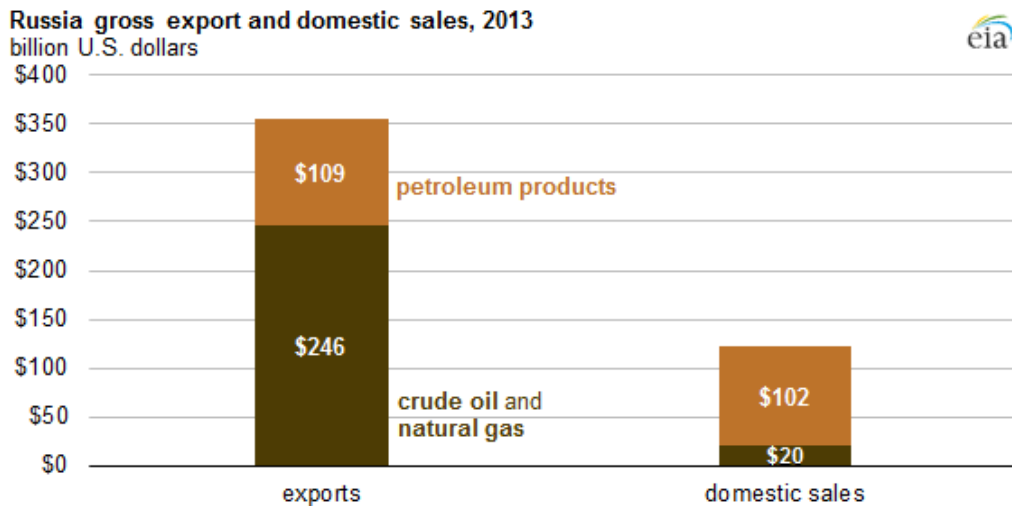
**Note:** Natural gas includes liquefied natural gas (LNG) sales <http://www.eia.gov/todayinenergy/detail.cfm?id=17231>

### Russia's oil earnings

Year	Total Revenue	Average Urals \$/bbl
2000	\$ 52 B	\$ 26
2001	\$ 52 B	\$ 23
2002	\$ 56 B	\$ 24
2003	\$ 74 B	\$ 27
2004	\$ 100 B	\$ 35
2005	\$ 148 B	\$ 51
2006	\$ 191 B	\$ 61
2007	\$ 220 B	\$ 69
2008	\$ 300 B	\$ 92
2009	\$ 200 B	\$ 41
2010	\$ 275 B	\$ 75
2011	\$ 320 B	\$ 105
2012	\$ 325 B	\$ 115
2013	\$ 325 B	\$ 97
2014	\$ 325 B	\$ 101

<http://www.globalsecurity.org/military/world/russia/energy.htm>





**Source:** U.S. Energy Information Administration, Russia Federal Customs Service, IHS Energy, Eastern Bloc Research  
**Note:** Natural gas includes LNG sales. <http://www.eia.gov/todayinenergy/detail.cfm?id=17231>

This situation interweaves economics, domestic politics, and foreign policy in a complex mix. In fact, some of the politics of energy is warping diplomacy in certain parts of the world. The Russian neighborhood has experienced the same in a great deal as well; e.g. Ukrainian crisis is nothing else, but the all about politics (Luft 2006; Parker 2006; McFaul 2006; Rice 2006/08; Oil & Gas Journal 2008). Therefore, direct control over energy resources affords a formidable power in world politics. It lures large producer states to grab every opportunity to extend their control and project them as a strong nation in the international arena. The crisis of 2008, in particular, propelled Russia as well to formulate a new long-term energy strategy that targets at a comprehensive energy policy, enhancing domestic sustained development and a multi-polar world order (Shadrina 2010).

Russia has also been well aware of the fact that the new energy world order has a particular focus on the emerging markets where consumer nations have a bend of their foreign policies towards producer states. It has also been experienced that hydrocarbon abundant nations (HANs) have peculiar conflicting and cooperative relations unlike others. Their hydrocarbon resources have been shaping the foreign policy behavior since they have turned into exporters of these commercial and strategic commodities (Park et al 1976). Russia has these attributes quite well. It is well advanced in technical know-how of upstream and downstream petroleum industry unlike other HANs of various regions. Moreover, future energy projections, rising demands, and surging prices have inspired Russia to make assertive behavior in its foreign energy relations. Though, in spite of this assertion, Vivoda (2009/11) has

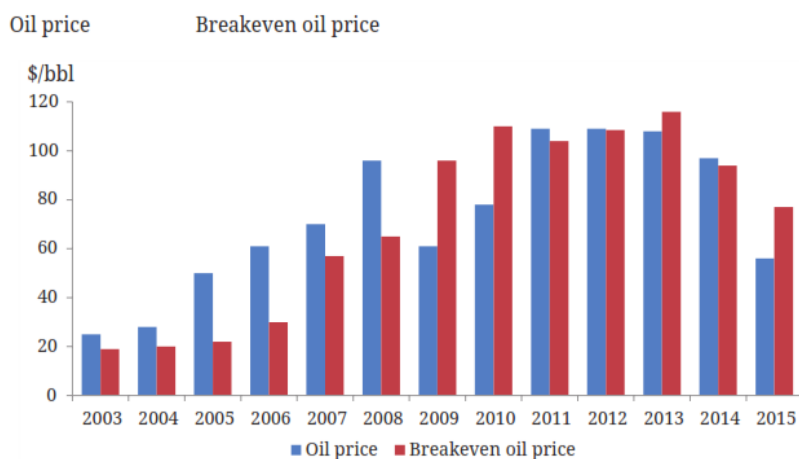
shown that high or rising prices allowed them ‘to reach more favorable investment conditions’ in energy business. It has sought new partners and avenues to expand and divert its energy resources in the long run. Strategically, the focus has been shifted to the neighboring economies and Asia-Pacific in general.

### Strength of Energy Resources

Energy resources have vital and natural place in decision making process of Russia. These resources are bound to play a pivotal role in the foreign policy behavior of major producer or consumer states in particular. Of course, Russia is of no exception. Its oil and natural gas production has been increasing since 2000, which has attained some new heights from 6,724Thou.Bbls/Day to 10,534Thou.Bbls/Day as well as 19,335Bcf to 21,359 Bcf respectively (up to 2013). Its inevitability as one of the largest energy producer and supplier in the new energy market is a well established and significant fact. In addition to European energy demands, energy hungry Asian economies are also looking desperately for its supply lanes.

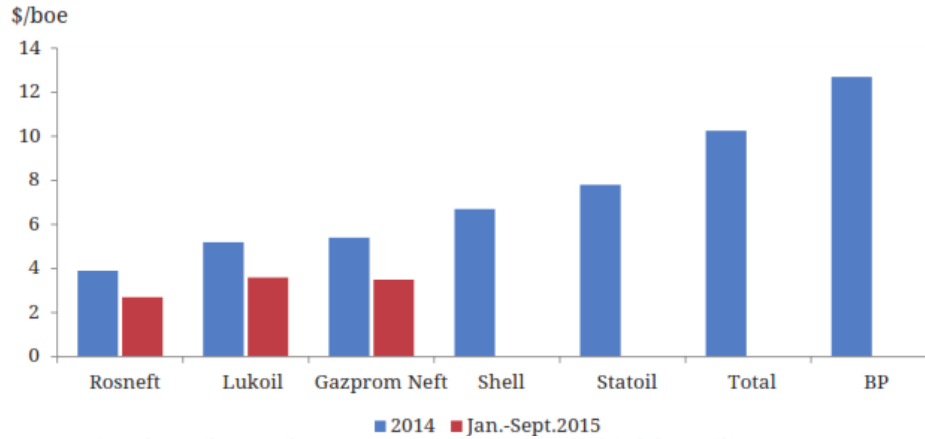
Russia, a \$2trillion economy, is one of the top producer and supplier of energy resources. It holds the largest natural gas reserves and is second largest producer of dry natural gas. In 2012, it was the third largest producer of liquid fuels wherein only the United States and Saudi Arabia are ahead of its production. In 2013, it was first in crude oil production, second in petroleum net export, and third in total oil production. If these reserves are strength of a state, the revenue dependence on hydrocarbons creates problems as well. Normally, oil and gas revenue of Russia accounts for more than fifty percent of the federal budget.

### Breakeven oil prices for Russia’s federal budget, USD per barrel



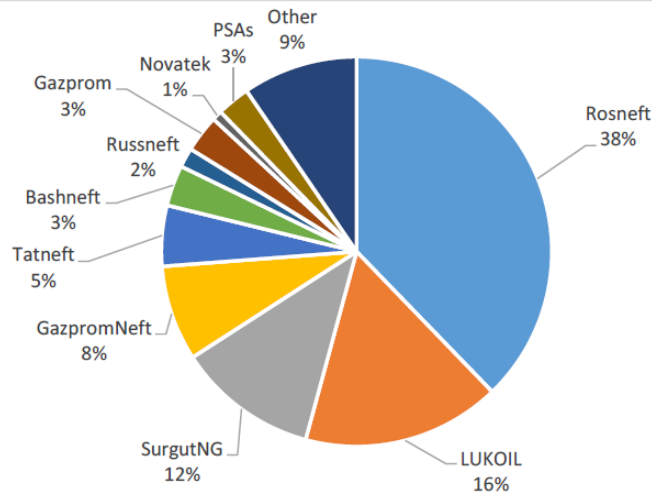
Source: Alex Fak, Valeriy Nesterov, “Russian Oil and Gas—Trimming the Belly Fat,” Sberbank CIB Investment Research, February 2016.

### Oil production costs comparison



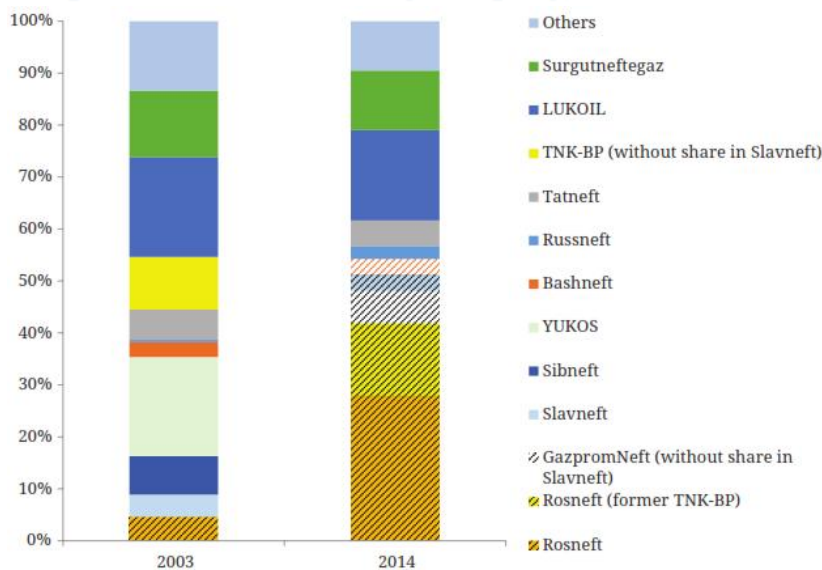
Source: Dina Khrennikova, "Siberian Surprise: The Numbers Behind the Resilience," *Bloomberg*, December 20, 2015, <http://www.bloomberg.com/news/articles/2015-12-20/siberian-surprise-the-numbers-behind-russia-s-oil-resilience>.

### Russian oil production by Company



Source: Russian Ministry of Energy data (NB: Rosneft and Gazpromneft include their 50% share in Slavneft, which they jointly own) <http://topforeignstocks.com/wp-content/uploads/2015/06/Russian-Oil-Production-by-Company.png>

### Oil production in Russia by company, 2003 and 2014

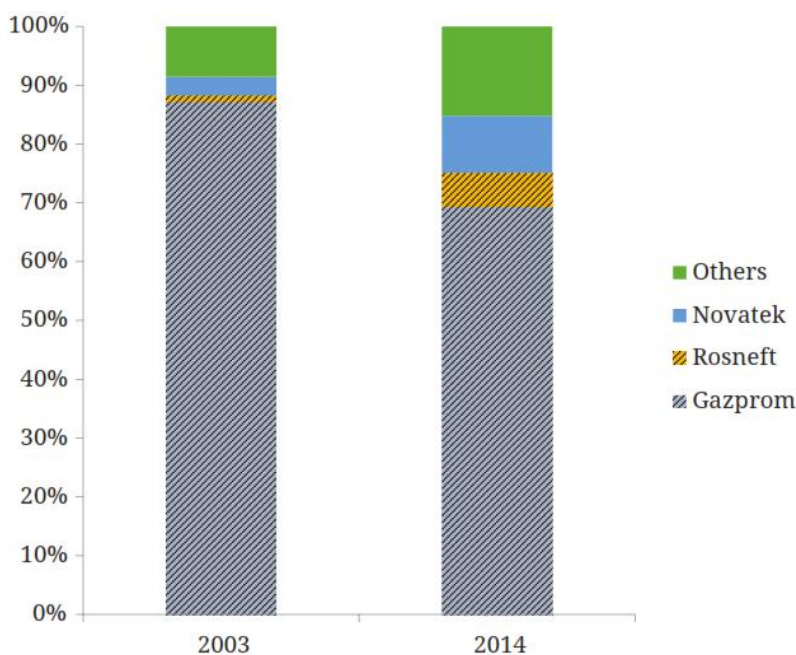


Sources: Companies' data, Rosnedra, the Energy Research Institute of the Russian Academy of Sciences (ERI RAS). Note: Cross-hatching denotes state control.

The huge revenue dependence compels Russia to exploit these resources at any cost. However, European dependence on Russian natural gas transforms the weakness of natural resource dependency into strength of the Russian state, which runs this oil and gas trade with individual European Union countries and other states. The EU depends heavily on Russian natural gas supply through pipelines which accounts for more than one-third of its total need. Most of the Russian gas supply to Europe comes through Ukraine and Belarus, who are also heavily dependent of Russia. Germany (41.0 Bcm/year), Italy (25.3Bcm/year), United Kingdom (16.6 Bcm/year), and Poland (12.9 Bcm/year) are the largest consumers of Gazprom in EU28; however, Turkey, a non-EU state, receives 26.7 Bcm/year from Gazprom.

The huge dependence makes energy vitally instrumental in the Russian foreign policy toward European region that provides strength and leverage to the state diplomacy. This power of energy resources has been acknowledged in the draft strategy ‘Energy Strategy of Russia to 2020’ (August 2003). It recognizes energy as “an instrument for the conduct of internal and external policy”. Moreover, it further ascribed its role in the world energy markets, which up to a large extent “determines its geopolitical influence” (Russia’s Energy Strategy... 2003). Scholars like Cohen (2011) have acknowledged at the U.S. Congress that Russia is willing to use energy as a foreign policy tool

**Gas production in Russia by company, 2003 and 2014**



Sources: Rosstat, ERI RAS.

Note: Cross-hatching denotes state control.

The aforesaid influence and energy superpower status was documented as a political instrument not only in the draft Energy strategy, but also in the President Putin's statements along with other major policy drafts. Cameron (2009) recalls the President when he argues that energy "to a large extent determines the country's place in geopolitics". However, the National Security Strategy until 2020 (May 2009) of the Russian Federation acknowledges energy as a resource and security matter. It has been recognized as an instrument of power that provides strength and leverage to the Russian state in world politics. But more than anything else, energy secures resources for strategic deterrence (Hass 2009; Simurdic 2009).

The concept draft (February 12, 2013) further laid emphasis on strengthening the strategic partnership with the major energy producing states, while actively promoting dialogue with the consumer and transit states. The policy has an assumption that "measures to ensure the security of energy supplies should be consistently complemented with reciprocal measures to ensure stable energy demand and reliable transit". The state audaciously affirms that it does provide "state support to the Russian enterprises and companies in getting access to new markets and in the development of traditional ones while counteracting discrimination against Russian investors and exporters."

In fact, state control of energy resources and the resultant potential use of this power for political purposes is a legitimate right of the sovereign nations (Stanislaw 2008). Russia has used this power in a significant manner, especially with/against the newly independent states in its near abroad. If Armenia, Belarus and Ukraine (under President Kuchma) have received heavily subsidized energy, other states such as Georgia, Moldova, the Baltic States and Ukraine (under President Yushchenko) have experienced supply disruptions and punitive price increase. However, the 'Petro-carrots and sticks' have been used for different political and economic reasons (Newnham 2011), and it is apparent in '*The Concept of the Foreign Policy of the Russian Federation*' (12 Feb., 2013). It clearly mentions Russia's principal objectives in terms of political as well as international economic relations. The draft objectives added the insurance of its equal standing in a modern system of international economic relations, and minimizing risks associated with its integration into the global economy.

All the emphasis and commitments in various draft strategies show that energy resources do not only occupy a crucial place, but also has emerged as a significant driver of diplomacy. Russia, like other hydrocarbon rich states, makes use of its control of energy resources to advance economic and other national interests through various diplomatic moves. It has been pursuing its energy policy composed of internal and external developments, especially focusing on its near abroad and Europe. Its tactics take the form of oil sanctions, gas isolation, and dissuasion of western firms from investing in Baltic energy projects. Even some companies take their direct guidelines from the State, such as Zarubezneft. It has been functioning more or less as an arm of the Russian Foreign Ministry (Grigas 2012; Hill & Fee 2002).

According to current data provided by the EIA (2014) on oil production, Russia comes third with its liquid fuels production 10.4 million barrels a day (bbl/d), while Saudi Arabia and the United States were the first and second largest producers of oil respectively. In 2012, it stood second in natural gas production (second to the U.S.) along with third in total liquids where the average production was at 10.5 (bb/d) through September 2013. It is also interesting that the United States was holding the first rank and the tug of war for the first rank goes on with Russia year on year.

### Crude Oil Production, Including Gas Condensate, in Russia, 1970–2010 (million tons)

Federal district	Siberia	Federal subject	1970	1980	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northwestern			7.6	21.7	17.0	10.3	13.5	14.5	15.4	18.0	21.6	24.5	26.0	27.4	29.5	33.6	32.2
Southern			41.8	22.6	12.0	7.8	10.6	11.6	12.3	12.8	13.3	13.5	13.6	13.3	12.6	11.0	8.9
Volga			201.5	187.2	109.6	78.3	75.2	78.7	83.0	89.2	92.9	93.2	95.5	97.4	98.8	102.3	107.0
Urals	Western Siberia	Tyumen Region	28.5	307.9	365.3	201.6	213.5	231.3	254.2	283.2	310.0	320.2	325.5	323.8	319.0	311.0	307.0
		Khanty-Mansi Auto. Region	28.5	304.9	306.0	169.2	180.9	194.2	209.9	233.2	255.8	268.0	275.6	278.0	275.0	268.0	266.0
		Yamalo-Nenets Auto.Region	—	3.0	59.4	32.4	32.0	36.3	43.4	49.1	53.0	50.8	48.4	44.5	42.4	40.3	35.7
		Subtotal–Urals	28.5	307.9	365.3	201.6	213.5	231.3	254.2	283.2	310.0	320.2	325.5	323.8	319.0	311.2	307.0
Siberia		Novosibirsk Reg.	—	—	0.0	0.0	0.0	0.1	0.2	0.5	0.9	1.4	1.8	2.0	n.a.	n.a.	n.a.
		Omsk Region	—	—	—	—	—	0.0	0.1	0.3	0.5	1.0	1.1	n.a.	n.a.	n.a.	n.a.
		Tomsk Region	2.9	4.8	10.3	6.7	6.9	7.8	10.6	13.7	15.9	11.7	10.1	10.3	10.4	10.6	11.1
		Subtotal–Western Siberia	31.4	312.7	375.7	208.4	220.4	239.1	265.1	297.6	327.4	334.3	338.6	336.1	n.a.	n.a.	n.a.
	Eastern Siberia	Krasnoyarsk Reg.	—	—	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	n.a.	3.8	12.9
		Irkutsk Region	—	—	—	—	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	n.a.	1.6	3.2
		Subtotal–Eastern Siberia	—	—	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	n.a.	5.4	16.1
Subtotal–Siberia minus the Urals			2.9	4.8	10.3	6.9	7.0	7.9	11.0	14.6	17.6	14.3	13.3	13.8	14.4	18.9	29.3
Far East		Sakha Republic	—	—	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	n.a.	2.0	3.5
		Sakhalin Region	2.5	2.5	1.9	1.7	3.4	3.8	3.3	3.2	3.5	4.0	6.2	14.8	12.9	15.5	14.8
		Subtotal–Far East	2.5	2.5	2.0	1.9	3.8	4.2	3.7	3.6	3.9	4.4	6.6	15.2	13.6	17.4	18.3
Total			284.8	546.7	516.2	306.8	323.5	348.1	379.6	421.3	459.3	470.2	480.5	490.9	488.0	494.3	505.0

Sources: Russian statistical yearbook 2007 (Moscow: Federal State Statistics Service of the Russian Federation: 2008, 2009, 2010).

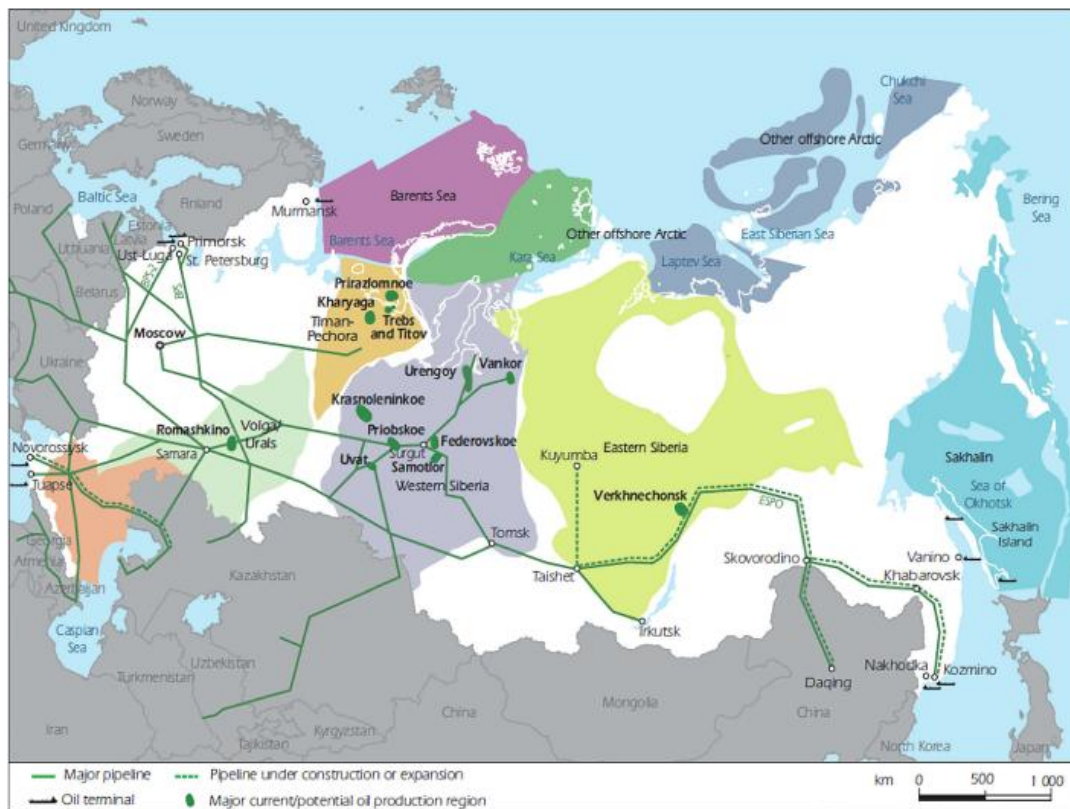


## Oil and Gas Producing Regions of Russia



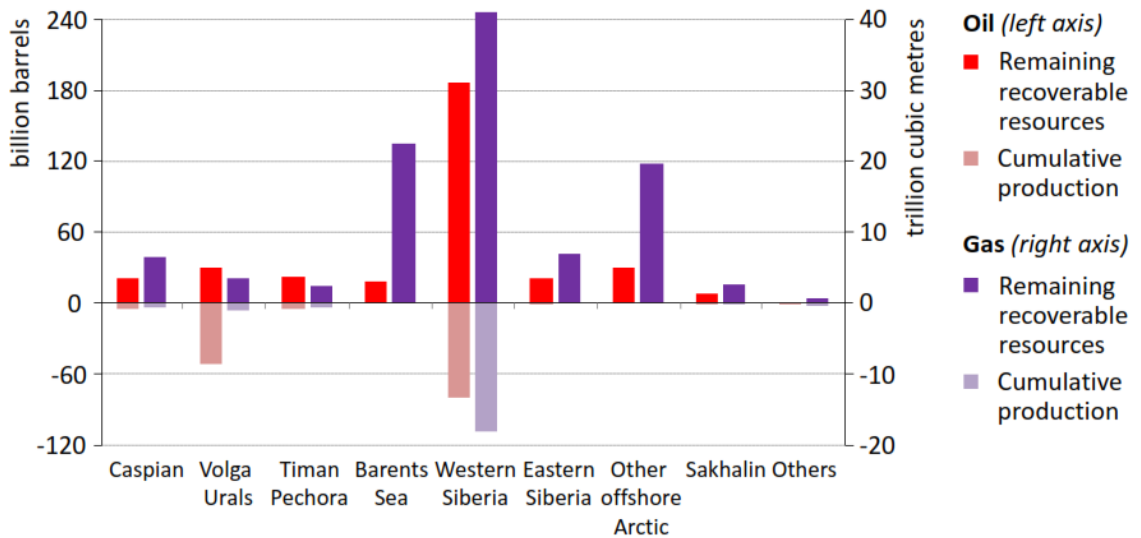
<http://petroneft.com/operations/west-siberian-oil-basin/>

## Russia's Oil-Producing Basins and Export Infrastructure



Source: IEA

## Conventional oil and gas resources in various Russian regions, end-2010



©OECD/IEA 2011

## Most Important Natural Gas Fields in Operation in Russia

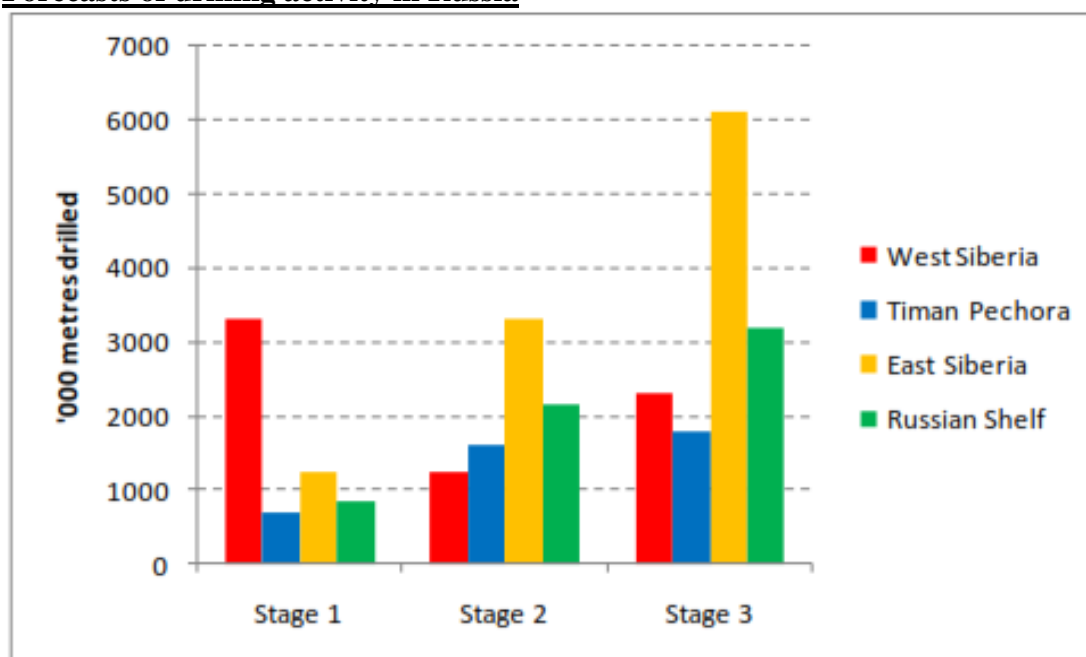
Field	Started in	Maximum production bcm per year	Year maximum production was achieved	Production in 2009, bcm
Western Siberia				
Medvjezhie	1972	75.3	1983	14.5
Urengoy (Senomanian)	1978	276.2	1987	58.7
Vyngapur	1978	20.4	1980	1.2
Urengoy (Valanginian)	1981	34.0	1989	22.8
Yamburg (Senomanian)	1986	174.2	1994	90.6
Yamburg (Valanginian)	1991	14.1	2006	13.8
Yubileynoye	1992	21.3	2004	17.9
Komsomolskoye	1993	31.2	2002	22
Western Tarkosalinsk	1996	15.9	2005	12.4
Yamsoveysk	1997	22.3	2007	19.0
Novy Urengoy and Eastern Urengoy (Ach. group)	1998	3.1 (production estimated up to 15.6)	2006	2.5
Gubkinsk (Senomanian)	1999	15.3	2001	11.8
Western Tarkosalinsk (Senomanian)	1999	12.5	2006	9.0



Zapolyarnoye (Senomanian)	2001	105.1	2006	73.3
Northern Urengoy (Valanginian)	2001	5.0	2010	2.9
Vyngayakhinsk	2003	5.5	2004	4.9
Yen-Yaginsk (Valanginian)	2003	5.4	2007	5.0
Western Tarkosalinsk (Valanginian)	2003	3.0	2005	2.6
Khancheyk	2003	5.2	2010	3.2
Yurharovsk	2003	9.6	2006	18.0
Severo-Komsomolsk	2003	0.4	2004	0.4
Yety-Purovsk	2004	15.1	2006	13.3
Pestsov	2004	27.0	2007	19.9
Vjuzhnoye	2005	0.1	2006	0.1
Nakhodka	2005	5.4	2006	5.9
Tarasovsk	2006	1.0	2006	0.3
Yuzhno-Russkoye	2007	25.0	2009	22.6
Beregovoye	2007	10.5	2010	3.6
Other regions in Russia				
Vukhtylsk	1968	19.2	1976	2.5
Orenburg	1970	49.4	1985	17.1
Astrakhan	1957	12.0	2007	9.5

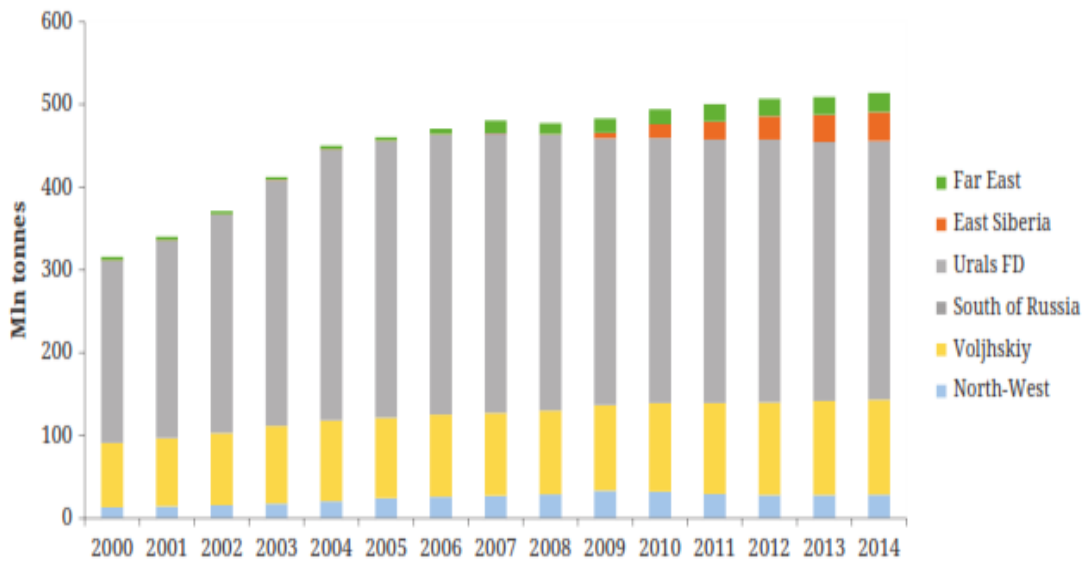
Source: “Analysis of the condition and perspectives of oil and gas refining, oil and gas chemical industries in Russia, 2011”.

### Forecasts of drilling activity in Russia



Source: Russian Energy Strategy to 2030 (NB: Stage 1 is up to 2013-2015, Stage 2 is to 2020-22 and Stage 3 is to 2030); Henderson, J. (2011).

## Russian Oil Production by Regions

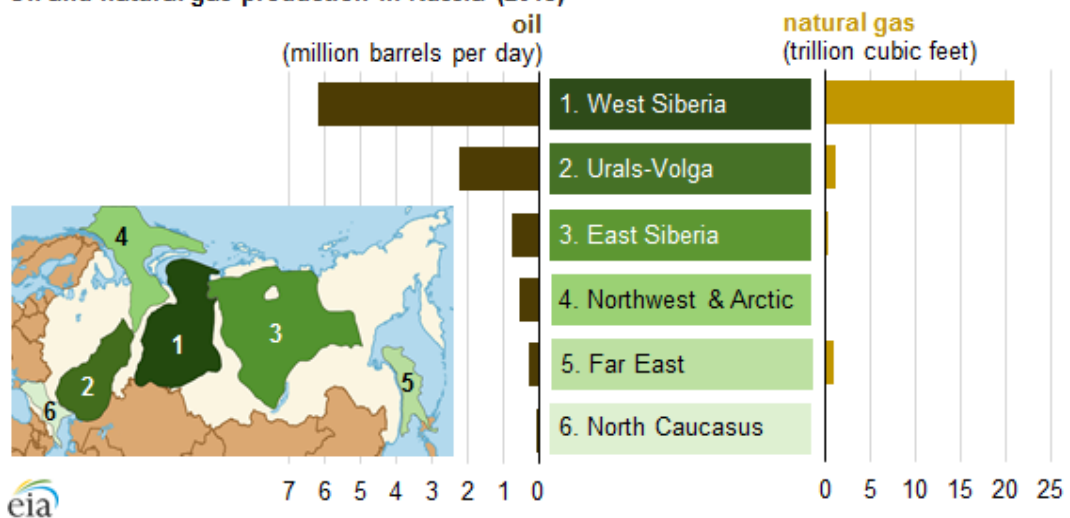


Sources: Rosstat, ERI RAS

## West Siberia

Currently, West Siberia is Russia's primary oil producing region and accounts for roughly 6.4 million bbl/d of total liquids production. It is roughly two-thirds of total production of Russia. West Siberia is a matured producing region, but the production potential of various fields of this area is still very important. Since the mature stage of this region, further exploitation of reservoirs would require improved production economics. The existing energy fields are slowly becoming difficult to exploit; while the unexploited reservoirs, which hold a good amount of remaining reserves, are far more complex to develop and make use of it.

## Oil and natural gas production in Russia (2013)



<http://www.eia.gov/todayinenergy/detail.cfm?id=18051>

The **Samotlor** and **North Priobskoye** are the largest oil fields in the Western Siberian region. These two oil fields account roughly about 20% of total production of this region. However, till the last days of Soviet Union, state was seated on the natural resource heaps and on the oil and natural gas in particular. West Siberian oil and gas fields especially Samotlor which supported the state in 70s came to its culmination.

**Samotlor oil field (Samotlor):**

“It is the largest oil field of Russia and the sixth largest in the world; owned and operated by TNK-BP. The field is located at Lake Samotlor in Nizhnevartovsk district, Khanty–Mansi Autonomous Okrug, Tyumen Oblast. It covers 1,752 square kilometres (676 sq mi). it is located in the Khanty-Mansi Autonomous District of the Tyumen region. Samotlor means "dead lake", "thin water".

The field was discovered in 1965. Development started in 1967 and first oil was produced in 1969. Discovery of this field had changed Nizhnevartovsk from a small nearby village into a busy oil city as Samotlor used to be the most important oil production base of the Soviet Union. After breakup of the Soviet Union the field was owned by Samotlorneftgaz and TNK-Nizhnevartovsk, which later formed TNK-BP.

All the years of operation drilling of 16,700 wells produced more than 2.3 billion tons of oil. For 1997, Samotlor oil field produced more than 1.9 billion tons. Production was decreasing 36 thousand tons per day. It was assumed that the deposit was almost exhausted. However, modern technology allows a few to increase returns.

At present, the development of the main part of the field leads the company NK "Rosneft" - OJSC "SNG", reorganized from JSC "Nizhnevartovskneftegas". At the end of 2013 at the Samotlor field key mining companies of JSC "SNG" and OJSC "RN-Nizhnevartovsk" ("Rosneft") produced over 22 million tons of oil.

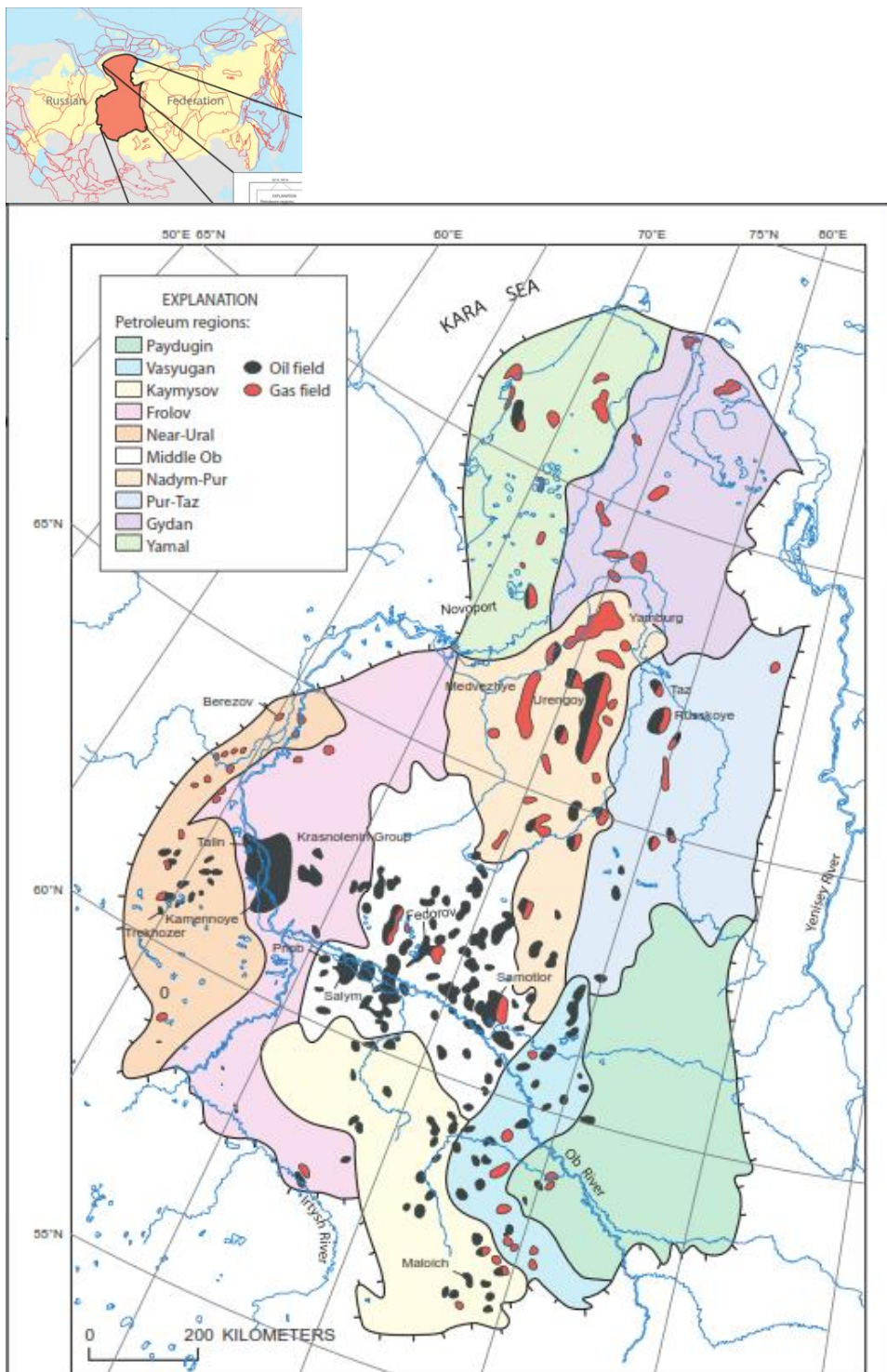
In 2014, "SNG" started realization of large investment project for the construction of more than 570 wells, infill drilling project provides a central area of the Samotlor field mobile units, as well as the drilling of marginal deposits by multiple drilling. According to forecasts, this stabilizes the oil production for the period until 2019.

Over the all development period a total of 2,086 well clusters (containing more than 17,000 wells) have been built and about 2.6 billion tons of oil has been produced. The peak production occurred in 1980 when Samotlor produced 158.9 million tons of oil (7 Mbb/d or  $1.1 \times 10^6 \text{ m}^3/\text{d}$ ). In 1996, it was produced only 16.74 million tons of oil. At the end of the 1990s, production rate dropped to 300,000 barrels per day ( $48,000 \text{ m}^3/\text{d}$ ). However, through an aggressive exploration program and application of cutting-edge technologies TNK-BP had raised production up to 750,000 barrels per day ( $119,000 \text{ m}^3/\text{d}$ ).

In the XXI century, a slight increase in the application of modern methods intensification of oil extraction of oil. The production has been in decline ever since, although according to TNK-BP the field production has stabilized over the past last years after. The in-place oil reserves of the Samotlor field were equal to 55 billion barrels ( $8.7 \times 10^9 \text{ m}^3$ ) and as of 2009 estimated at 1 billion barrels ( $160 \times 10^6 \text{ m}^3$ ). The proven reserves are approximately 44 billion barrels ( $7.0 \times 10^9 \text{ m}^3$ ). The field is 80% depleted with water-cut exceeding 90%. Up to 2012, TNK-BP plans to invest US\$1 billion per year for maintaining oil production in it at the level of 30 million tons per year”.

[https://en.wikipedia.org/wiki/Samotlor\\_Field](https://en.wikipedia.org/wiki/Samotlor_Field)

**Salymskoye** and **Mamontovskoye** are some other major oil fields in this area. It is interesting that along with many well established and matured oil fields, Russia has been developing various wet gas fields in the Western Siberia. These ongoing projects are likely to complete within the next few years. As a result of these new and growing wet gas fields, the volume of gas condensate would increase in the near future. However, the largest natural gas field in this region is **Urenogoy**.



Source: Ron (2015).

As far as estimation of reserves is concerned, it is said that:

*“reserve (or field) growth<sup>20</sup> has proven to be an important factor contributing to new reserves in mature petroleum basins. As a result an early booked reserve of any given field is very conservative. Also, any company would much rather have reserves too low and increase them later than have them too high and have to decrease them later. But would this not mean that fields of national oil companies and especially fields that were discovered and developed in the Former Soviet Union have different reserve growth rates than fields developed by publically traded oil firms. The answer is yes and the United States Geological Survey (USGS) admits that is exactly the case”.*

*“The West Siberian oil fields show a 13-fold reserve growth 20 years after the discovery year and only about a 2-fold growth after the first production year. This difference in growth is attributed to extensive exploration and field delineation activities between discovery and the first production year. Because of uncertainty in the length of evaluation time and in reported reserves during this initial period, reserve growth based on the first production year is more reliable for model development. However, reserve growth models based both on discovery year and first production year show rapid growth in the first few years and slower growth in the following years. In contrast, the reserve growth patterns for the conterminous United States and offshore Gulf of Mexico show a steady reserve increase throughout the productive lives of the fields. The different reserve booking requirements and the lack of capital investment for improved reservoir management and production technologies in West Siberian fields relative to U.S. fields are the probable causes for the difference in the growth patterns” (Ron 2015).*

#### West Siberian data analysis

USGS results on the West Siberia	Ron Patterson’s <sup>21</sup> results on the West Siberia
<ul style="list-style-type: none"> <li>▪ <i>“West Siberian Basin reserve growth is similar to what has been reported for the North Sea fields; production start-up date is the basis for both the analyses.”</i></li> <li>▪ <i>“All models show rapid reserve growth in the first five years, but the West Siberian models show much slower growth in the following years compared to the models for the U.S. fields. Slower growth in West Siberian fields is caused by different reserve booking requirements and probably by insufficient investment in improved production technologies.”</i></li> <li>▪ <i>“The West Siberian model, using the year of first production, predicts potential reserve growth ranging from 270 to 330 million barrels, or 0.34-0.42 percent per year over a five-year (1998-2003) period, compared with 0.51-0.58 and 0.72-0.79 percent per year predicted by two models for U.S. onshore fields over a five-year (1996-2001) period.</i></li> </ul>	<ul style="list-style-type: none"> <li>▪ <i>“Had the Western Siberia oil fields had the tiny reserve growth this report predicted for 1998 to 2003 period it is lone gone now. All those fields are in decline now and have been in decline for a few years now. But Russian production has not yet started to decline. New fields have kept production up. Vankor, and three nearby fields now produce almost half a million barrels per day. However Vankor will likely start to decline next year.”</i></li> <li>▪ <i>“So it is very likely that with the peaking of even Vankor, and with the declining of all those old fields in Western Siberia, Russia will start to decline in earnest. Russian oil production will not get any help from reserve growth in Western Siberia. Old dying fields, like old dying men... do not grow.</i></li> </ul>

<sup>20</sup>*“In general, a portion of a field’s probable and possible reserves tend to get converted into proved reserves over time as operating history reduces the uncertainty around remaining recoverable reserves: an aspect of the phenomenon referred to as reserves growth” (BP).*

*“Experience shows that initial estimates of the size of newly discovered oil fields are usually too low. As years pass, successive estimates of the ultimate recovery of fields tend to increase. The term reserve growth refers to the typical increases in estimated ultimate recovery that occur as oil fields are developed and produced” (Wiki).*

<sup>21</sup> Patterson, Ron (2015). “Reserve Growth in West Siberian Oil Fields”; June 5.  
<http://peakoilbarrel.com/reserve-growth-in-west-siberian-oil-fields/#>

## **Urals-Volga**

The exploitation of energy resources in the region began in 1929 and initial oil production was started in the 1930s. In general, the region encompasses an oil production area of roughly 500,000 square km on its western flank of the Ural Mountains that exceeds up to the Volga River Basin. In early stages, production was very slow and gets speedy recovery as well as export only through the 1950s. Romashinko and Arlan fields of this region became two major producing centers, where 17 billion barrels capacity of Romashinko made the field as the world's largest and very significant for the Soviets. It had significantly contributed to the Soviet economy and fuelled it for more than two decades. Even in 2009, it had a production capacity of more than 2000 t/bbl a day. The Tatar Republic of Russia has secured its remarkable support to fuel the economy, while the field holds a central position for the Tatneft as well (IEA 1996).

An extensive pipeline system of more than 5000 km was laid down in 1960-64. In the mid 1970s, another parallel pipeline system of greater diameter was built. The region holds many big oil refineries as well. During the Soviet era, this was the main producing region and was acknowledged as the petroleum and gas province. The region was known as 'second Baku' due to its energy potentials. It stretches from the west of Volga River to the western Ural Mountains. Regions such as Bashkortostan, Tatarstan, Samara (Syzran) Orenburg, and Perm hold the largest energy resources. The Buguruslan region is known for its large natural gas reserve fields. The region is not only responsible to supply oil to various industrial regions of Russia, but also connects many European countries such as Germany, Poland, Czech Republic, Slovakia, and Hungary (Encyclopedia: Britannica).<sup>22</sup>

Until Western Siberia had surpassed the region in the late 1970's, this was the Soviet's largest energy producing region. Now it accounts for only 22% of the total output of Russia and stands for the distantly 2<sup>nd</sup> position among various producing regions. The largest field of region is Romashkinskoye. It was discovered in 1948 and operated by the Tatneft. The Wood Mackenzie has estimated that this field would

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<sup>22</sup> Volga-Ural Petroleum and Gas Province Region, Russia:  
<http://encyclopedia2.thefreedictionary.com/Volga-Ural+Oil-Gas+Region>  
<http://www.britannica.com/EBchecked/topic/632254/Volga-Ural-Petroleum-and-Gas-Province>



likely to continue production at least until 2030. However, the field had got reached the peak (production) in the late 1970s at a time when the Western Siberia was evolved as a new long-term hope for the Russian supply. Now, a significant production of this region is heavy oil. This region contains relatively many small sized fields. The Wood Mackenzie has estimated that these small sized fields hold roughly at about 140 million barrels as the recoverable liquids (EIA 2014).

However, in 2010, the United States Geological Survey (USGS) estimated technically recoverable, conventional, undiscovered oil and gas resources of the Volga-Ural Region Province in Russia; i.e. 725,000 square kilometers, north of the Caspian Sea:

*“Two total petroleum systems (TPS), the Proterozoic-Paleozoic Composite and the Permian Foreland Basin, were defined for the Volga-Ural Region Province. The Proterozoic-Paleozoic Composite TPS was defined to include petroleum source rocks ranging in age from Late Proterozoic through Carboniferous, with Upper Devonian to Lower Carboniferous (middle Frasnian to Tournasian) Domanik mudstone being the main source of petroleum. Two assessment units (AU) were defined geologically within the Proterozoic-Paleozoic Composite TPS – Volga-Ural Clastic and Carbonate Reservoirs and Lower Volga). Reservoirs and seals in these AUs are associated with carbonate platforms and reefs, and marine clastic rocks. Middle to Upper Devonian sandstones and Lower Carboniferous carbonate rocks contain the greatest quantities of known oil and gas... the mean volumes and probability ranges of undiscovered petroleum are approximately 1,417 million barrels (MMB) of crude oil, with a range of 567 to 2,674 MMB; 2,377 billion cubic feet (BCF) of natural gas (both associated and dissolved, and non associated), with range of 644 to 5,641 BCF; and 85 MMB of natural gas liquids, with a range of 22 to 209 MMB” (USGS 2010)<sup>23</sup>.*

### Volga-Ural Region Province assessment results (technically recoverable, conventional undiscovered resources)

[MMB, million barrels; BCF, billion cubic feet. Results shown are fully risked estimates. For gas fields, all liquids are included under the natural gas liquids (NGL) category. F95 denotes a 95-percent chance of at least the amount tabulated. Other fractiles are defined similarly. Fractiles are additive under the assumption of perfect positive correlation. TPS, total petroleum system; AU, assessment unit. Gray shading indicates not applicable.]

Total Petroleum Systems (TPS) and Assessment Units (AU)	Field type	Mean (expected) largest field size (MMB or BCF)	Total undiscovered resources											
			Oil (MMB)				Gas (BCF)				NGL (MMB)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
<b>Volga-Ural Region Province, Proterozoic-Paleozoic Composite TPS</b>														
Volga-Ural Clastic and Carbonate Reservoirs AU	Oil	168	493	1,104	2,220	1,198	210	571	1,503	680	9	25	67	30
	Gas	316					156	558	1,840	717	6	23	76	29
Lower Volga AU	Oil	47	64	154	332	170	84	202	437	224	1	2	5	2
	Gas	196					158	432	1,150	512	5	13	35	15
<b>Volga-Ural Region Province, Permian Foreland Basin TPS</b>														
Permian Reefs/Thrust Folds AU	Oil	17	10	39	122	49	11	49	180	66	<1	2	8	3
	Gas	96					25	120	531	178	1	4	18	6
Total Undiscovered Petroleum Resources			567	1,297	2,674	1,417	644	1,932	5,641	2,377	22	69	209	85

<sup>23</sup> “The assessment was based on published geologic information and on commercial data from oil and gas wells and fields, and field production records. The USGS approach is to define total petroleum systems and assessment units, and assess the potential for undiscovered oil and gas resources”. <http://iv-g.livejournal.com/555248.html>



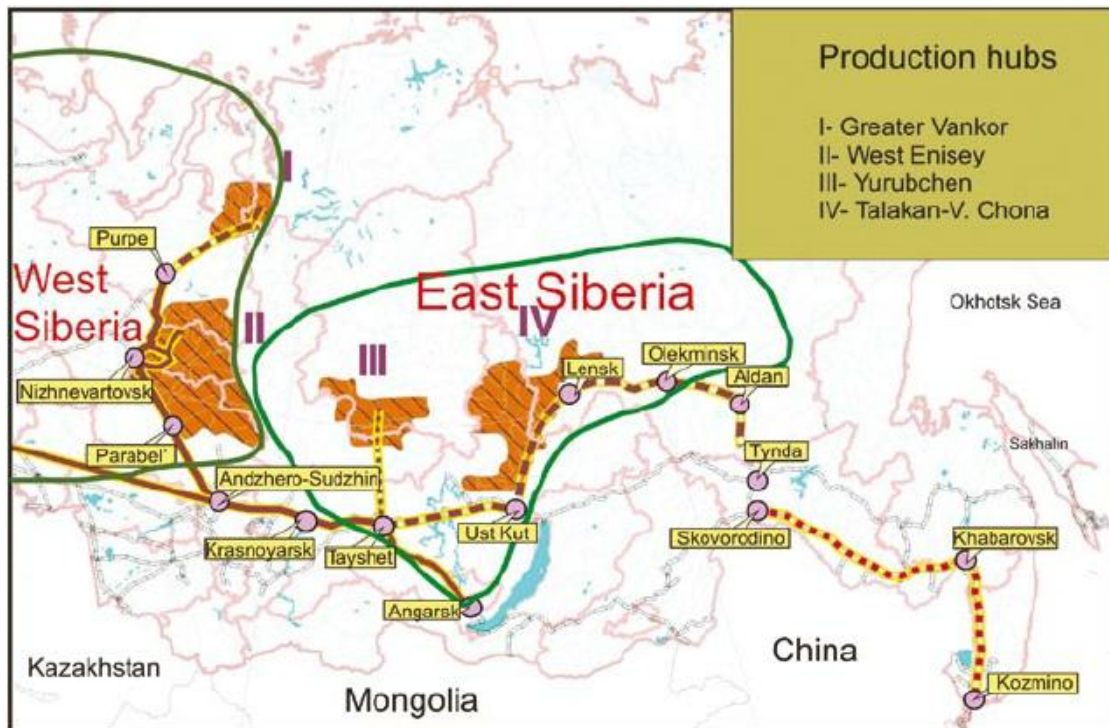
**Figure 1.** Location of 3 assessment units (AU) in the Volga-Ural Region Province and approximate location of cross section (A-A') shown in figure 2. (Map not definitive for political boundaries.)

<http://iv-g.livejournal.com/555248.html>

### **East Siberia**

These days, the Russian oil industry has made a serious attention on the East Siberian energy resources. The region has been a focus of development for the last few years. The potential of East Siberian resources have given the hope that this could play a crucial role to meet future energy demands. Since, the conventional oil and natural gas fields have reached the peak and currently in decline, the given potential of the region could become a focal point to expand new oil production fields. Russian efforts to continue the expansion and enhancement of oil production has got a new support from recently discovered and developed oil and natural gas fields as well as newly planned pipelines to export resources from this region.





(“Interpreted regional seismic line across the West Enisey area. Mesozoic cover of the West Siberian basin overlaps thick older deposits of the western margin of the Siberian platform. The Upper Cambrian evaporites are interpreted to be present in the Vendian-Paleozoic section in the central-eastern part of the line”)

[https://www.researchgate.net/figure/274370407\\_fig2\\_Figure-4-Interpreted-regional-seismic-line-across-the-West-Enisey-area-Mesozoic-cover-of](https://www.researchgate.net/figure/274370407_fig2_Figure-4-Interpreted-regional-seismic-line-across-the-West-Enisey-area-Mesozoic-cover-of)

### Reserve estimates for the East Siberia and the Far East of Russia

	mm bbls	Source
<b>Regional Estimates</b>		
Total East Siberia	71000	Russian Academy of Sciences (Minina 2007)
Total East Siberia and Far East	161000	Russian Academy of Sciences (Poussenkova 2007)
<b>Field Estimates</b>		
Vankor	2854	P&P oil reserves from Rosneft
Verkhnechonskoye	1323	P&P oil reserves from Rosneft
Talakanskoye	909	C1+C2 oil reserves (Minina, 2007)
Yurubcheno-Takhomskoye	754	P&P oil reserves from Rosneft
Kuyumbinskoye	1539	C1+C2 oil reserves (Minina, 2007)
Sakhalin 1	1080	P&P oil reserves from Rosneft
Sakhalin 2	1246	Gazprom Estimate
<b>Total</b>	<b>9705</b>	<b>Approximate Proved &amp; Probable Reserves</b>

Source: James Henderson's: The Strategic Implications of Russia's Eastern Oil Resources (Jan 2011)

The network of Eastern Siberia Pacific Ocean (ESPO) pipeline, which was recently inaugurated, has increased the potential of this region. It has provided an outlet to the oil of East Siberian region. The very first year of the pipeline networks operation received a total of nearly 400,000 bbl/d of crude oil supply that justifies its production potential for the future. Once fully operated the ESPO, it would export Russian crude oil over a length of 4,700km, which could open the doors of the Asian Pacific energy markets to Russian companies with exporting energy resources to the China, Japan, and Korea<sup>24</sup>. In fact,

*“the original project proposed to build a pipeline from Angarsk, Russia to Daqing in northern China. This was then combined with a pipeline project from Taishet in Irkutsk Oblast to the Far East port of Kozmino near Nakhodka in May 2003. In October 2008, the section between Taishet and Talakan was launched in a reverse to pump oil from Surgutneftegas – owned Alinsky deposit. This pipeline was completely laid in May 2009. The 1,963km section from Taishet to Kozmino will run 882km through the Amur region, 324km through Jewish autonomous region, 247km through Khabarovsk territory and 570km through Primorye. Feasibility studies for this section have been completed and the pipeline was expected to be fully laid by 2014” (Hydrocarbons-technology.com 2012).*



<http://acdemocracy.org/russia-the-geopolitics-of-natural-gas-2/#prettyPhoto/0/>

<http://acdemocracy.org/russia-the-geopolitics-of-natural-gas-2/#prettyPhoto>

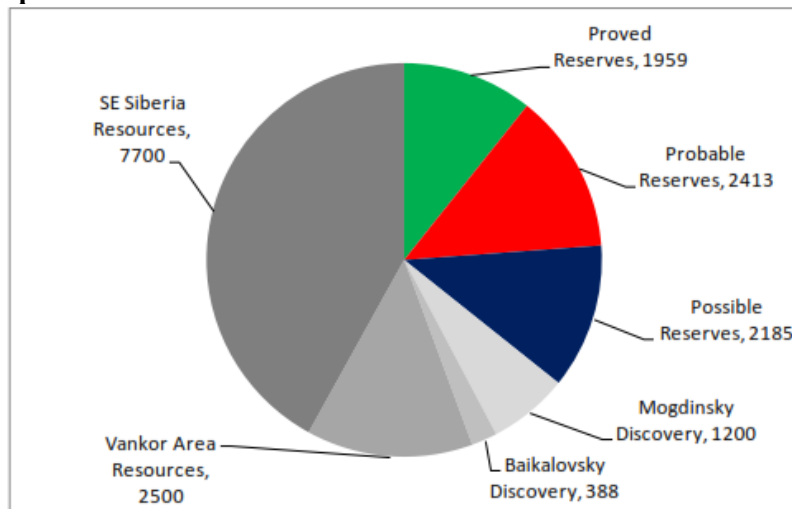
<sup>24</sup>[http://in.rbth.com/articles/2010/10/27/slaking\\_chinas\\_huge\\_energy\\_thirst04830.html](http://in.rbth.com/articles/2010/10/27/slaking_chinas_huge_energy_thirst04830.html)  
<http://uk.reuters.com/article/2010/09/27/russia-china-pipeline-idUKTOE68Q04I20100927>

## Fields in East Siberia granted export tax reduction

Original 13 Fields		License Holder	9 New Fields		License Holder
1	Vankor	Rosneft	1	Yaraktinskoye	Irkutsk Oil
2	Yurubcheno-Takhomskoye	Rosneft	2	Danilovskoye	Irkutsk Oil
3	Talakanskoye (incl Talakan East)	Surgutneftegas	3	Markovskoye	Irkutsk Oil
4	Alinskoye	Surgutneftegas	4	Zapadno-Ayanskoye	Irkutsk Oil
5	Srednebotuobinskoye	Sberbank	5	Tagulskoye	TNK-BP
6	Duliminskoye	Sberbank	6	Suzunskoye	TNK-BP
7	Verkhnechonskoye	TNK-BP / Rosneft	7	Yuzhno-Talakanskoye	Surgutneftegas
8	Kuyumbinskoye	Slavneft	8	Vakunaiskoye	GazpromNeft
9	Severo-Talakanskoye	Surgutneftegas	9	Chayandinskoye	Gazprom
10	Vostochno-Alinskoye	Surgutneftegas			
11	Plyudinskoye	Surgutneftegas			
12	Stanakhsokoye	Surgutneftegas			
13	Verkhnepeleduiskoye	Surgutneftegas			

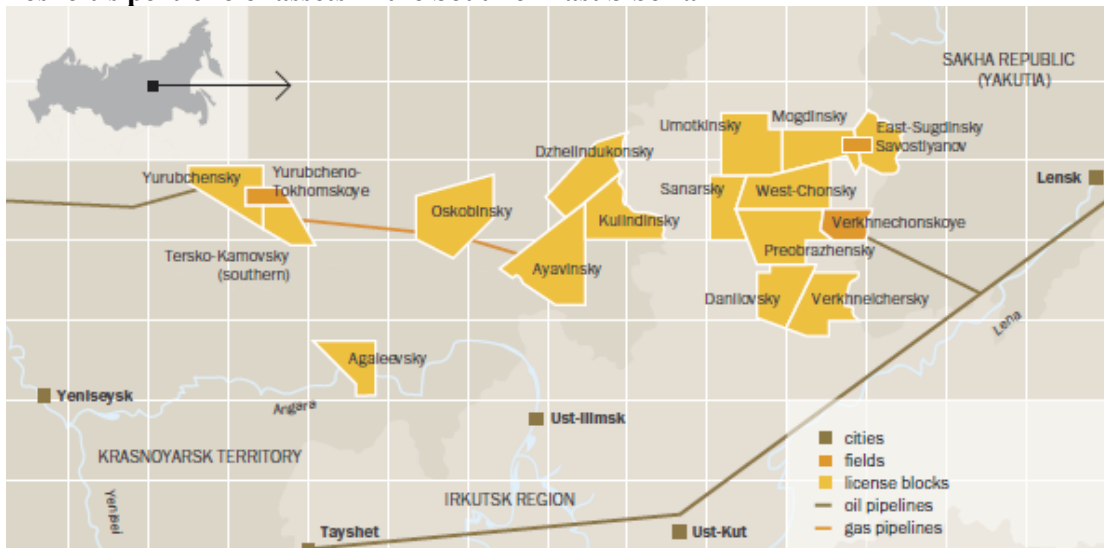
Source: Interfax, 19 November 2009, "Number of East Siberian fields exempt from export duty may rise to 22", Moscow

## Split of Rosneft's reserves and resources in East Siberia and the Far East



Source: Rosneft company data from [www.rosneft.com](http://www.rosneft.com); all figures are million barrels of oil

## Rosneft's portfolio of assets in the South of East Siberia



Source: Rosneft Annual Report 2009, page 49





[http://russiancouncil.ru/en/blogs/casingpoint/?id\\_4=437](http://russiancouncil.ru/en/blogs/casingpoint/?id_4=437)

## East Siberian - Pacific Ocean (ESPO) Pipeline



[http://static.seekingalpha.com/uploads/2010/1/11/saupload\\_unitled.png](http://static.seekingalpha.com/uploads/2010/1/11/saupload_unitled.png)

The most important state oil company Rosneft has worked extensively to enhance the production growth and converted the region as the center for future supply of energy to the new regions as well. The “tax incentives, pipeline infrastructure, and investments have been focused making East Siberia the future for Russian oil

production” (Coburn 2010)<sup>25</sup>. However, various tax breaks, removal of specific export duties, and other concessions that had played a crucial role to develop the region’s oil field were removed in 2011(EIA 2014). Some analysts have estimated far less oil- roughly about 5 billion barrels- reserves in the East Siberia than the expected potential in the Russian official energy strategy drafts. They are of the opinion that Northern provinces of Russia - Timan Pechora, West Siberia, and the North Caspian regions hold the most of oil reserves.

In August 2009, Vankorskoye (Vankor) oil and gas field was started and made a drastic regional increase in production. This is the largest Russian oil discovery in the last thirty years and proved the Arctic oil and gas potential as well. Vankor is located in the north of Arctic Circle. It has produced nearly 430,000bbl/d oil in 2013. In fact, it was a major factor in the total increased production of Russian oil and gas since 2010. The region holds some other important fields as well; i.e. Verkhnechonskoye oil and gas condensate field, Agaleevkoye gas and condensate fields, Yurubcheno-Tokhomskoye oil and gas condensate fields.

### Yamal Peninsula/Arctic Circle

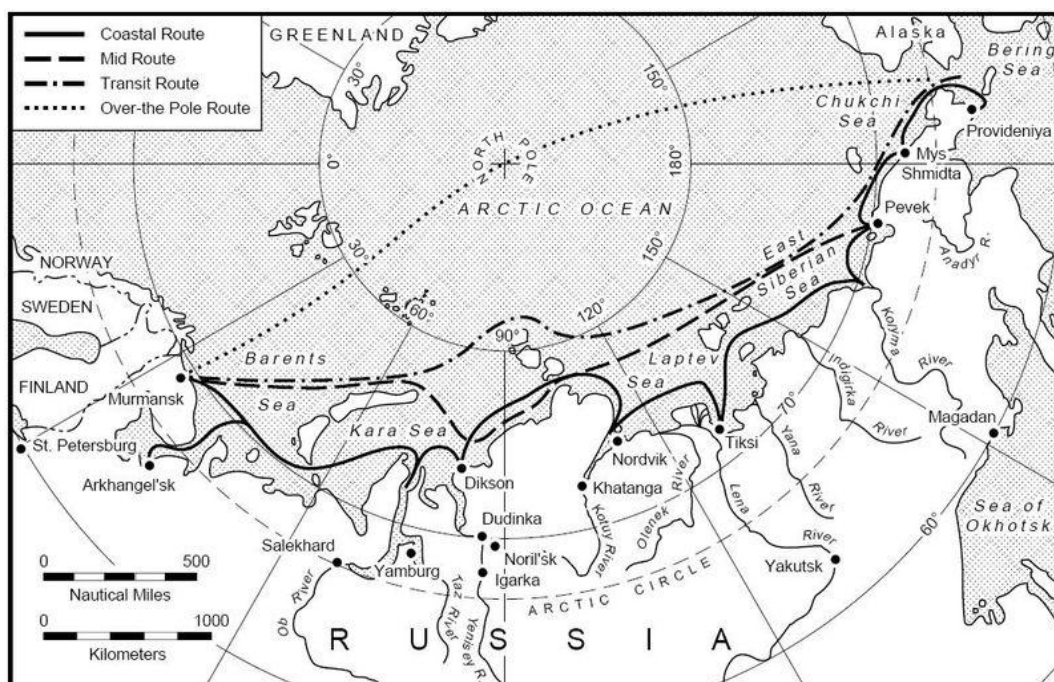


Figure 2. The various Northern Sea Route options.

<http://benmuse.typepad.com/.a/6a00d8341d9cb353ef010535b9c5da970c-popup>

<sup>25</sup>[file:///E:/My%20Documents/2014--24th%20Feb.%20--Energy%20foreign%20policy/103coburn%20\(1\).pdf](file:///E:/My%20Documents/2014--24th%20Feb.%20--Energy%20foreign%20policy/103coburn%20(1).pdf)

“Existing and prospected capacities of main Arctic terminals off-loading Russian crude oil and petroleum products for export (in thousands tonnes) (Bambulyak and Frantzen 2009)”.

Terminal locations	Capacity 2002	Capacity 2013	Capacity 2018
Sabetta, Kara Sea	500'		15 000'
Novy Port, Kara Sea	-	600'	8 500'
Varandey, Pechora Sea	1 500'	12 500'	12 500'
Prirazlomnoye, Pechora Sea	-	-	6 500'
Arkhangelsk, White Sea	2 500'	4 500'	7 000'
Vitino, White Sea	4 000'	11 000'	12 000'
Murmansk, Barents Sea	2 000'	8 000'	8 000'
Mokhnatkina, Pakhta, Barents Sea	-	2 500'	2 500'
Lavna, Barents Sea	-	-	25 000'

<http://www.barentsportal.com/barentsportal/index.php/en/health/93-maritime-transport/592-expected-development-in-maritime-transport>

## Reserves and Resources of Yamal

### Field Pre-Development Scheme for the Ob & Taz Bays and the Yamal Peninsula



<http://www.gazprom.com/about/production/projects/mega-yamal/>

### Gas Production Forecast for the Yamal Peninsula and Adjacent Offshore Areas

Year	2011*	2015	2020	2025	2030
Gas production (bcm)	7.9	75–115	135–175	200–250	310–360

(The development of promising areas offshore Yamal in the Kara Sea is projected to start after 2025)  
[http://www.gazprom.com/f/posts/25/697739/book\\_my\\_eng\\_1.pdf](http://www.gazprom.com/f/posts/25/697739/book_my_eng_1.pdf) \*Production startup on Yamal

Yamal (means ‘end of the land’) Peninsula is located in the north-west Siberia and comes under the autonomous district of Yamal-Nenets. It has an extension of nearly 700 km and is bordered by the OB Bay on the east and Baidarat Bay and Kara Sea on the west. It is a crucial strategic oil and natural gas bearing area, and acknowledged as a region where Russian gas production build-up has to move in decades to come. According to Alexey Miller “*Yamal is the future of the Russian gas industry*” (Gazprom 2014).

Yamal peninsula in the Russian Arctic region holds the largest gas reserves on the planet. During the Soviet era, Yamal was identified for its stupendous natural gas deposits. However, only recently the Russians could avail the required technology and other resources to make it a viable region for the natural gas productions, in which Japanese pipelines have also contributed enough to help develop commercially and rapidly. Though, Viktor Chernomyrdin projected that the region contains 55 trillion cubic meters of gas, but a more cautious Gazprom, the state gas monopoly of Russia, estimated roughly 38 trillion cubic meters natural gas reserves on the peninsula along with the adjacent offshore gas fields. If Gazprom manages it properly, it would be provide sufficient amount of supply to Europe for several decades. Vladimir Putin has been taking personal interests in the development of this region for a long time. In 2009, he invited international energy companies to be a part of this treasure-trove and offered partnerships in extracting gas reserves of the Arctic Circle in the Yamal peninsula (Harding 2009).

The peninsular region is mostly known for natural gas, and the crude oil infrastructure development is relatively new phenomenon for the industry. Though, long railway lines, bridges and gas pipeline infrastructure building is on the way, but the region has

a big challenge to mete out the constraints of transportation infrastructure in the near term. The three phased Zapolyarye-Purpe pipeline project of Transneft is designed to connect the Purpe-Samotlor pipeline with the Zapolyarye gas and condensate field; while Purpe-Samotlor pipeline itself has ameliorated many constraints of the region. Zapadno Messoyakha, Vostochno Messoyakha, Tagul, Suzun, and Russkoye are some important oil fields in the region and additional infrastructure facilities would benefit these fields substantially. Moreover, on the Yamal Peninsula itself, in addition to the Neitin and Vostochno Bovanenkov gas and condensate fields; the Khararsavey, Severno Tambey, and Yuzhno Tambey natural gas fields are the major and dominant producing regions (EIA 2014).

Bovanenkovskoye gas and condensate field is the largest of the region and the estimated potential of its gas reserves is approximately 4.9 trillion cubic meters. However, the total estimation of the Cenomanian-Aptian deposits of the Bovanenkovskoye field is 115 billion cubic meters of gas per year. Gazprom has been building its new Bovanenkovo plant across the tundra region. It is gradually heading for its production capacities in the field and developing the Cenomanian-Aptian deposits. More than two hundred auxiliary, production and infrastructure facilities are involved to develop this commercial giant.

The region has experienced a sharp rising production rate ever since it was started in 2012 when only 4.9 billion cubic meters of gas was produced. The rise in production is so fast that in 2013, more than four times gas was produced vis-à-vis the whole production of the previous year, when “the first gas facility (GP-2, 60 billion cubic meters) was launched at the Bovanenkovskoye field. A total of three gas facilities with 115 billion cubic meters in annual capacity will operate in the Cenomanian-Aptian deposits” (Gazprom 2014). It was further expected to yield more than 40 billion cubic meters of gas in the very next year. “In the long run the annual gas production from the Bovanenkovskoye field, with the account of Neocomian-Jurassic deposits, will reach 140 billion cubic meters of gas” (Gazprom 2014).

Therefore, keeping this potential in consideration and to maximize the production rate in the Yamal Peninsula, President “*Putin commanded to put on stream the gas*



facility” and the GP-1(a new gas facility) was commissioned in December 2014. The annual design capacity of this new facility is expected to 30 billion cubic meters, which is more than the production of its Company from the Chayandinskoye field that is largest in Yakutia.

If on the one hand, new technologies were used to build the gas facilities; the single technical infrastructure was also applied to extract the deposits at the different depths; e.g. Cenomanian - 520-700meters, Aptian-Albian- 1200-2000 meters. It has not only improved the field productivity, but also reduced the cost of constructions. The field construction has implied highly automated and unmanned technologies, which helped environmentally clean methods to preserve the nature of Peninsula. It is said that:

*“The Yamal Peninsula has a strategic importance for the evolution of the Russian gas industry, and this requires building green field production facilities in the harsh Yamal climate as well as constructing motor roads, power plants, a rail connection and an airport. Explored and provisionally estimated gas reserves there exceed 16.7 trillion cubic meters. In the long view Yamal will be among three biggest gas production centers of Russia with potential annual output reaching 310 – 360 billion cubic meters of gas by 2030, which is over one-third of forecasted gas production in Russia for that period... Gas from the new gas facility is fed into the Unified Gas Supply System of Russia via the Bovanenkovo – Ukhta gas trunk line system (GTS)... Currently, the construction of GTS’ second string is underway... The development of an unparalleled gas production center is well underway in Yamal, in harsh Arctic latitudes. The annual design capacity at Bovanenkovo has already amounted to 90 billion cubic meters of gas. It is commensurate with the volume supplied by Gazprom to Germany, Turkey and Italy last year, and this not the full productivity yet. Yamal the future of the Russian gas industry; said Alexey Miller” (Gazprom 2014).*

### **North Caucasus and Caspian**

The region has been producing hydrocarbons since the mid 19<sup>th</sup> century and the North Caucasus was one of the oldest oil and gas producing areas of the Soviet Union<sup>26</sup>. Initial oil production had been started around the capital city of the Chechen Republic, Grozny. Now, the region is a matured field for oil production; while various social unrest as well as political instability in the region has also hammered the hope for potential hydrocarbons vis-à-vis international energy enterprises. The oil and gas resources of the region have not only become unattractive for multinational, but also

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<sup>26</sup> <https://northcaucasusland.wordpress.com/tag/gas/>

for domestic big players. However, Dagestan, Chechnya, and Stavropol Territory are fairly developed for oil production. These regions combined are contributing 0.6% of the total oil produce as well as 97% of the oil income of the region (Kavkaza 2010).



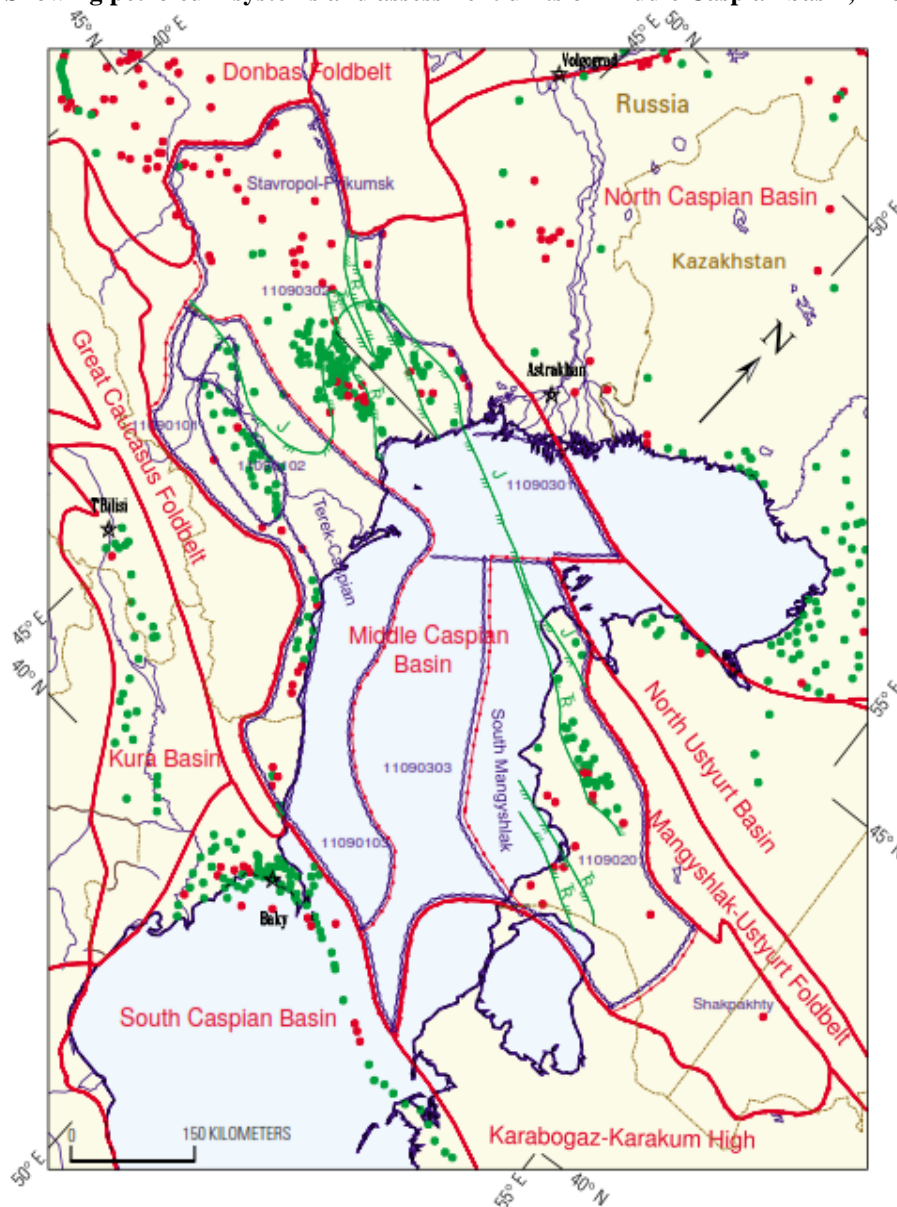
[http://www.theoil Drum.com/tag/north\\_caucasus](http://www.theoil Drum.com/tag/north_caucasus) <http://www.eia.gov/countries/regions-topics.cfm?fips=csr>

The energy distribution networks of the region play a supportive role in the European supply chain for the Russian exports. Though, it is now a matured region and consists of only various small fields; many new fields, such as Rakushechnoye, Khvalynksou, Zapadno Rakushechnoye, and Sarmatskoye have also been discovered with a great hope. On the other hand, Lukoil has been involved in the North Caspian as well to developing some other deposits, where Yuril Korchagin is a prominent field. Government tax regimes are playing a crucial role in the development of this region. The U.S. Energy Information Administration is of the opinion that “the development of the region is highly sensitive to taxes and export duties, and any change or cancellation of tax breaks may negatively affect the region’s development” (EIA 2014). However, Russia does not hold large amount of offshore hydrocarbons in the North Caspian basin as compared to other Caspian states; but its stupendous Astrakhan gas and condensate field holds large amount of gas reserves where oil comes second to the gas (Grace 2005).

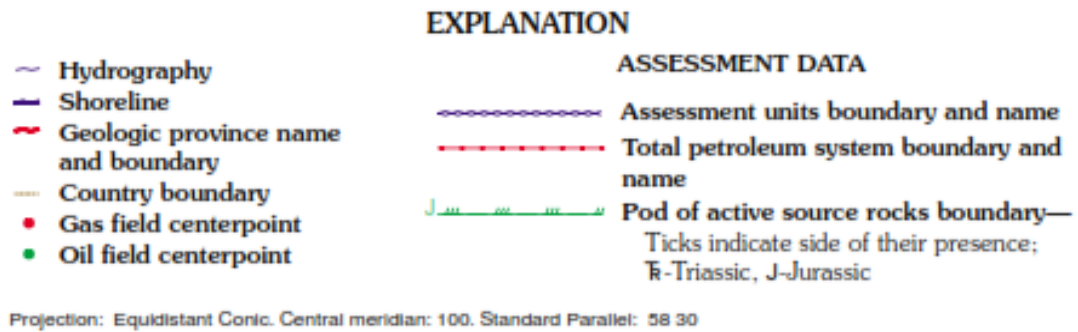
Traditionally, Russia’s production in the Caspian basin comes from the onshore fields, particularly in the North Caucasus region. Stavropol, Krasnodar, and Chechnya are significant regional fields, which are responsible to supply of approximately

65,000bbl/d, acknowledged by the Eastern Bloc Energy for the North Caucasus supply. As far as medium term growth of oil and gas production is concerned, the Northern Caspian is one of the key regions for Lukoil. Its “proved reserves in the region to international standards have increased by 35% over a period of five years thank to successful exploration drilling” (Lukoil Annual Report 2013). Yu Korchagin was the country’s first offshore production field of Lukoil in the Russian region of Caspian Sea. It became operational in 2010. It has become Lukoil’s one of the most commercially advantageous upstream projects in the region and as a result Russia has reduced export duties on its production. The crude goes to Dagestan’s Makhachkala port to be shipped for the Novorossiysk port on Black Sea through pipeline network.

**Showing petroleum systems and assessment units of Middle Caspian basin, Province 1109**



<http://pubs.usgs.gov/bul/2201/A/> <http://pubs.usgs.gov/bul/2201/A/b2201-a.pdf>



On the other hand, “Transneft announced plans to expand the Baku-Tikhoretsk pipeline to accommodate increased Russian output from the Caspian to Novorossiysk” (Lukoil 2013). Other than oil revenues, the development of the North Caspian region provides an opportunity to the Russian enterprises for developing new technologies, which could ultimately be employed in the stark Arctic region (EIA 2013). Yu Korchagin “was the first field in the world to use an ice-class floating storage offloading vessel to protect against the harsh conditions of the northern Caspian Sea. The oil passes through 36 miles of underwater pipelines to floating oil tanks” (EIA 2014).

At the end of 2013, the proven reserves of hydrocarbons at the field were 121 million boe and 1,372 tones was the total production during the same year. The oil produce at this field was increased 73% in the same year as well. The field is rapidly growing. Recently, “four new wells were launched, one of which has unique construction parameters: total borehole length is 7.6 thousand meters and the horizontal bore is 4.3 thousand meters. Bottom-hole zones at several wells were treated with oil-water emulsions and foam systems” (Lukoil Annual Report 2013). Furthermore, the drilling work is going on with the scheduled planning at the field and the pilot production programme has adopted the smart systems and other new technologies for the well completion.

Another important Caspian field launched by the Lukoil is V. Filanovsky. Lukoil has announced its next plan to increase the investments into the Filanovsky field, which is expected to produce approximately 120,000 bbl/d (EIA 2014). Roughly, it is estimated that the said field had proven hydrocarbon reserves of 487 million boe at the end of 2013. The “*work has begun on construction of main shore facilities for receipt of oil and its transfer to the CPC pipeline system*”, while the support blocks for its first

stage offshore platforms have been completed in 2013 in addition with the blocks “towed into position and secured with piles”. The regular production at the site “is scheduled at the end of 2015 and target output of 6.1 million tonnes per year should be achieved in 2016” (Lukoil Annual Report 2013). The government has given some tax preferences where “special procedure for MET calculation at a rate of 15% of the value of extracted hydrocarbons” is important (Lukoil 2013). The Lukoil has opted the Zero Discharge Rule<sup>27</sup> for this project.

### Timan-Pechora and Barents Sea



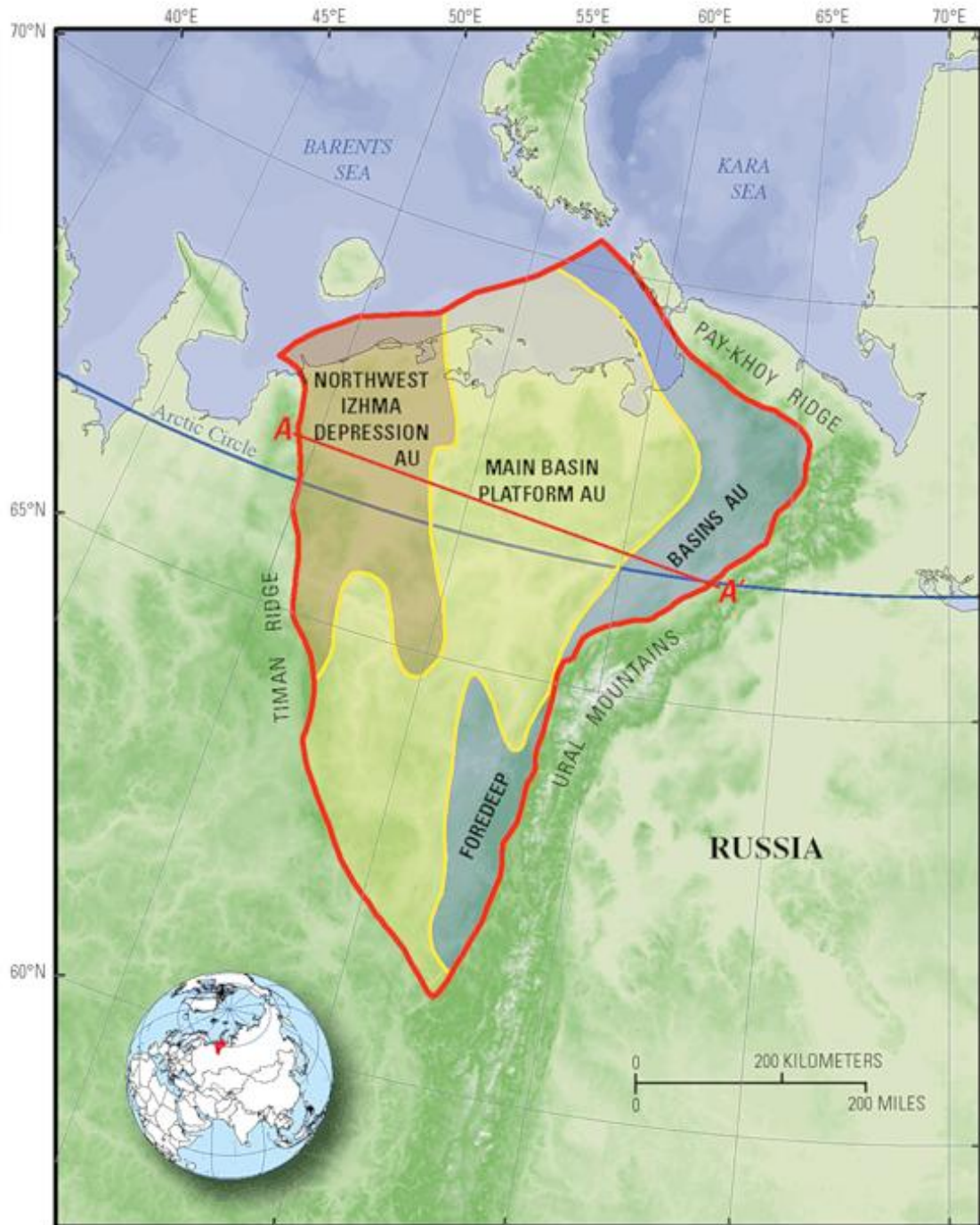
<http://www.oilandgasonline.com/doc/russian-arctic-activity-slowly-heating-up-0001>

Timan-Pechora and the Barents Sea are located in the north-western Russia. Like the North Caucasus region, these areas hold relatively small sized liquids fields. However, in spite of comparatively small fields, companies could avail “advantage of the developed infrastructure and can maximize their export potential via the Arctic Sea ports including the Varandey port”. Whilst, as the offshore Arctic sector of Russia is located in the Pechora and Barents Seas, unfortunately “the Barents offshore

<sup>27</sup> Lukoil Annual Report 2013: “The Zero Discharge Rule Preventing any pollution of the Baltic Sea and the Caspian Sea is a matter of principle for the Company, so all offshore projects by LUKOIL are guided by the Zero Discharge rule, which prohibits any discharge of waste into the marine environment. Waste from production is collected in closed containers and transported to the shore for disposal and recycling. The zero discharge rule is strictly observed during exploration drilling, production drilling and during commercial production of hydrocarbons, ensuring that seawater around LUKOIL’s offshore projects remains clean”.



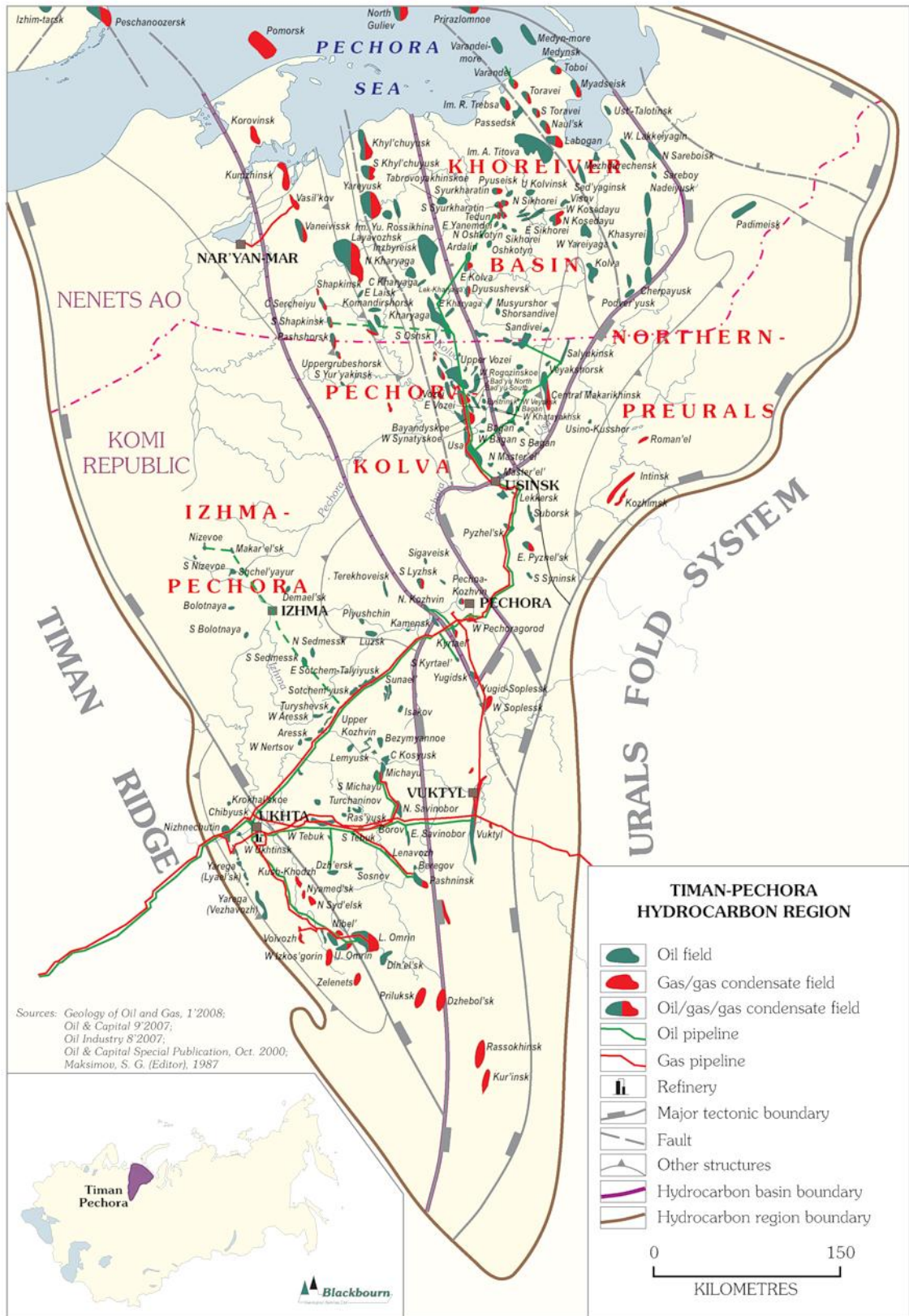
production likely will have very little effect on liquids production, as the region is home to gas fields that contain little to no liquids in the reservoirs” (EIA 2014).



**Figure 1.** Timan-Pechora Basin Province of Russia (red line). Three assessment units (AU; yellow lines) were defined in this study: Northwest Izhma Depression AU, Main Platform Basin AU, Foredeep Basins AU. Note that portions of each AU extend south of the Arctic Circle. A-A', line of section in figure 2.

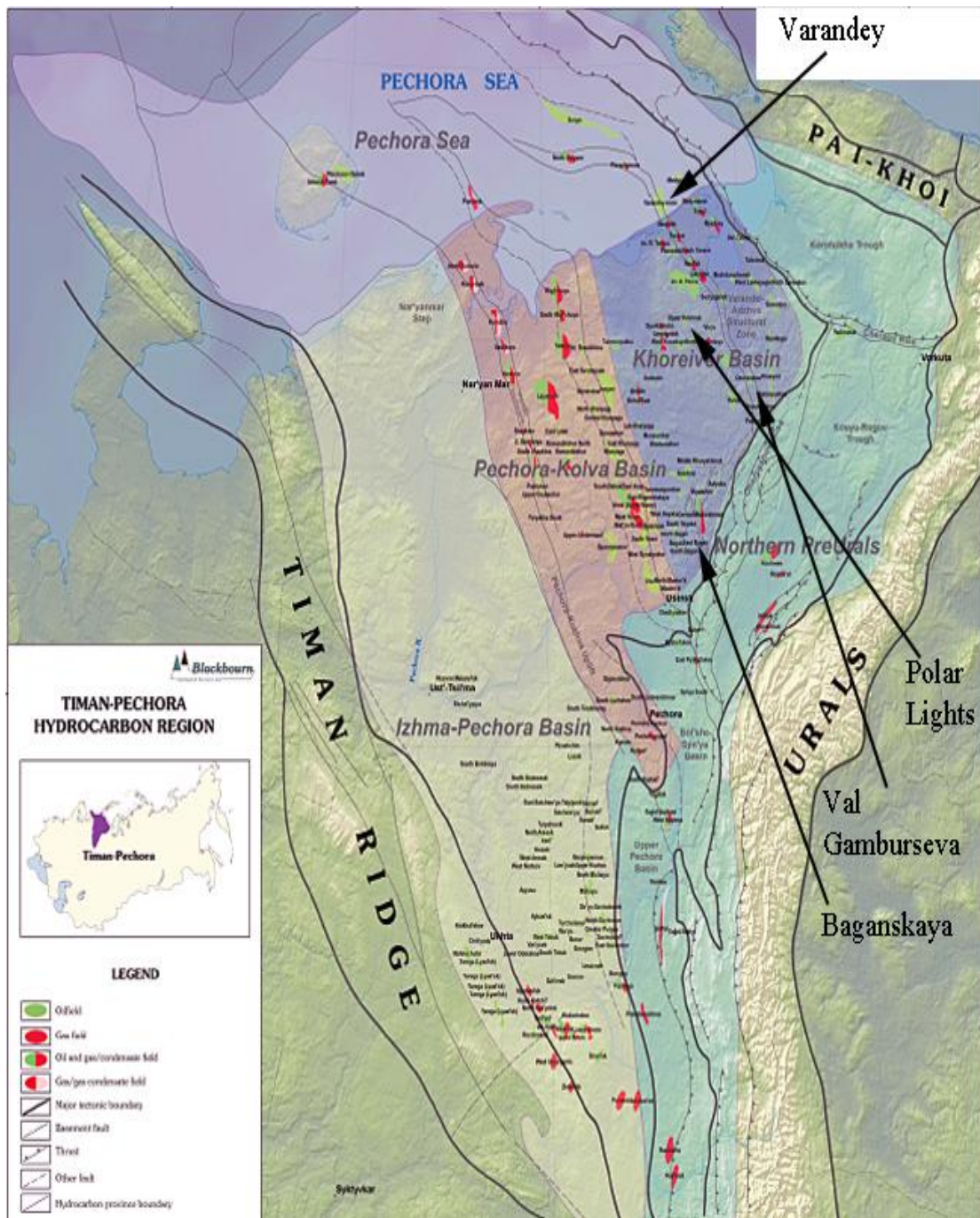
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**“Assessment of Undiscovered Oil & Gas Resources of the Timan-Pechora Basin Province, 2008”**



[http://lj.rossia.org/users/iv\\_g/tag/%D0%9D%D0%93%D0%91+%D0%A2%D0%B8%D0%BC%D0%B0%D0%B%D0%BE-%D0%9F%D0%B5%D1%87%D0%BE%D1%80%D1%81%D0%BA%D0%B8%D0%B9](http://lj.rossia.org/users/iv_g/tag/%D0%9D%D0%93%D0%91+%D0%A2%D0%B8%D0%BC%D0%B0%D0%B%D0%BE-%D0%9F%D0%B5%D1%87%D0%BE%D1%80%D1%81%D0%BA%D0%B8%D0%B9)





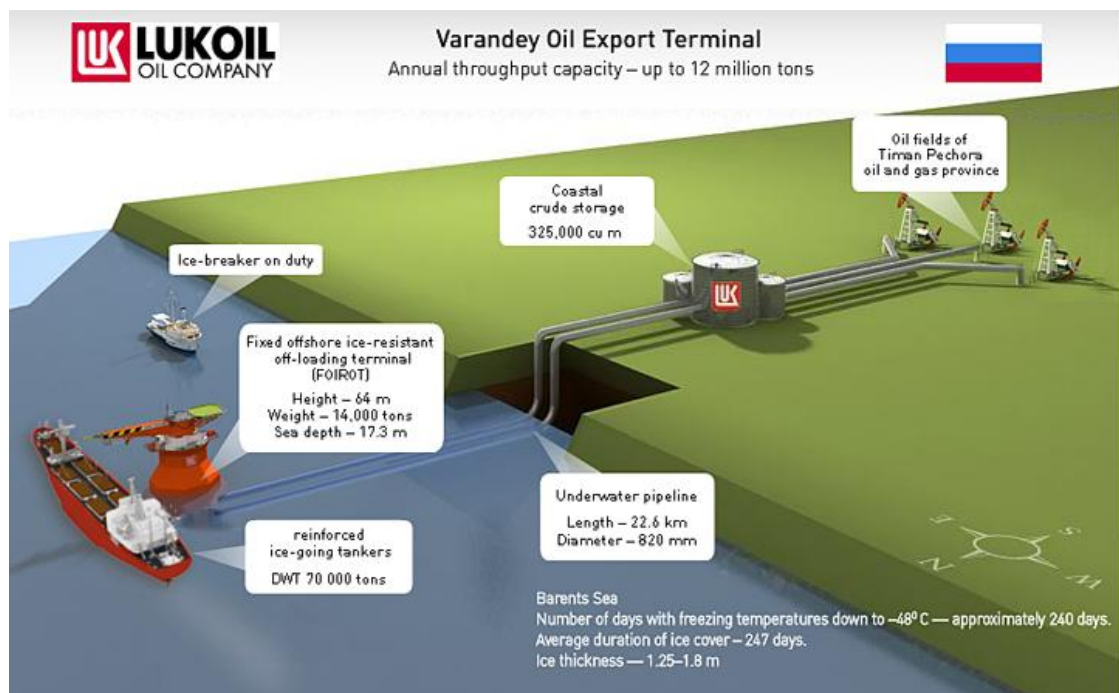
<http://bittooth.blogspot.in/2012/02/ogpss-oil-production-from-timan-pechora.html>

However, contrary to many projections, Lukoil’s Vagit Alekperov assumes that “the key to opening up the area is the development of the Northern Territories in the Timan-Pechora oil and gas province, which enclose about 1.2 million acres (Howes 2015). This area stretches from the north of Moscow to the Barents Sea. Yareiyu, Yuzhno-Khylchuyu (Y-K), Inzyrei, and Khylchuyu are major fields in the Northern Territories. It is said that these fields have a large potential of recoverable reserves;



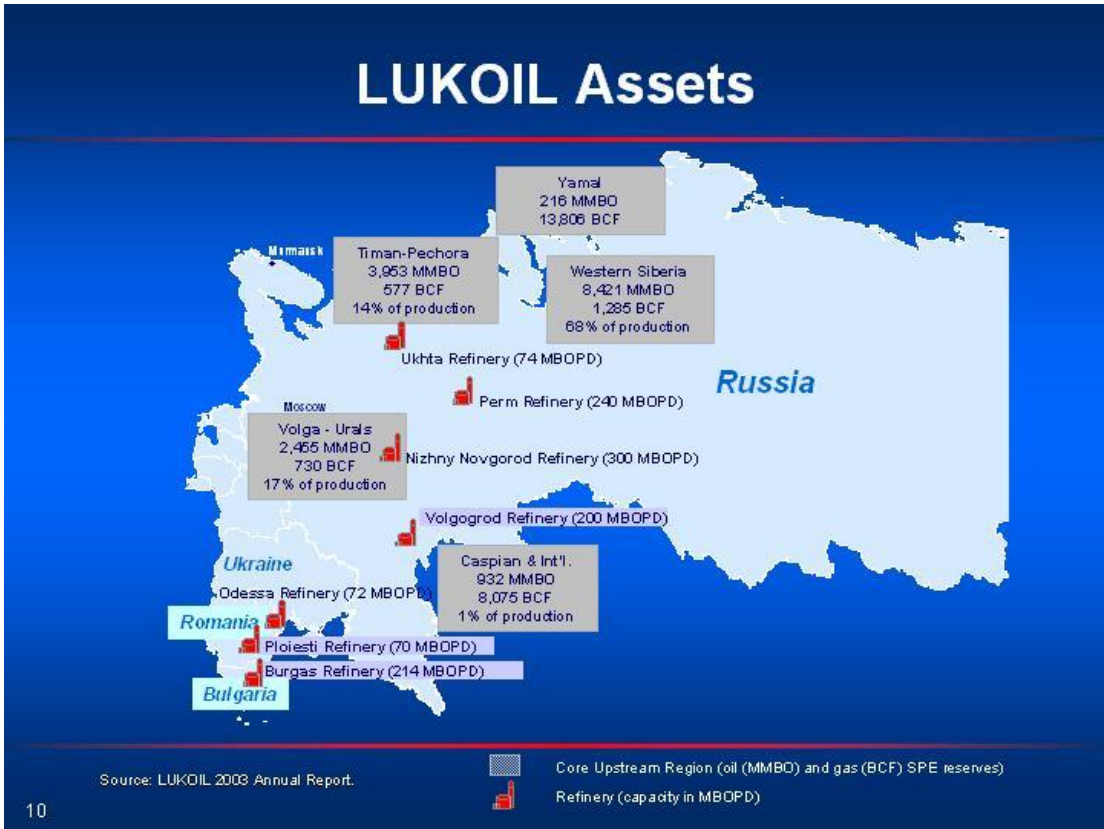
i.e. more than two trillion cubic ft of natural gas and over a billion bbl of oil is expected. The development of these major fields would make an estimated impact of \$25 billion on the Russian economy. This “development envisages the construction of two ice-resistant drilling platforms, four submarine units with 12 well clusters, submarine in-field pipelines and cable wires, 30,000-ton submarine storage tanks for each drilling platform for condensate, with a terminal for loading tankers and a 635-km main pipeline to the Kola Peninsula coast” (Howes 2015).

### The Varandey Oil Terminal (Lukoil )

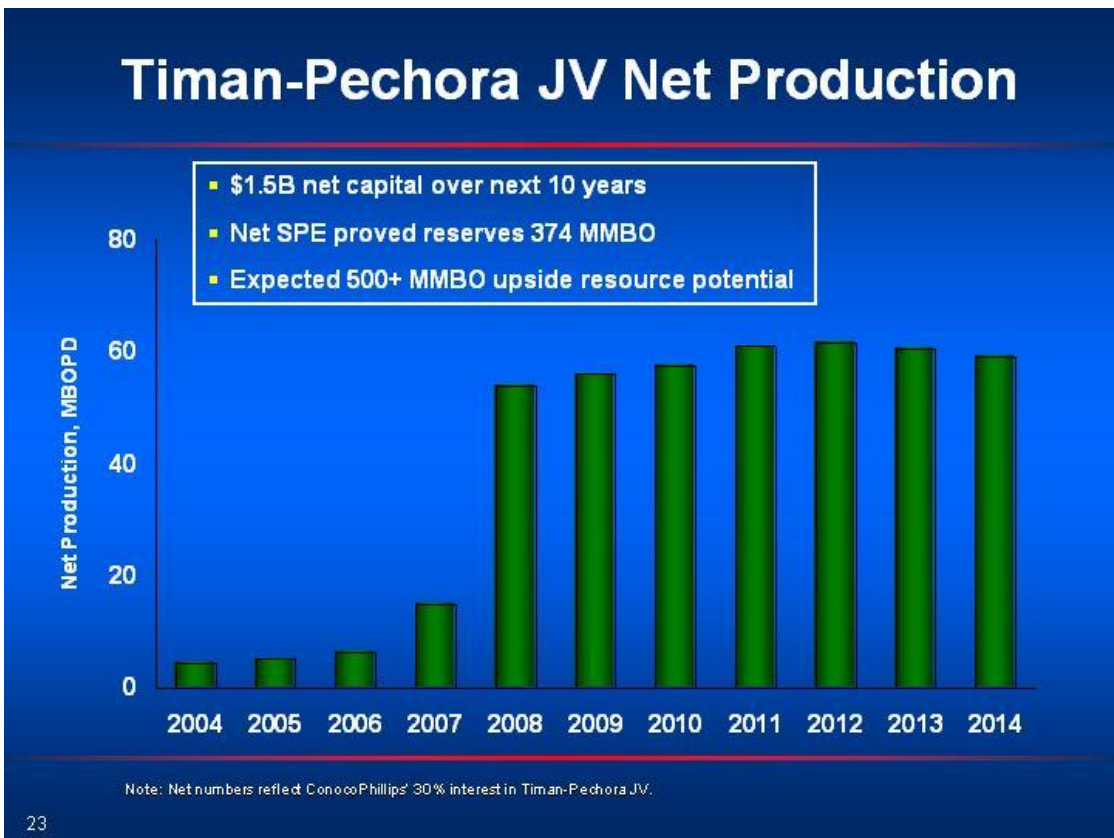


<http://bittooth.blogspot.in/2012/02/ogpss-oil-production-from-timan-pechora.html>

According to Energy Information Administration the exploration and production in the region has not been very encouraging. As in June 2010, Lukoil’s Khylichukoye project appeared to reach the peak production capacity; while in July 2012, only when Gazprom was granted tax breaks, it planned to develop a 530 million bbl project of Priraziomnoye field in the Pechora Sea. “Without the tax breaks, the project would have been uneconomical.” These tax breaks and other exemptions are important to make the initial production possible and help projects to be economically viable. It is estimated that under the regular tax and tariff system, it is challenging and expensive to develop the projects in this region. Costs and tax incentives are crucial for other projects as well to making them economically viable; e.g. Gazprom’s Shtokman gas field in Barents Sea was repeatedly delayed due to costs and lack of tax incentives.



<https://www.sec.gov/Archives/edgar/data/1163165/000095012904007500/h18718exv99w1.htm>



<https://www.sec.gov/Archives/edgar/data/1163165/000095012904007500/h18718h18718z0023.jpg>

### **Fields and Companies involved in the region:**

*“The Y-K Field will be developed jointly by Lukoil, AGD, and Conoco. With a 40% share, Conoco has already invested \$100 million to prepare the field for development and for preliminary evaluation of the other fields and exploration acreage in the block. Preliminary engineering work on the field indicates it may require about 42 billion in capital costs to be developed.*

*The other huge prospect is the Shtokmanovskoye natural gas project that Conoco is also working on with Gazprom/Rosshelf, TotalFinaElf, Norsk Hydro, and Fortum. In June 2000, Vladimir Putin signed the law that would enable negotiations for a production sharing agreement (PSA).*

*The Shtokmanovskoye Field is located in the central part of the Barents Sea, about 600 miles north-east of Murmansk, in about 1000ft of water. It was discovered in 1988. The Russian Federation estimates reserves for the field of about 100 trillion cubic ft of gas and 250 million bbl of condensate based upon data from six wells penetrating the four separate reservoirs. At peak production, the field could produce as much as 20% of the current daily gas production of Russia.*

*Of the western companies in Russia, Conoco has been the most prominent. Its history dates back to 1991, when it formed Polar Lights, the 50/50 joint venture with Arkhangelskgeologia to develop the Ardalin Field in Northern Russia’s Timan Pechora Basin. Ardalin is the largest of several oil fields in the Polar Lights joint-venture area and is located in the Arctic-tundra, approximately 1,600 km north-east of Moscow.*

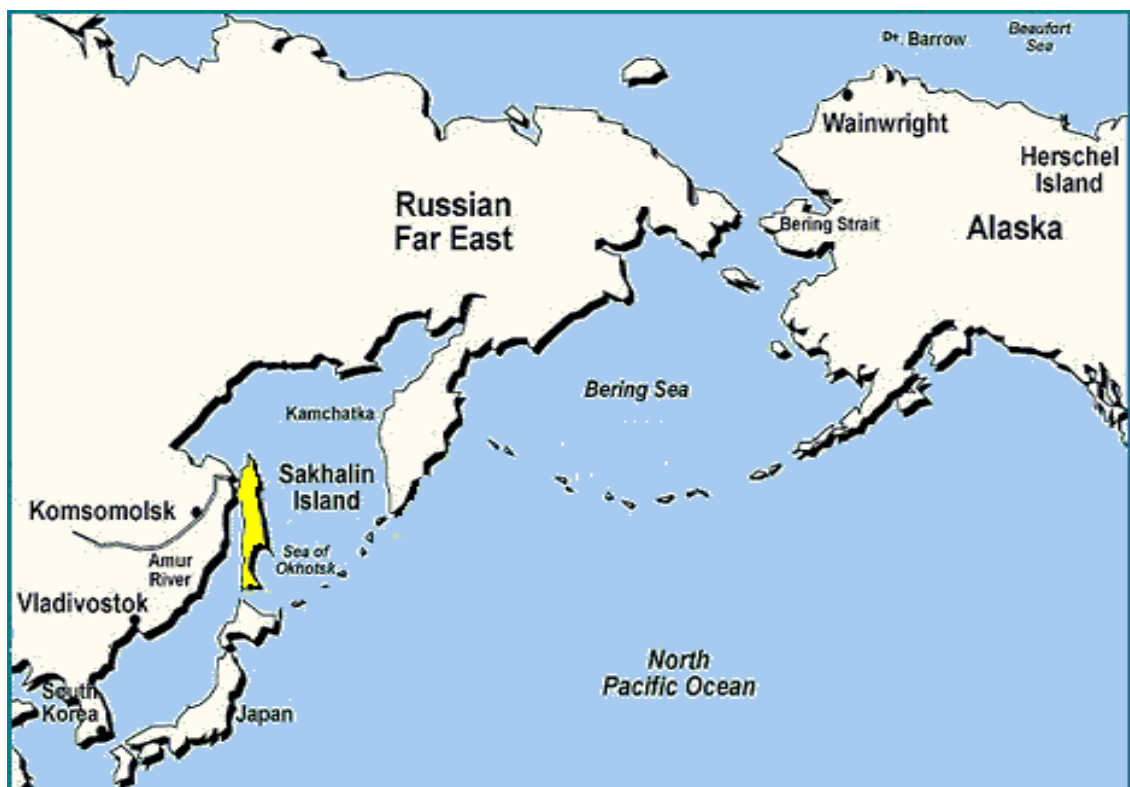
*To transport the oil from the Ardalin complex, a 65 km above-ground, insulated pipeline was constructed. The field contains more than 110 million bbl (16 million tons) of recoverable reserves. Its peak production of about 20,000b/d (3,700ton/day) was reached in 1996.*

*However, it would be wrong to conclude that Conoco was the only western company active in Russia. TotalFina (50% operator) and its partners, Norsk Hydro (40%) and the Nenets Oil Company (10%), announced the Start-up of oil production on horizons two and three of the Khariaga Field, located north of the Arctic Circle, in the Timan-Pechora Basin in the Nenets Autonomous Territory. The oil is transported to Usinsk (150 km) using the KomiTEK collection system and then transported via the Transneft system over the 2,400 km to the western border of the Russian Federation, from where it is exported to Europe.*

*Khariaga is the first onshore field to come on stream in Russia within the framework of a production sharing agreement. Production during the initial development phase is expected to reach 10,000b/d” (Howes 2015).*

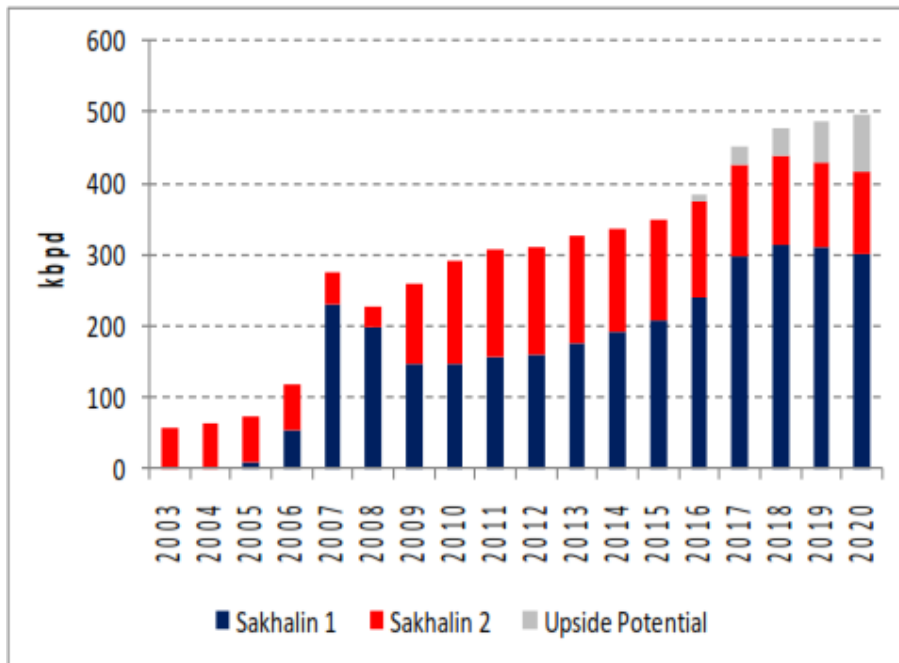
## Sakhalin Island

Sakhalin Island has been termed as the Russia's East Asian trump card. It is acknowledged as the new gateway for growing requirements of natural energy resources. It is an energy rich region which has the potential to fulfill the ever growing demand of the region. The region consists of China, Japan and Korea. The first two are the second and third largest economies of the world respectively; while Korea is rapidly growing nation in the region. Sakhalin Island is not only rich in energy resources, but also holds ocean and forest resources. Oil and gas of Sakhalin Island is certainly the main focus; however, fish and other sea foods are also going to serve the region and may enhance the total export revenue of the Russian Federation. The ever growing demand of energy needs of the region has provided an opportunity to Russia to diversifying its energy marketplace and to create a parallel market vis-à-vis Europe.



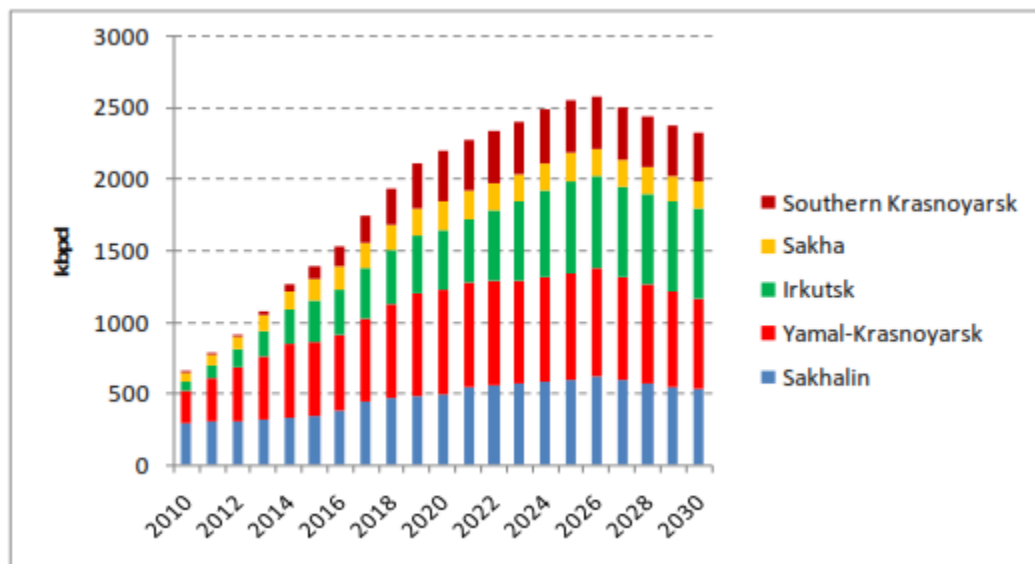
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### Potential output from Sakhalin Island projects



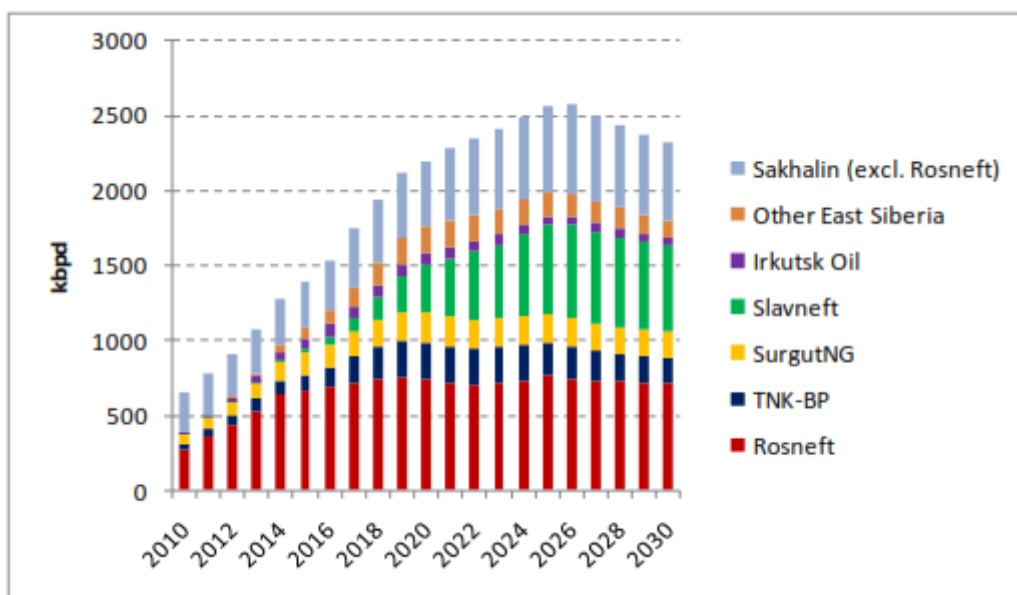
Source: Wood Mackenzie Consultants; James Henderson's: The Strategic Implications of Russia's Eastern Oil Resources (Jan 2011)

### Oil supply potential from Eastern Russia



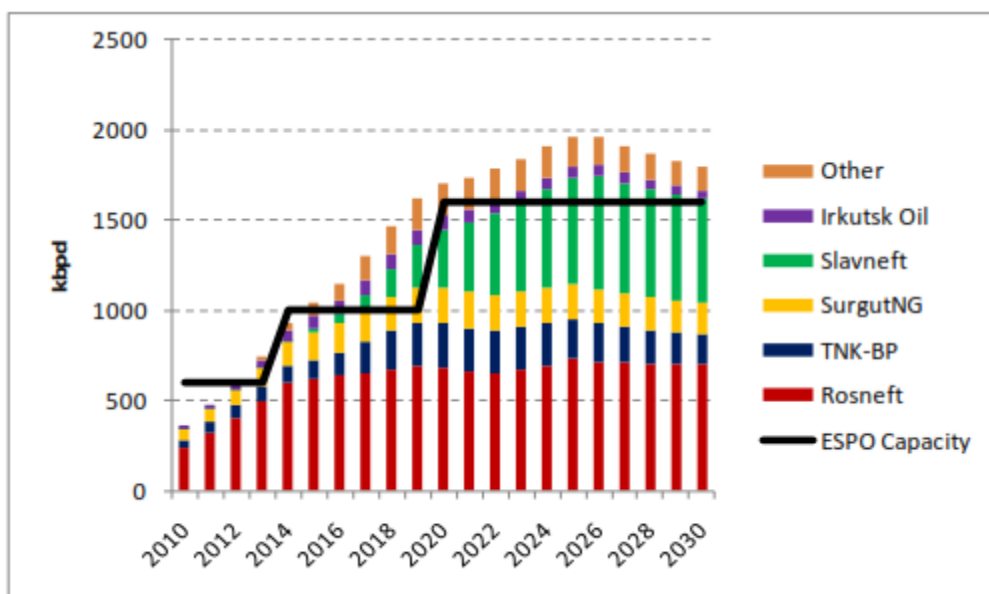
Source: James Henderson's Estimates based on Company Data in "The Strategic Implications of Russia's Eastern Oil Resources" (Jan 2011)

### Eastern Russia oil production by company



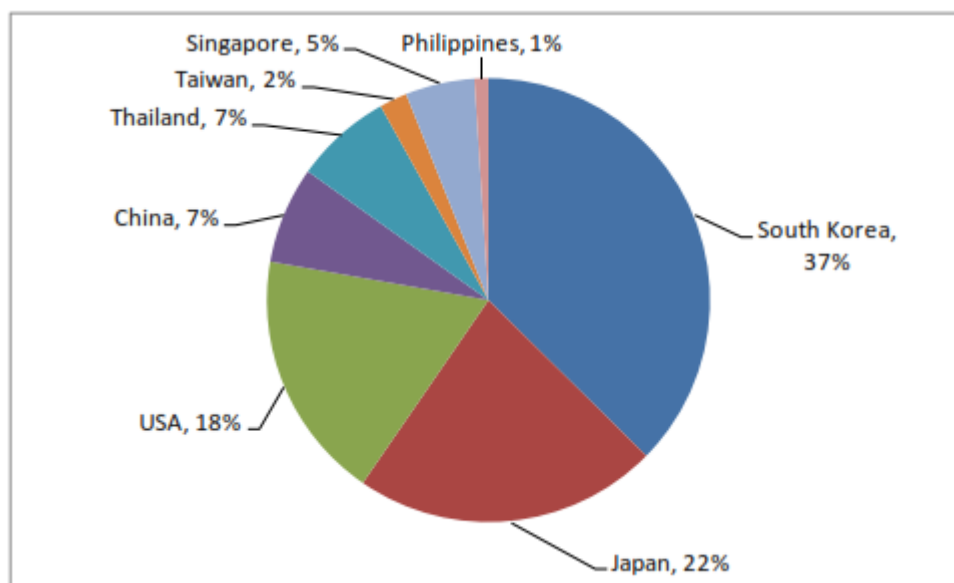
Source: James Henderson’s Estimates based on Company Data in “The Strategic Implications of Russia’s Eastern Oil Resources” (Jan 2011)

### Eastern Siberia oil production and ESPO capacity



Source: James Henderson’s Estimates based on Company Data in “The Strategic Implications of Russia’s Eastern Oil Resources” (Jan 2011)

### ESPO crude exports by destination (December 2009 to October 2010)



Source: Platts

It has been estimated that Sakhalin Island holds about 45 bb of oil equivalent. This reserve potential could make the Island as Russia's one of the most significant destinations for foreign investment as well as oil and gas producing regions. Oil and gas production of Sakhalin is focused on to export energy resources to Japan, South Korea, South Asia, New Zealand, Australia, and even to the United States. Sakhalin-1 and Sakhalin-2, the two of the largest energy extraction projects of Russia have been driven by the large energy resources of the eastern most Island of Sakhalin. Most interestingly, these projects are being overseen by the international consortium. As far as Sakhalin-1 is concerned, it is operated by a consortium of Exxon Neftegas Ltd, which includes Japanese SODECO, Russia's Rosneft, and India's state-owned ONGC Videsh Ltd. However, the Sakhalin-2 has been operated by the consortium of Russia's Gazprom/Sakhalin Energy Investment Company, the Anglo-Dutch multinational company (MNC) for oil and gas, the Royal Dutch Shell, and Japanese Mitsui with Mitsubishi. The project is more important because it includes the first Liquefied Natural Gas (LNG) plant of Russia and exporting most of the produce to Japan and South Korea. As far as volume is concerned, Sakhalin has produced roughly eight million tonnes of crude oil in its first 6 months of 2011. It was 5% increase as compared to a year earlier. On the other hand, Itar-TASS has reported that 13 bcm of natural gas was extracted during the same period. It is noteworthy that:



“prior to the start-up of the ESPO in December 2009 Russia was exporting between 400–500,000 bpd of crude to Asian markets via a combination of tankers from Sakhalin Island and rail transport to China. In 2010 the level of exports jumped by almost 300,000 bpd as the ESPO opened as far as Skovorodino, allowing onward transport of crude to Kozmino Bay on the Pacific Coast. From January 2011 ESPO exports will jump by up to a further 300,000 bpd as the spur pipeline from Skovorodino to the Chinese border also becomes operational, although this will probably reduce rail exports to China and so the overall total will rise only by a further 100,000 bpd to approximately 900,000 bpd. As a result it is again apparent that exports from Eastern Russia to Asia have already started to replace the declining sales to Europe that can be seen appearing through 2010. Although the effect is only marginal at present it is expected to accelerate over the next three years, with exports to Europe estimated to decline by 600,000 bpd between 2009 and 2014 while exports to Asia should have increased by around 800,000 bpd over the same period”(Reed, 2010; Henderson 2011).

### The Sakhalin licenses



Source: James Henderson's: The Strategic Implications of Russia's Eastern Oil Resources (Jan 2011)

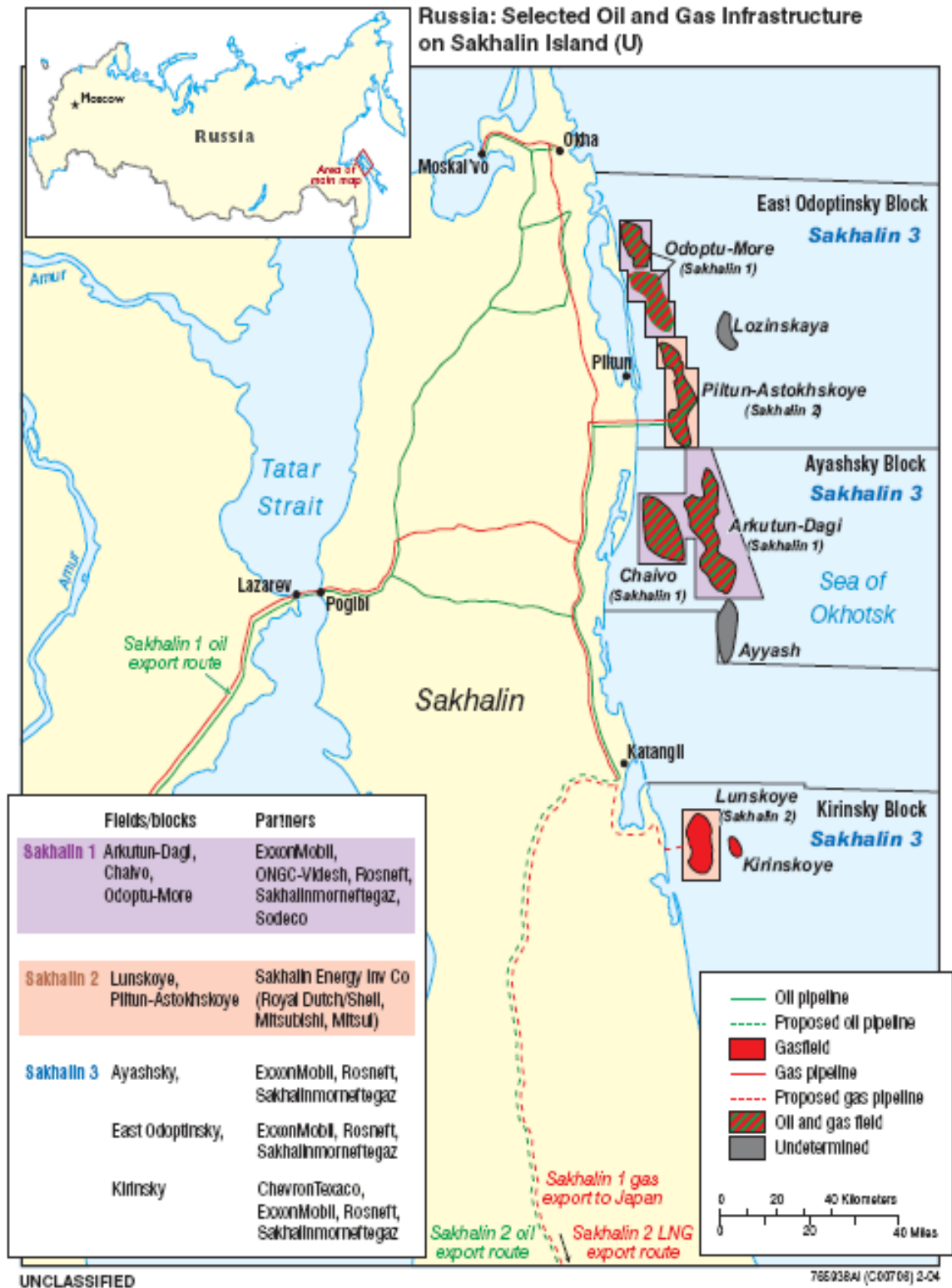


Mr. Taro Aso, the Japanese Prime Minister in 2009, compared Sakhalin-2 Liquefied Natural Gas plant as Russia's 'window to Asia'. In fact, "this often overlooked corner of northeast Asia has a history and modern role as complicated as the island's weather, which can turn from rain and fog to snow, sun and wind in a single day" (Letman, 2011). Even the West, especially Center for Strategic and International Studies' Energy and National Security Program, has reported the region having the great potential for exporting oil and natural gas in 2009. It had also highlighted that

*"Russian oil exports offer 'reliability, security and diversity of supply' geographically and politically distant from the uncertainties and instability of places such as Nigeria, Venezuela or Iraq...Political tensions and territorial disputes notwithstanding, Sakhalin's relationship with its East Asian neighbors is maturing...With these still relatively untapped energy and marine resources, strategic location and an increasingly vibrant economy, Sakhalin's importance to the Asia-Pacific region is reflected in the attention it and the Kuril Islands are receiving from Moscow, seven times jones away" (Letman, 2011).*



[http://static.truniversity.net/files/116001\\_116100/116098/Sakhalin.gif](http://static.truniversity.net/files/116001_116100/116098/Sakhalin.gif)



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### Sakhalin Fact Sheet (May 2008)

Sakhalin Island, a former penal colony located off Russia's eastern shore (see map), is home to six oil and gas projects. The five projects are currently in different stages of development, and two of the projects, Sakhalin 1 and Sakhalin II, aim to bring oil and natural gas production online in the near term. Both projects have targeted Asian markets. Three blocks after Sakhalin VI have not been awarded yet, and Sakhalin 7-9 are awaiting development			
<b>Name</b>	<b>Sakhalin I</b>	<b>Sakhalin II</b>	<b>Sakhalin III</b>
Primary Field/Block Names	Odoptu [Northern and Southern] (onshore), Chayvo (onshore and offshore), Arkutun-Dagi	Sakhalin Energy Investment Company: Piltun- Astokskoye, Lunskeye (will provide most of the LNG. 34 kb/d of oil)	Kirinskii, Veninskaya, Vostochno-Odoptu, Aiyashkii
Oil Reserve Estimate	975 million bbl. (Source: IHS Energy)	1.0-1.2 billion bbl (Source: Shell)	Total: 4-5 billion bbl Veninsky Block: 830 million bbl (Source: IHS)
Natural Gas Reserve Estimate	11 Tcf, (Source: IHS Energy)	17.3 Tcf (Source: Shell)	Total: 27-38 Tcf Veninsky Block: 11 Tcf (Source: IHS)
Net Total Investment	Phase 1: \$5 billion	Phase 1: \$4.5 billion. Phase 2: \$20 billion over next 4-5 yrs.	\$13.5 billion expected ExxonMobil- \$80m in geological studies
Current & Expected Prod'n Level	Max oil production from Chayvo field achieved in Feb. 2007 at 250 kb/d. Commercial gas prod'n expected in 2008	Current: 80,000 bbl/d for 6 months. Phase II: 180,000 bb!/d. year-round oil production expected by 2009, LNG prod'n expected by 2009	n/a
Primary Project Developers	Exxon Neftegaz (30%). in conjunction with consortium members SODECO (30%). ONGC Videsh [20%]. Sakhalinmorneftegaz (Rosneft-Sakhalinmorneftegaz Subsidiary. 11.5%). and RN Astra (Rosneft Subsidiary, 8.5%)	Gazprom (50%), Sakhalin Energy Investment Company: Shell (27.5%). Mitsui (25%). Mitsubishi (20%)	Rosneft is primary developer. Veninsky Block: Rosneft (49,8%). Chinese Sinopec (25.1%) and Sakhalinskaya Neflyanaya Kompaniya (25.1%)
Status/Notes	Mode of gas export still up for negotiation. Exxon prefers pipeline exports to China (cheaper). Other shareholders, Gazprom prefers piping to LNG terminal at Sakhalin II.	Oil production began in 1999; Processing terminal under construction which will have capacity of 88,000 bbl/d of oil. 1.8 bcf/d of gas	License possibly suspended. Lukoil possibly in cooperation with Gazprom will probably take part in new tenders for Kirinskii and Vostochno blocks.
<b>Name</b>	<b>Sakhalin IV</b>	<b>Sakhalin V</b>	<b>Sakhalin VI</b>
Primary Field/Block Names	Pogranichny Block. Vest Schmidt. Okruzhnoye fid	Kaigansko-Vasyukansk, E. Schmidt	Pogranichny
Oil Reserve Estimate	880 million bbl. Vest Schmidt may contain as much as 1.3 billion bbl acc. to Degolyer &McNaughton	E. Schmidt (2.98 bill, bbls). K-V (8.5 billion bbls) according to D&M.	800 million bbl
Gas Reserve Estimate	19 Tcf. 1 Tcf in Vest Schmidt acc. to Rosneft website	15.2-17.7 Tcf (E. Schmidt 9 Tcf)	n/a
Net Total Investment	\$2.6 billion expected	\$3-5 billion expected	n/a
Current/Expected Prod'n	n/a	n/a	n/a
Primary Project Developers	BP (49%). Rosneft (51%)	Elvary Neftegaz: BP (49%). Rosneft (51%)	Urals Energy (via Petrosakh). Alfa Eco
Status/Notes	There is speculation that unreleased drilling results during 2007 were not positive. JV does not plan to drill again during 2008, although seismic activities will continue.	Activities in 2008 will include seismic processing, interpretation and acquisition on the existing license blocks	3 blocks in Sakhalin VI have not been awarded, but Gazprom is interested.

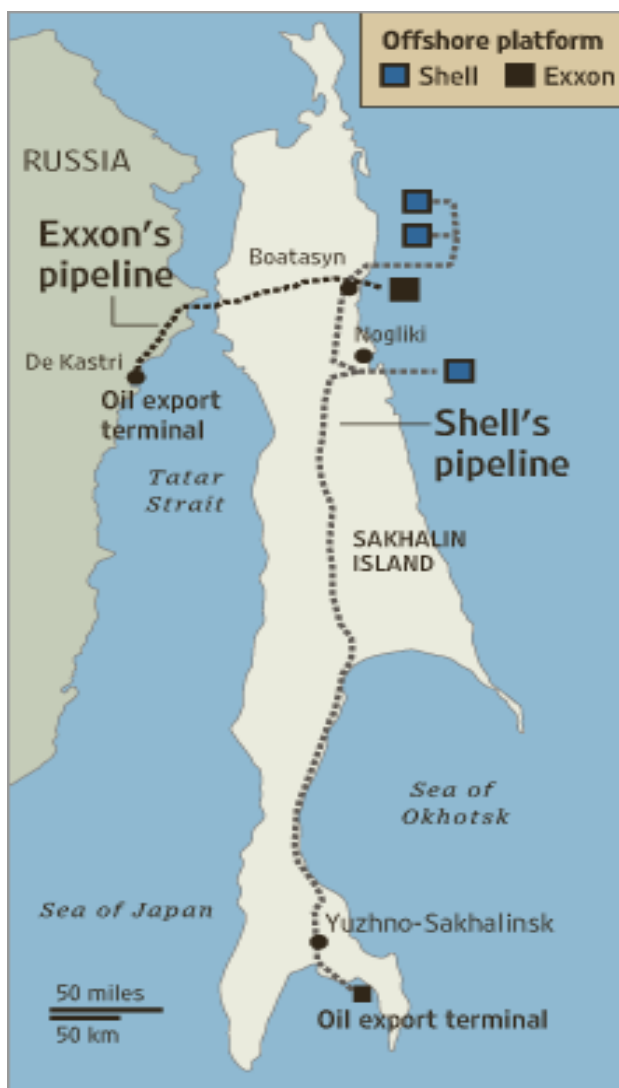
Source: Project Homepages (see links section). IHS Energy. Interfax. Russian Energy Monthly (www.easternblocenergy.com). FSU Oil and Gas Monitor. Pipeline & Gas Journal



## Rosneft's projects offshore Sakhalin Island



Source: James Henderson's: The Strategic Implications of Russia's Eastern Oil Resources (Jan 2011)



[http://online.wsj.com/public/resources/images/OB-AK231\\_EXXRUS\\_20070506213654.gif](http://online.wsj.com/public/resources/images/OB-AK231_EXXRUS_20070506213654.gif)



[http://www.pbs.org/frontlineworld/rough/roughimages/map\\_rc44\\_pipe2.jpg](http://www.pbs.org/frontlineworld/rough/roughimages/map_rc44_pipe2.jpg)

## Oil & Gas Global Perspective

### Energy Commodities: Global Reserves and Production

	<b>Proven reserves 2010</b>	<b>Production 2010</b>	<b>Reserves to production ratio</b>	<b>Carbon emissions<sup>(b)</sup></b>
	Billion tonnes oil equivalent	Billion tonnes oil equivalent per year	Years	Grams CO <sub>2</sub> per kilowatt hour
Natural gas	168	2.9	59	370
Crude oil	208	3.9	53	640
Coal	442	3.7	118	720–940

(a) Oil equivalence is based on average calorific value of different fuels. Proven reserves are those which, based on geological and engineering information, can be recovered in future with reasonable certainty based on current economic and operating conditions. Both conventional and unconventional sources of gas and oil are included in figures for production and proven reserves.

(b) Figures based on average emissions per kilowatt hour from power generation in OECD member countries over 2006 to 2008. Values are an approximation and should be interpreted with caution.

Sources: BP (2011); International Energy Agency

In terms of largest oil producing states and as the data provided by the EIA (2014) for 2012, Russia was ranked third with its estimated total liquids fuel production as of

10.4 million barrels a day (bbl/d) of which 9.9 million bbl/d was crude oil; while the consumption<sup>28</sup> was roughly 3.2million bbl/d. During this period, 7million bbl/d was exported<sup>29</sup>, which includes roughly 5 million bbl/d of crude oil and the remaining was in other energy products. In the world ranking of production, Saudi Arabia and the United States were the first and second largest oil producers respectively. It comes second in natural gas production, where the United States holds the first rank. Russia is the third largest producer in its total liquids production as well. However, the average production was at 10.5 (bb/d) through September 2013.


According to the *Oil and Gas Journal*, as of January 2013, the proven oil reserves of Russia were 80 billion barrels. Western Siberia is the most important region for oil reserves. The region between Ural Mountains and the Central Siberian Plateau that could be extended up to the Caspian Sea holds the maximum oil reserves of Russia. Some of the resources are located in the Eastern Siberia as well; however, much of the exploration is still awaited (EIA 2014).

## **Natural Gas**

Being one of the largest primary energy producers, Russia is a major player in the global energy market. It holds the largest reservoirs of gas and significant player in the world gas market where only the United States has a capacity to produce more than Russia due to recent developments of shale. But when it comes to export capacity, Russia still exports maximum gas to the global energy market. Qatar of Middle East, Norway of Europe, Canada of North America, and Algeria of North Africa on the Mediterranean cost and Netherlands along with Central Asian Turkmenistan etc follow Russia in export.

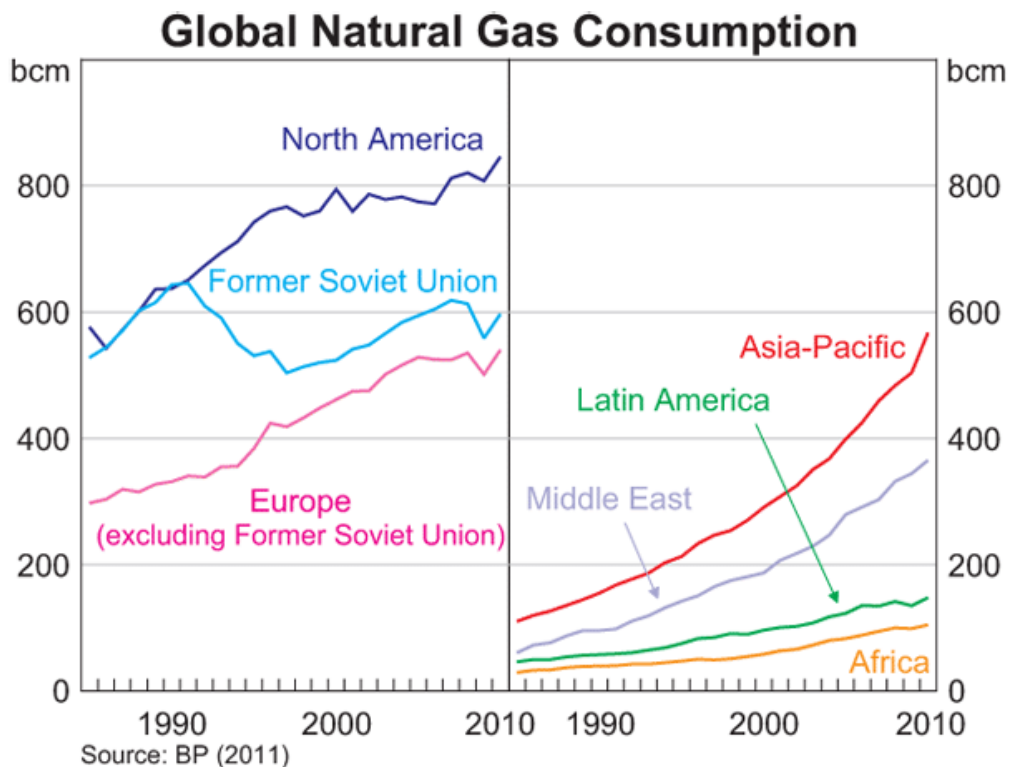
As far as Russian gas market is concerned, most of the current export goes to European nations, while potential Asian market gives hope to extend the export network in the unconventional and new regions. However, countries of post-Soviet space are no less significant in Russia's oil and gas export strategy as well as existing

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<sup>28</sup> Russia's total liquid fuels supply and consumption, 2002-2014   
[http://www.eia.gov/countries/analysisbriefs/Russia/images/liquid\\_fuels\\_supply\\_consumption.png](http://www.eia.gov/countries/analysisbriefs/Russia/images/liquid_fuels_supply_consumption.png)

<sup>29</sup> *Russian pipeline oil exports come under the jurisdiction of Transneft that is the state owned monopoly* (EIA 2014).

energy markets. Time and again, it is proved that energy supply to the West is not only the strength of the Russian state, but also an instrument to make favourable relations with strong as well as weak European or Commonwealth of Independent States. This geopolitical instrument has been the most significant factor of integration in the former Soviet Union and Eastern Block regions. It offers Russia to influence the foreign policy making of these countries. However, recent developments have made Russia to think for a new strategy to diversify its market to Asian countries, where it can “extend relations and maybe even build strategic alliances with Asian countries (mainly China) in opposition to the US and Europe” (Tatiana 2014). She further opines that Russian geopolitical use of energy resources is significant “for international negotiations and to strengthen its soft power” to which she has called “an instrument to obtain influence.”



Tatiana (2014) highlights that “Russia’s total of 170-200bcm of gas exports make it significant from a natural gas perspective, as currently it alone provides for about 20% of the international gas trade.” It supplies roughly 50% of the European gas market while Commonwealth of Independent States is completely dependent on the Russian



exports. This sizable control of market provides Russia an upper hand to influence the gas prices in the region, which ultimately transforms in a geopolitical leverage in the world politics.

The Russian energy leverage comes not only due to price mechanism; it turns on some other aspects as well. Russian transcontinental energy infrastructure pulls that force through the 150,000 km of trunk pipelines in the Eurasian region. It could be the competitive market strength of Russian energy resources to challenge the new players in a big regional market where not only Europe, the commonwealth of Independent States and Caspian Sea region, but North Africa and North-East Asian countries as well could become as one strong market entity. Along with the vast pipeline networks, strong hold on other major energy transportation assets in the existing market provide Russia a significant leverage to compete and challenge other potential suppliers. The vast energy resources of Russia make consuming countries confident of demand security and as a reliable partner in an ever changing energy market (Tatiana 2014).

However, Russia, till recently, has supported a model of traditional gas market and protected “long-term take-or-pay contracts” (Tatiana 2014). It always favored the idea of a cartel for natural gas exporting nations. The whole idea of a gas union is based on a tendency to strengthen the supply security of major producing states, where Russia would have strong leverage to manipulate the market mechanism for other purposes as well. It is not clear that how far does it make sense or could it be a reality; Russian policy makers have always made a failed attempt and sought to establish an alliance; however, when failed, time and again strived for lobbying as a minimum.

In general, according to the U.S. Energy Information Administration reports for the year 2012, Russia holds the second place in dry natural gas production and is third largest producer of liquid fuels in the world. Its oil and gas exports have made country’s economy heavily dependent on hydrocarbons, which provide more than 50% revenues to its federal budget. The energy export driven economic growth of Russia has become susceptible to the price fluctuation of market. Therefore, when oil, gas and petrochemicals accounts for over 70% of total exports, it is quite natural that the state would have special focus on its production, distribution or market mechanism. Current and previous experiences have shown that these two products

have been of prime concern in domestic as well as foreign policies of the Russian state. As far as Russian energy consumption is concerned, which was 32.77 quadrillion British thermal units (Btu) in 2011, roughly 56% of total came from natural gas, while petroleum and coal had provided 19% and 14% of total respectively. So, the leading concern is not only due to the strategic nature of these two commodities or the volumes Russia holds vis-à-vis world reservoirs; it is due to domestic energy mix or consumption patterns as well (EIA 2014).

### **Energy and politics**

The connection between energy and politics is an age old phenomenon, wherein oil politics among states has been pivotal in shaping their relationship for over two centuries. Various causes of conflicts have been influenced by the fact that who controls the energy resources. And the contemporary fact also remains that in spite of the new and significant alternative energy sources in the supply chain, the world will remain dependent on fossil fuels in the years to come. This hydrocarbons dependence complicates and deepens the complex relationship between energy, politics, and economy (Finger and Finger-Stich 2010). It raises question of sustainable development and concerns for growth vis-à-vis demand, supply, and market forces regarding oil and gas in particular. More importantly, it reflects that oil and gas supply arrangements still have huge dependence on states and its energy infrastructure which provides strength to be a major actor in the world order. In other words, energy has a promotional, diluting, or preserving tendency for those states who wants to be a major, principal or even a minor actor in the related market and in world system.

Russian energy resources have been inherently associated with its foreign policy especially towards Europe and its 'near abroad'. It has exploited various transit routes as well as strength of oil and natural gas to influence or woo its adjacent territorial or distant neighbors and friends. It puts various military, markets, inherited cultural and ethnic justifications in support of foreign policy moves and actions. However, the expansion of NATO and American desire to get involved and influence the region have authenticated some of Russian rationales behind the use of energy as an instrument in the foreign policy of the state. From Baltic to Central Asian territory, it does find energy and culture two strong *raison d'être* to make further political influence in the region.

Though, in western writings, Russian energy strategy and even market approaches have been described as a ploy to demean its political or market acumen. Now it has been accepted as a well established fact (?) in the West that Russia always uses its energy resources to influence business partners to get political leverage and mileage; but that assumed mileage in political terms has yet to be conceptualized in details. However, if some of Russian actions do not authenticate the Western arguments that are harped on the instrumentality of energy resources, they are as a minimum supported by them. For instance activities on the North Pole and aggressive approach towards neighboring countries could be taken for that purpose. Although, the financial crisis and its global impact has changed everything which was supported by the energy prices in the world market, Russian flag hoisting at the North Pole (Lomonosov Ridge) in August 2007 and the Georgian crisis has led the speculation of a new Cold War in the international community (Lukyanov 2010; Overland 2010). This grim thought has made an environment to analyze other significant dimensions of international world order as well as conflicts and rights where energy foreign policy and strategy was bound to play a crucial role. It brought revived many old concerns and debates vis-à-vis question of new threats to national sovereignty and an indiscreet race to acquire various natural resources and related conflicts and impacts.

It is beyond doubt that major changes in the energy market, either of international prices or new regional market equations, have had serious impacts on policy making of nation states according to their economy, geography, and status in the world order. The transformation in various aspects in a nation state due to this situation has brought in not only diverse interpretations, but also competing discourses. These discourses set many dimensions before the state to choose and follow to assign, design, and make its place in a changing world order. One such discourse expresses that major changes, especially of prices in the world energy market, could pose a threat to the sovereignty of a state and cause unnatural pursuit of energy resources as well as clash and conflicts in other fields (Borgesson 2008; Smith 2008). Similarly, Klare (2008) suggests that energy interdependence and resource crunch lead to cyclical instabilities, which creates a new battleground for geostrategic primacy.

However, Paillard (2010) and Trenin (2010) differ from above interpretations. They do not accept the logic of race or conflict for natural resources especially in case of

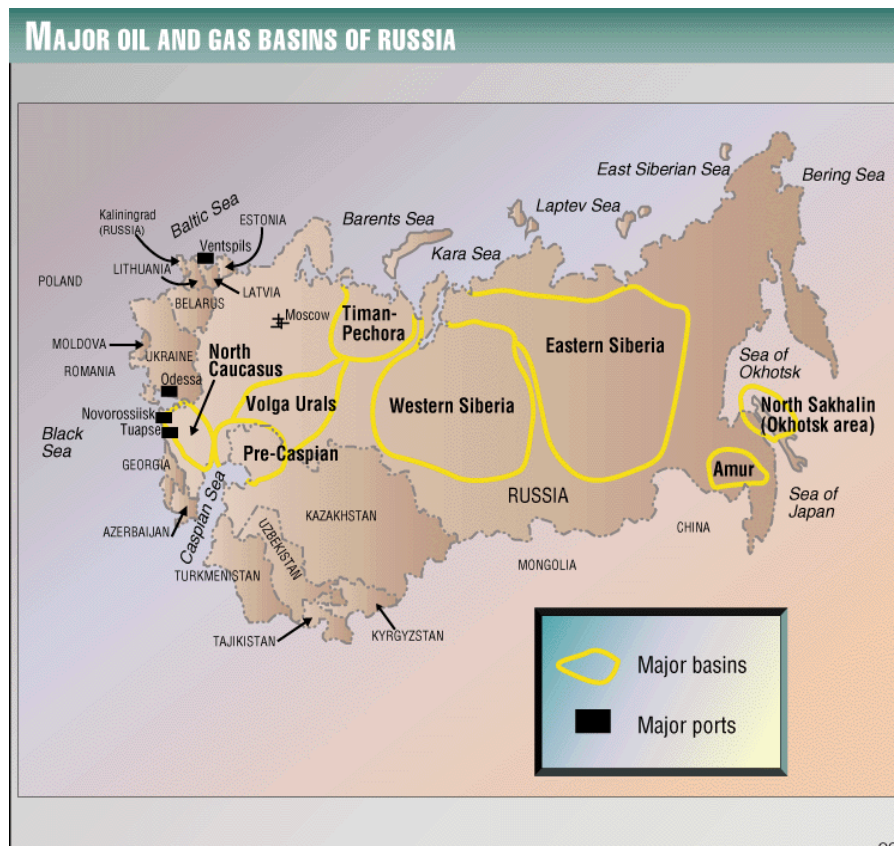
energy policy between/among states. On the contrary, they do emphasize that various states have specialized technological and financial strength to develop cooperation for required alternative energy (policy) solutions, which could ensure their comparative peaceful, stable, and sustained growth in the new global energy world order. To prove their stand, both have produced significant examples of 'Russia and Europe's Mutual Energy Dependence' as well as 'The Arctic: A Front for Cooperation not Competition', while Kropatcheva (2011) highlights the major components of energy.

Sometimes, Russia has been branded as a state having aspiration and desires to be involved in the energy imperialism as well. However, after analyzing the whole energy structure the fact remains that it is neither the only nation with huge energy reserves nor has all kinds of advanced technology to exploit all available sources of energy by itself, and more importantly other players have not been dropped behind in the global energy market as well. Moreover, a flouting image was contrived in terms of Russian energy supply especially for European countries despite the fact that only few transit states have some problem with Russia on pricing not the whole Europe or many other oil and gas customer nations. In fact, like many other states, Russia also makes use of its resources to maximize the power of a state which requires political, economic, military or any other means to get strengthen to hold a strong position in an anarchic international system (Morgenthau 1948).

## Chapter 4

### RUSSIA-EUROPE ENERGY RELATION

Russia and Europe have strong interdependent relations and most of the Russian energy export goes to the European Union. In the last decade, West started to emphasize on the political instrumentality of Russian energy resources where natural gas has been viewed as an instrument to project Russia's power beyond its territories. Though, Russia has no free ride on Europe even in the field of natural gas supply. It is constrained not only by its own production capacities as well as aggressive strategies of other major players, but also ability of the European Union to project the regulatory powers. In this context, it seems that Russia has very little room to maneuver gas trade with European nations. It is also true that Russian relations with various European countries certainly go beyond the market, i.e. pure economy or commercial practices. Up to some extent, it is embedded with some geopolitical overtones. Therefore, Russia as well as Europe is bound to have some short and long term strategies to limit their own damage and influence the other side without stretching their tense relations too far.



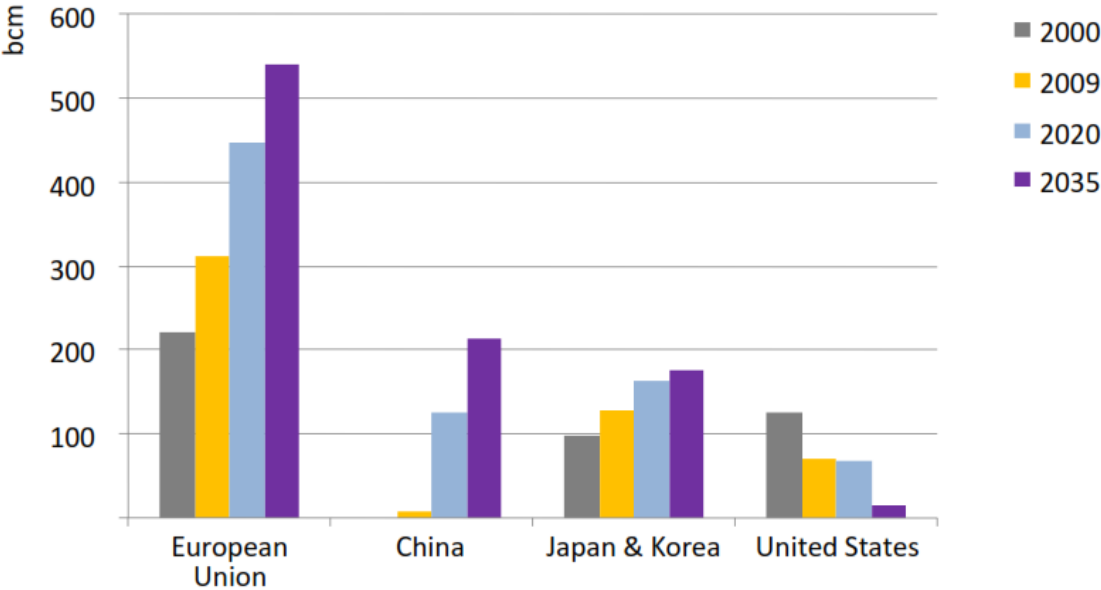
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**Russia's gas export pipelines to Europe (existing and under discussion)**



Source: Tatiana Mitrova “Shifting Political Economy of Russian Oil & Gas”, March 2016 ( A Report of the CSIS Energy and National Security Program

**Net imports of natural gas**



©OECD/IEA2011: Despite competitive pressures, in 2035 Russia provides more than 30% of the gas imported by the EU (170 bcm), and 20% of imports to Japan and Korea (35bcm)

In this backdrop, it is a known fact that energy is the olfactory of geopolitics. But, recently, Russia has stated that it is not intended to dominate the global energy market and called for universal regulators of distribution. It has acknowledged that ‘using energy as geopolitical tool increases instability and worsens investments climate.’ It stands not only for a ‘fundamental’ market mechanism in its energy policy<sup>30</sup> but also warned against ‘the temptation to use geopolitical tools to change the balance between suppliers and clients.’ But, these intentions sound more like rhetoric than a reality.

Since the beginning of the 21<sup>st</sup> century, Russian oil and gas industry has been deeply influenced by the geopolitics. It is not only a resource driven or market phenomenon, but also has some personality dynamics. These elements have been validated by the various ups and downs that occurred in the last ten years. Various developments compel us to recall the famous resignation speech (December 25, 1991) of Mikhail Sergeyevich Gorbachev in Moscow, wherein the last President of the Union of Soviet Socialist Republic emphasized on ‘land, oil and gas, other natural resources’ as their innate strength. Gorbachev supported “the preservation of the union state and the integrity of (t)his country” together with “independence of nations and the sovereignty for the republics”. However, he did not subscribe “the policy prevailed of dismembering” the USSR and disuniting the state<sup>31</sup>.

These reminiscences reveal the roots of current developments as well as policies adopted by the state. Russia, a natural resource abundant state, is striving hard to regain its lost status in world politics and energy word order. Needless to say that high energy prices helped consolidate the nation in the very first decade of this century and it has convincingly overcome the chaos and confusion of its disintegration. At present, it is ready to project and reclaim its lost eminence and repute in the world politics.

Since, energy market has almost remained a seller’s market; the state control over energy resources provides a better bargaining power in terms of diplomacy to the producer states. Along with the strategic nature; rising demand and soaring prices

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<sup>30</sup> “As the statements given by the Russian Energy Minister Mr. Alexander Novak in the 21<sup>st</sup> World Petroleum Congress amid 5000 delegates from more than 80 countries. Organizing World Petroleum Council includes 69 member countries which accounts 96% of the global oil and gas production and consumption” (Xinhua June 19, 2014).

<sup>31</sup> END OF THE SOVIET UNION; Text of Gorbachev's Farewell Address; New York Times, December 26, 1991. <http://www.nytimes.com/1991/12/26/world/end-of-the-soviet-union-text-of-gorbachev-s-farewell-address.html?pagewanted=all>

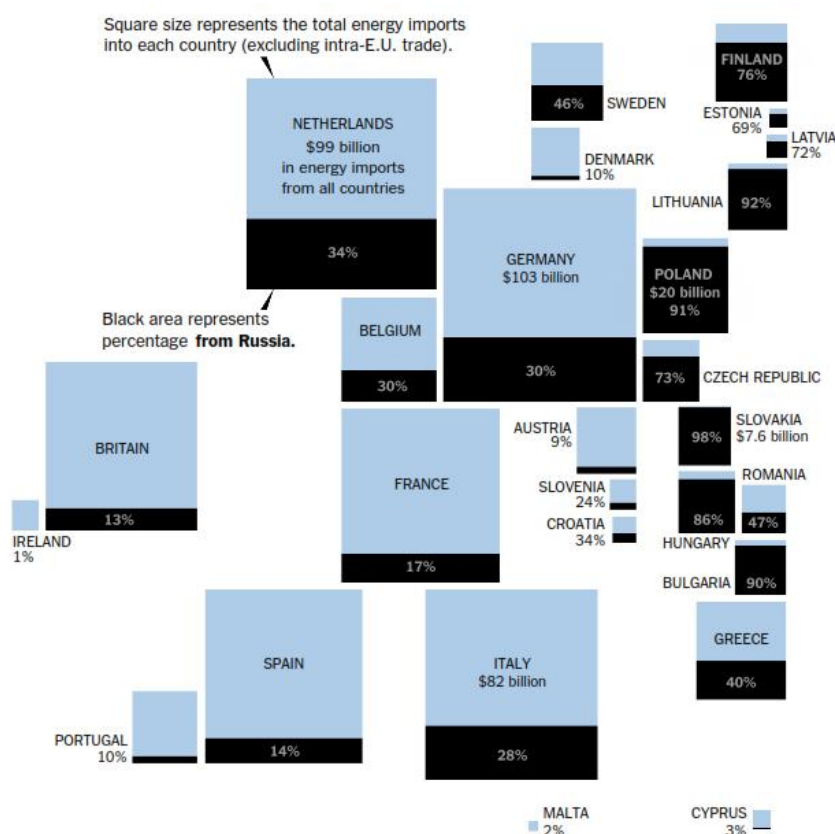
have made energy a vital determinant of foreign policy of producer as well as consumer states. If the question of sustainability of energy at affordable prices is important for the consumer states; supply security is a crucial issue for all producing nations. This supply and demand security encompasses not only geopolitics and diplomacy, but also the economy of a country and market forces as well.

In other words, the concept of energy security and foreign policy has been defined in terms of the nation's diplomatic position and requirements. Almost all the consumer states have a consensus over the lower prices of energy resources. They interpret energy security in terms of "availability of sufficient supplies at affordable prices" (Yergin 2006). However, the producer states have a different notion and interpretation regarding security of supply. They use sovereign rights over energy resources not only to regulate them domestically, but also to promote national interests, and influence the world politics. The sovereign rights provide room for these resources to be instrumental in the foreign policy behavior of a state. Moreover, if the producer states mobilize other nations of same interests to form a group; the consuming states try to regulate these resources through various international organizations and constructed norms. However, transit states expect high rents, subsidies, lower prices for their domestic consumption.

All these factors make the whole scenario very complex where energy resources do play a major role not only in the foreign policy behavior of producer and consumer states, but also in the transit and supplier states. In terms of midstream and downstream, consumer and transit states have a different status and value. Transit states can create some complex situation for consumer as well as supplier states; e.g. along with a potential for production, Commonwealth of Independent States or the CIS region as a whole has the capacity to disrupt the supply to the European countries. Due to transit and consumer value of Central Asian and East European states, Russians are skeptical about their market sustainability. This is an important factor behind Russia's East Asian diversification plans which does not deliver a complete disconnects with the policies of near-abroad and European market as well. Nevertheless, existing European requirements and dependence provide Russia a better bargaining position for which Russia demands a considerable share of the European Union's energy market.



## Russian share of natural gas



Source: Eurostat as published by Global Trade Information Services

Note: Luxembourg's imports are too small to show.

<http://www.nytimes.com/interactive/2014/03/21/world/europe/how-much-europe-depends-on-russian-energy.html>

### %Dependence

Low Dependent	Moderate Dependent	Dependent	High Dependent
<b>0-25%</b>	<b>25-50%</b>	<b>50-75%</b>	<b>75-100%</b>
Belgium	Germany	Czech Republic	Bulgaria
Spain	Greece	Estonia	Lithuania
France	Latvia	Romania	Hungary
Italy	Netherlands		Poland
Luxembourg	Austria		Slovakia
Slovenia			Finland
Sweden			
United Kingdom			
Ireland			
Cyprus			
Malta			
Portugal			

\* Denmark is out of dependency (-36.8%)

Source: Tugce Varol Sevim (2013)

## European oil and gas imports from Russia

Country	Oil			Natural Gas		
	2009	2009 All	Ratio of	2009	2009	Ratio of
	Russia Eurostat m/t	countries Eurostat m/t	total import %	Russia Eurostat bcm	total Eurostat bcm	total import %
Belgium	11.248	31.224	36	0.526	18.6812	2,8
Bulgaria	4.489	6.158	73	2.6620	2.6620	100
Cze.Rep.	5.097	7.187	70	6.8368	9.9058	69
Denmark	-	3.511	-	-	-	-
Germany	34.649	98.028	35	36.0786	95.3639	38
Estonia	-	-	48*	0.6560	0.6560	100
Ireland	-	2.678	-	-	4.9522	-
Greece	5.710	17.780	32	1.8577	3.7013	50
Spain	8.201	52.297	15	-	39.6923	-
France	10.251	71.404	14,5	7.4768	50.8677	14,6
Italy	15.128	76.297	20	20.4613	70.8509	29
Latvia	-	-	-	1.7456	1.7486	100
Lithuania	8.359	8384	100	2.7349	2.7349	100
Luxembourg	-	-	-	0.335	1.3897	24
Hungary	5.425	5.425	100	8.1633	9.8778	83
Netherlands	16.202	48.203	33	3.2475	22.9704	27
Austria	0,295	7.424	0	7.4469	11.8760	63
Poland	18.930	20.098	94	8.3561	10.1880	82
Portugal	-	-	-	-	5.3296	-
Romania	2.467	6894	35	1.9697	1.9963	100
Slovenia	-	-	-	0.5023	1.0355	48,5
Slovakia	5.704	5.704	100	5.9721	6.0171	100
Finland	9.581	10.784	88	4.3524	4.3524	100
Sweden	7.167	19.005	37	-	1.5198	-
UK	5.831	47.104	8	-	44.0622	-
<b>EU-27 total</b>	<b>154.475</b>	<b>624.465</b>	<b>31 (35)**</b>	<b>121.3811</b>	<b>422.4434</b>	<b>28,7(45,6)**</b>

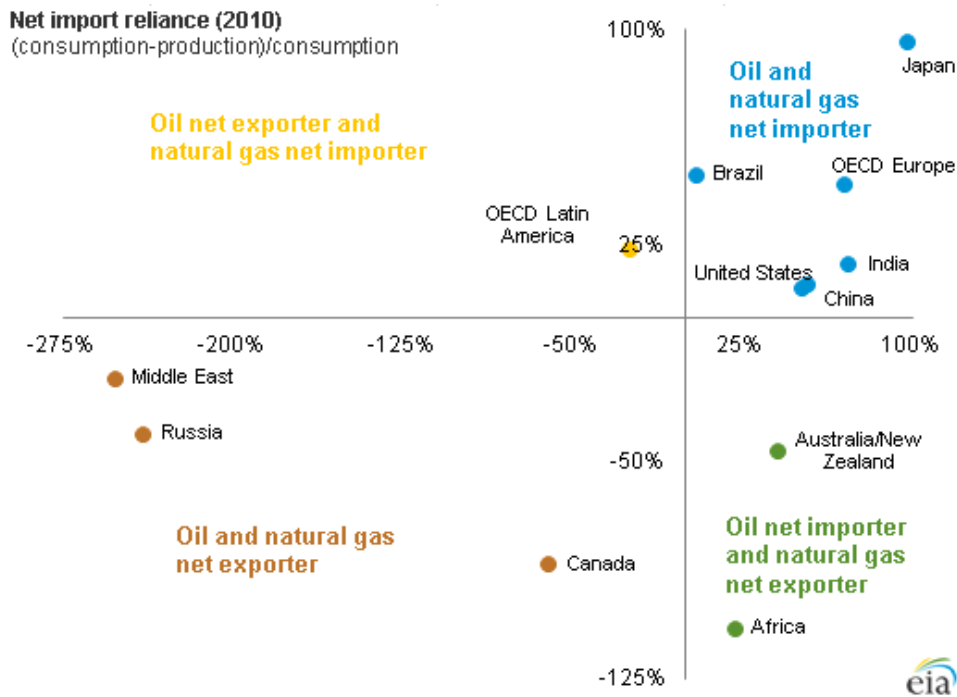
\*Estonian numbers does not exist in Eurostat. Johann Fabian-Marks, "Energy Security Position Paper – Estonia. \*\*Individual ratio of each country. Source: Eurostat Available on site <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>. Note: Cyprus, Malta -NA. Source: Tugce Varol Sevim (2013)

It also insists on legal security on long term supply contracts and acquisitions. However, signing long-term bilateral and multilateral contracts, internal and external consolidation of upstream and downstream strategic energy infrastructure, especially of pipelines; removing competition by using petro-carrots and sticks through cut off's and subsidies are other significant steps (Orttung & Overland 2011; Newnham 2011). It has continued efforts to control over downstream energy assets of the European Union too (Solana 2006). Moreover, analyzing the diversification plans and state control through nationalization are also important to find out how energy is being used as an instrument in the foreign policy behavior of Russia.

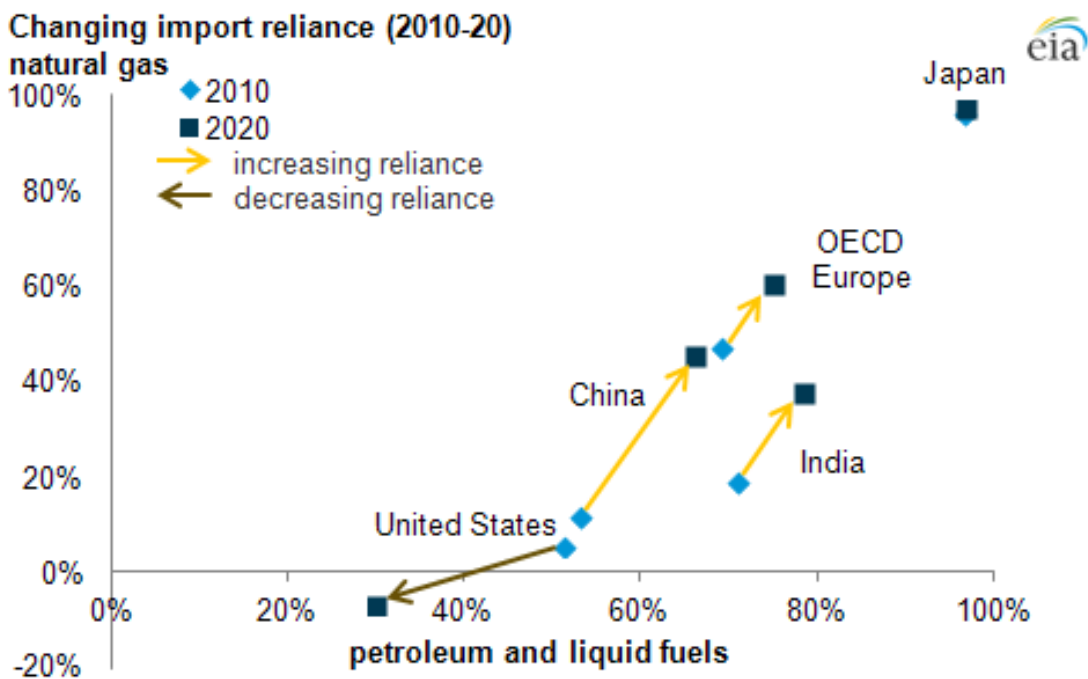
In nutshell, three fundamental concerns are critical to understand the instrumentality of energy in the foreign policy behavior; i.e. previous, existing, and potential energy conflicts; the demand and supply security; and finally, political as well as economic risks attached to the energy in terms of resource diplomacy. Various energy issues, regarding these concerns, offer different examples to understand the energy foreign policy of a large producer state which has been yearning for its lost economy and status.

However, the link between energy and foreign policy is a subtle subject where various conflictual situations lead some harmonious political or economic alliances as well; e.g. Ukrainian crisis has paved the way for many alignments in various regions. It has shown that energy issues encompass not only bilateral and regional but also global equations and concerns. At times, it could contain geopolitics and energy diplomacy vis-à-vis resource nationalism/mercantilism and sustainable development as well.

Therefore, this paper aims at the new understanding of abovementioned situations not only in terms of shifting energy markets, but also in terms of energy (resource) diplomacy and geopolitics. In this context, Klare (2008) rightly pointed out that the world has been experiencing a profound revolution where a significant and permanent shifting in the balance of world power is apparent. Changing patterns of import-export of crude oil and natural gas validate the argument profoundly in various regions.



**Source:** U.S. Energy Information Administration, 2013 International Energy Outlook  
**Note:** Import reliance is expressed as (consumption-production)/consumption. While a country can only import up to 100% of consumption, there is no limit to the extent exports can exceed consumption. (**Principal contributors:** Robert McManmon, Mark Eshbaugh)



**Source:** U.S. Energy Information Administration, 2013 International Energy Outlook (IEO) and 2014 Annual Energy Outlook (AEO) Early Release for U.S. projections

**Note:** Import reliance is expressed as (imports-exports)/consumption for the United States and (consumption-production)/consumption for other countries and regions as we do not project gross import/export values in the IEO. While this analysis focuses on the mid-term 2020 timeframe, IEO projections extend to 2040. Chart recreated based on a Bloomberg New Energy Finance graphic using International Energy Agency data. (Republished February 4, 2014, graph was updated with *Annual Energy Outlook 2014* data for the United States.)

In light of above drivers and equations, this study finds that the Russian energy policy behavior is harped on the following arguments. In the first place, the new energy world order has provided Russia an opportunity to reorient its foreign policy and reclaim its lost status in world politics. Secondly, European energy dependence has caused Russia to exert pressure on many European states while these states could favorably reorient their policy towards Russia through their own diversification plans as well. And finally, growing energy demand of the East Asian nations has proven a boon for Russia, where China is ready to play a major role in terms of consumption.

### **Russian Challenges of Production and Reserves**

Russia is a key player in the international energy market. It holds the largest proven gas reserves in the energy world. It is one of those top ten nations which have the largest proven oil reserves as well (OGJ 2005). Russia is the largest natural gas exporter and stands second as far as oil production and export is concerned. It is the third largest consumer of energy resources in the world. Though, America was one of the major geopolitical rivals of Russia in the Cold War era; now they are challenging each other in the world energy market through various strategies. America is not only a significant consumer state but also holds a position as a major producing state of various energy resources. These two competitors in the world energy market influence each other's policies in general and energy strategy in particular. American energy market is being influenced by the energy policies and trends pushed by the Russian Federation. Sometimes, even American welfare is being acknowledged as affected by the Russian energy strategies (CSR Report RL33407).

Though, Russia has some large potential energy resources in the East; the Western Siberia holds roughly 60-74 bb of proven crude oil reserves. The Central Siberian Plateau and Ural Mountains are the focused region and hold rich oil reserves. The rich energy resources of this region supported the old Soviet state to be a major oil producer in the world, especially in 1980s. In 1988, this natural endowment helped Russia to increase production of crude oil up to 12.5million bbl/d (BP 1992). On the other hand, approximately 6%of natural gas reserves and 25% of crude oil reserves of Russia rests in the Far-East region on the Island of Sakhalin. It is located in the north of Japan which gives the region a hope to reach a new energy market.

As far as declining trend of Russian crude oil production is concerned, it was started long back even before the demise of the Soviet Union in 1991. However, it was started declining fast after the disintegration. The worst results came in 1997-98 when even less than 6million bbl/d production was recorded (BP 1997). Due to pressure and commitments of the Soviet system state always attempted to increase the production which resulted speedy depletion of the energy resources in many large fields of the Western Siberia. Even ultimately the central planning system of the Soviets collapsed. The recovery of production was tough due to politics and management in the industry and vested interested involved in the sector. It took almost a decade to get production recovered in 1999. Privatization was acknowledged as one of the major factors behind this recovery. It is said that industry made incentives and focused on cost management thoroughly. Focus was given on lesser expensive activities and ways of production. The new focus was given on western technology application and to rejuvenate the old oil and gas fields. This new focus along with increased oil prices in the world market helped Russia to boost its output. The crude oil production in Russia attained a new height. In 2005, it was reached up to 9million bbl/d which even rose in 2006 and reached 9.2million bbl/d. interestingly, the post-effects of the financial crisis of 1998 and a consequent devaluation of the currency (Ruble) may also have contributed to this development (EIA 2007).

We believe on data of the Russian Natural Resources Ministry; according to its Director's brief, the reserve growth of Russian oil production was being increased as a policy of "intensive deposit exploitation", which was certainly combined with the previous technology and leaving roughly 65% of crude oil in the ground. However, the period of 1994 to 2005 has experienced some tremendous changes. Russian crude oil extraction was reached up to 8bbl which was larger than increase in Russian reserves. The result of this development was seen in the shrinking reserves in the Western Siberian region in 1993-2005, which reduced to almost 23bbl. It is noteworthy that this was happened in the prime crude oil production area of the Russian Federation (FSU Oil & Gas Monitor, April 18, 2007). It is also notable that Russia holds the largest gas reserves with roughly 1700 trillion cubic feet. Simultaneously, it is not only the largest gas producer state but also number one in its export. The only concern was its slogged increase in production, while EIA has projected to continue its slow pace in coming years as well (EIA 2007).

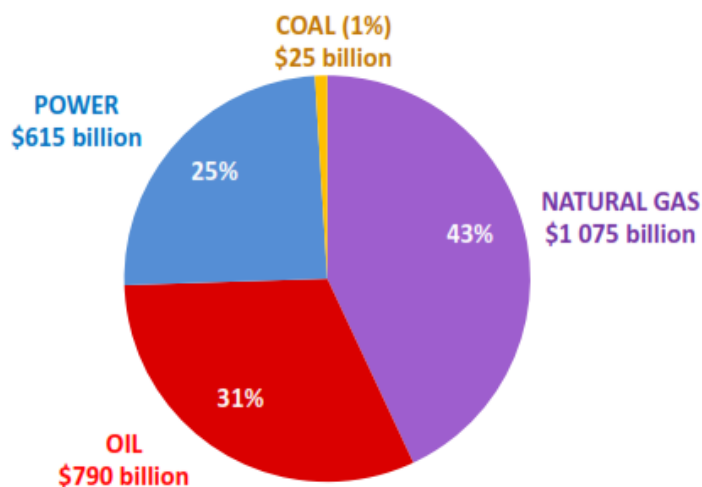
Slowly, the exports have been recovered and reached up to the level of late 1990s; but the question of sustained growth remained an important issue for the energy policy makers. The growth of gas sector in Russia was not affected by any singular reason. It was retarded due to physical as well as policy reasons. The industry was almost monopolized by the Gazprom where major state holdings played a crucial role in the management. Domination of one player or the involvement of government pushed state regulations in forefront which lacked the professional approach vis-à-vis market. The situation was aggravated by the natural ageing oil and gas fields along with insufficient pipelines to export the product. The bigger problem lies with the export mechanism. Though, Gazprom operates the domestic gas pipeline networks and produces almost 90% of Russian gas; according to law, it has to supply gas for heating purposes as well as power generation. The state-regulated market where it is bound to take below market prices makes its problems worse. It shows the highly regulated mechanism of the company as well. The Russian state holds 51% shares in Gazprom which made it a state-run monopoly. It holds more than 25% of the gas reserves in the world and pay huge tax amounts to the state. It is responsible for earning roughly 25% of the federal (Russian) tax revenues.

The potential oil and natural gas production and its sustainable growth in Russia are dependent on various domestic as well as international factors. Technology will play a pivotal role in the development of this sector. Russia has been lacking in the full introduction of western technologies in terms of crude oil and natural gas explorations. Production technology has also becoming obsolete. Natural gas of many oil companies has largely been flared. Now, it is expected that independent natural gas companies would play a significant role in the Russia energy sector through their increase share in the total natural production. It could go from 9% in 2005 to roughly 17% by 2010 (EIA 2007). However, the success of this private entrepreneurship would depend on how far and long they get access to the transmission mechanism held by Gazprom.

On the other hand, various contradictory assumptions are in the market environment. If some have viewed the situation in affirmative and focuses on the improved climate of investment in Russia; others argued reasons for otherwise. There were reports that establishment has thought of some proposals to inflict tight restriction on foreign

companies. It was assumed that government had very little interests to lure foreign companies to get involved or participate in the production of crude oil gas in Russia. It would certainly discourage and hamper foreign investment in the energy sector. There are some problems with the judicial system as well. Limited protection of rights of minority stakeholders and uncertain laws of property rights are also problematic for new investors. These investors have a problem of inefficient and reluctant bureaucracy along with oppressive tax regimes regarding new investments.

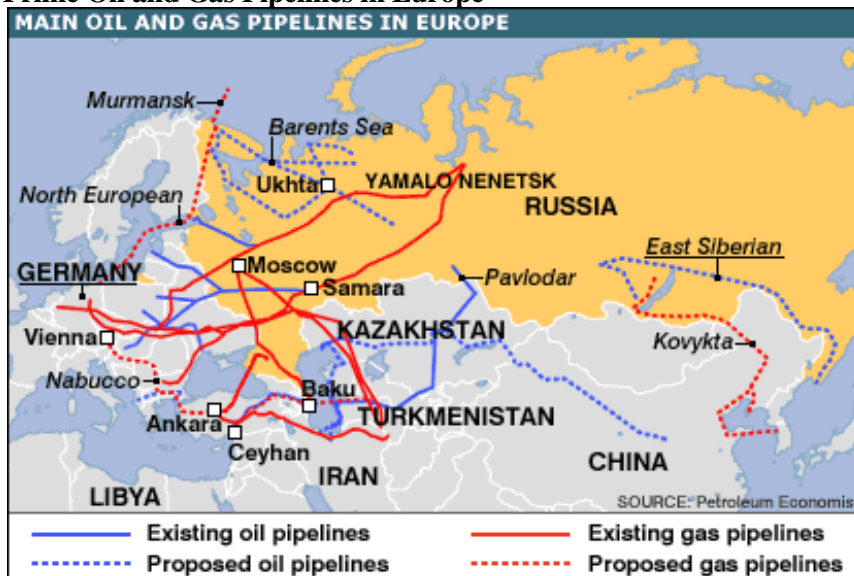
### Cumulative investment requirement in Russian energy supply, 2011-2035



©OECD/IEA2011: Investment needs total almost \$2.5 trillion, or just under \$100 billion per year on average, the bulk of it in the upstream oil and gas sectors

### Petroleum Exports

#### Prime Oil and Gas Pipelines in Europe



<http://news.bbc.co.uk/1/hi/shared/spl/hi/guides/456900/456974/img/1152550748.gif>



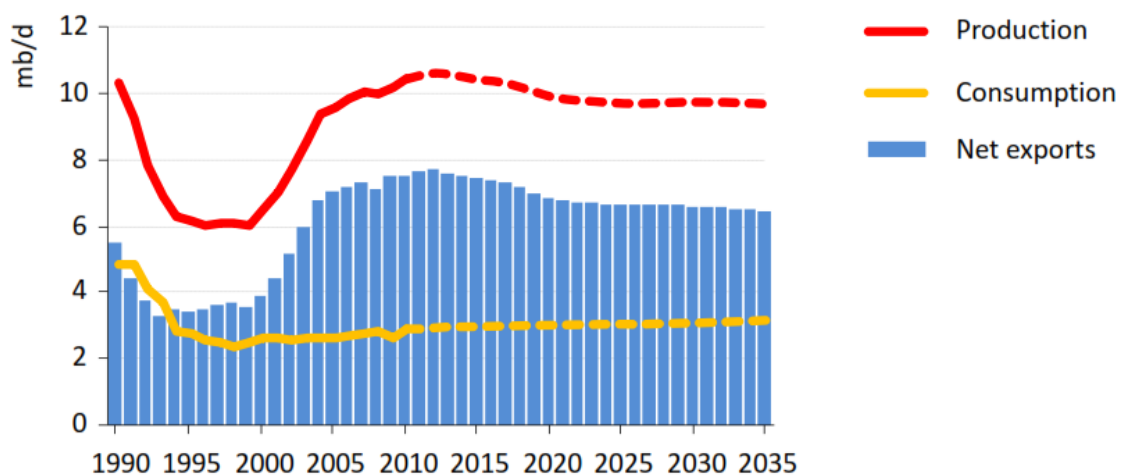
Russian economy has significantly been dependent on energy exports. It is considered as a major growth driver in the policy making. It had supported the growth and strength of state in the first decade of 21<sup>st</sup> century. Initial years of the first decade had enjoyed relatively high prices of crude oil and natural gas, while production in Russia was also high.

Russia has been benefited through no longer having a negotiation of transit fee with some intermediary nations or paying them in gas. Though, the agreements on pipeline have been criticized by various European countries, especially who had an objection to the fact that this was reached the destination without having any discussion with them. These states hold the view that these pipelines are an example of an undue bypass having politically motivated intentions along with many environmental risks. It was also acknowledged that Gazprom has been planning to building the LNG plant in the area of St. Petersburg to substitute or supplement the NEGP.

This huge and unexpected high price for a long time has supported the growth but at the same time made economy dependent on crude oil and gas exports. Russian economy had become vulnerable to the fluctuations of prices in the international energy market. An IMF study has calculated that “a \$1 per barrel increase in the price of Urals blend crude oil for a year results in a \$3 billion increase in Russia’s nominal Gross Domestic Product”(Spilimbergo 2005).

## Oil

### Russia’s Oil Balance



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Most of the Russian crude oil production has been exported since long. It is almost 3/4<sup>th</sup> of the total production. It is also true that Russia has a good refining capacity of crude oil and exports some refined products as well. Recently, it has even started to export Euro-5 petroleum fuel to Europe. Most of the Russian refined (petroleum) products exports are distillate oil which is used in Europe to heating along with fueling the trucks.

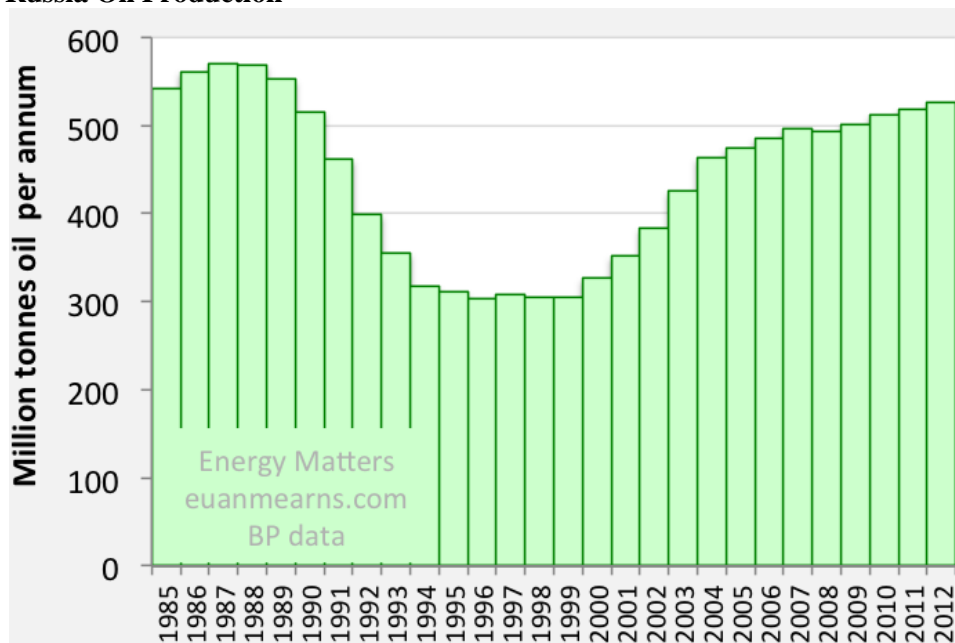
**Russia's oil production by region, 2012**

Region	Thousand bbl/d
Western Siberia	6,422
Urals-Volga	2,312
Krasnoyarsk	368
Sakhalin	283
Komi Republic	259
Arkhangelsk	249
Irkutsk	201
Yakutiya	133
North Caucasus	64
Kaliningrad	26
<b>Total</b>	<b>10,317</b>

Source: Eastern Bloc Energy

[http://2.bp.blogspot.com/-NDF-NDUp1FI/UznnZSG1ZrI/AAAAAAAAABIQ/etD5A7\\_7eOk/s1600/Eastern-Bloc-Energy.jpg](http://2.bp.blogspot.com/-NDF-NDUp1FI/UznnZSG1ZrI/AAAAAAAAABIQ/etD5A7_7eOk/s1600/Eastern-Bloc-Energy.jpg)

**Russia Oil Production**

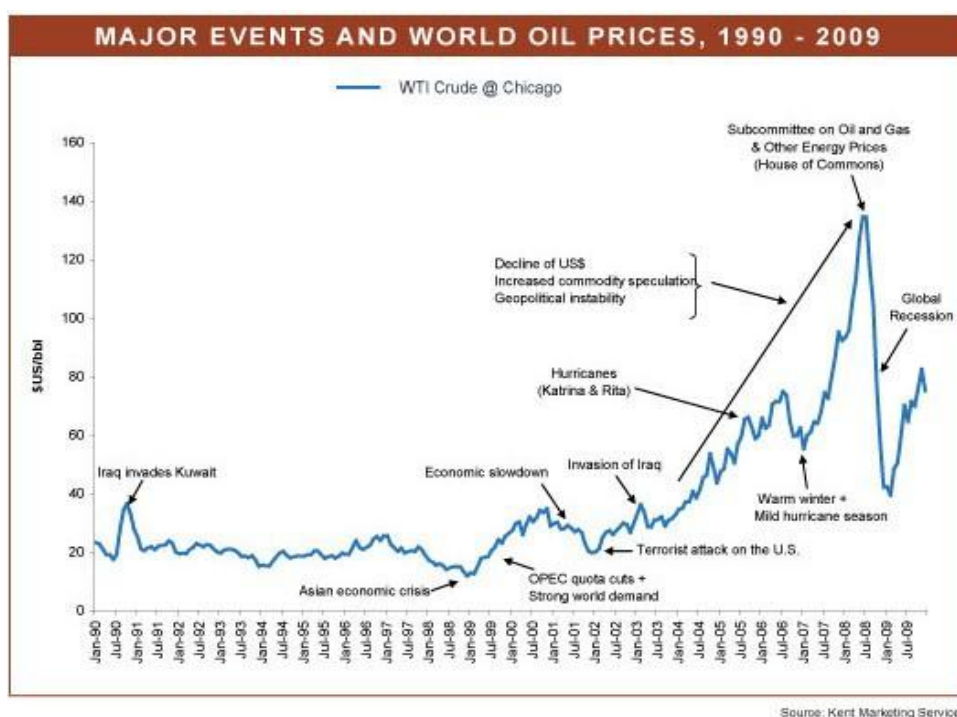


“In 2012 Russian oil production averaged 10.64 million barrels per day. Production is still rising slowly and has yet to attain the 1987 Soviet era peak of 11.42 million barrels per day”  
<http://euanmearns.com/russian-power/>

## Russian Crude Oil Exports (2000-2010)<sup>32</sup>

Year	Total (m/t)	Value million USD	CIS (m/t)	Non CIS (m/t)	Average Price of Export USD/bbl
2000	144,4	25271,9	16,9	109,8	23,94
2001	164,5	24990,3	23,7	110,4	20,78
2002	189,5	29113,1	33	111,1	21,02
2003	228	39679	37,2	121,9	23,81
2004	260,3	59044	40,1	115,5	31,02
2005	252,5	83438	38	97,3	45,21
2006	248,4	102282,9	37,3	98,5	56,32
2007	258,6	121502,8	37,3	104,8	64,28
2008	243,1	161147	38,2	92,6	90,68
2009	247,5	100593,2	36,5	103	55,61
2010	256,7	135799,3	26,6	106,2	74,11

## Oil Prices Between: 1990-2009<sup>33</sup>



<sup>32</sup> Russian Crude Oil Exports (2000-2010); According to the Russian Federal Customs Service and the Federal State Statistics Service; Updated September 26, 2011

[http://www.cbr.ru/eng/statistics/print.aspx?file=credit\\_statistics/crude\\_oil\\_e.htm&pid=svs&sid=vt1](http://www.cbr.ru/eng/statistics/print.aspx?file=credit_statistics/crude_oil_e.htm&pid=svs&sid=vt1)

<sup>33</sup> Canadian Petroleum Products Institute, Available on site [http://www.cppi.ca/index\\_e.php?p=69](http://www.cppi.ca/index_e.php?p=69)

### Oil Prices: 2000-2010

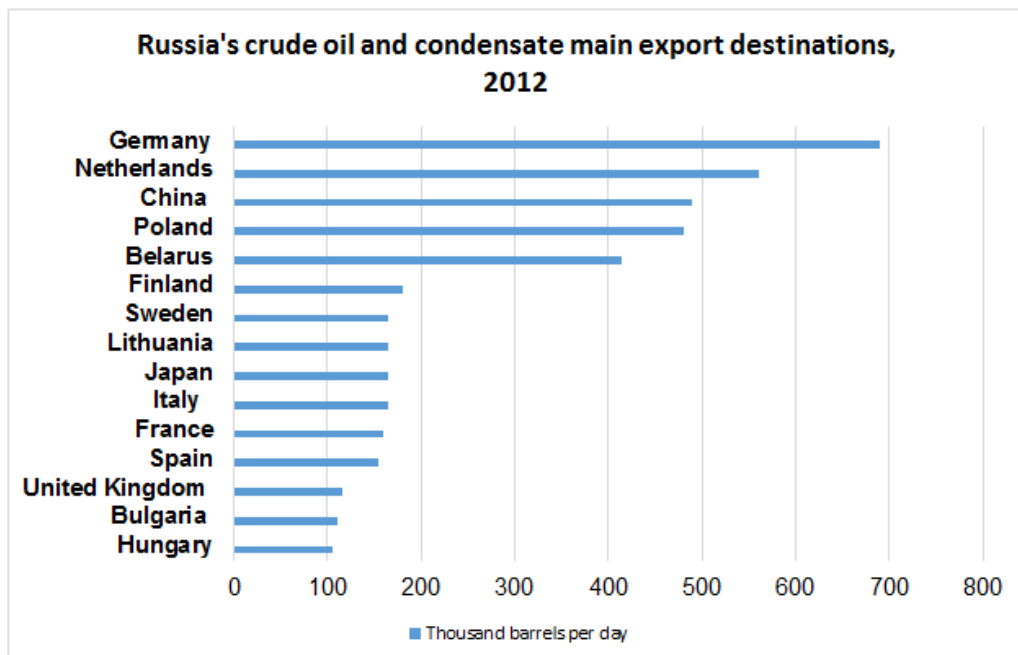
Year	Price (\$/barrel)
2000	25,22
2001	25,64
2002	19,49
2003	31,29
2004	31,18
2005	44,28
2006	63,57
2007	54,3
2008	91,92
2009	44,86
2010	76,37
2011	96,29

Source: Sevim 2013

### Russian oil exports

Country	Crude Export from Russia (bbl/d thousands) 2012	Average WTI & Brent 2015 predicted price*	Dollar amounts U.S. could potentially garner
Hungary	105,000	58.71	6,164,550
Bulgaria	110,000	58.71	6,458,100
United Kingdom	115,000	58.71	6,751,000
Spain	150,000	58.71	8,806,500
France	155,000	58.71	9,100,050
Italy	155,000	58.71	9,100,050
Lithuania	160,000	58.71	9,393,600
Sweden	160,000	58.71	9,393,600
Finland	165,000	58.71	9,687,150
Belarus	415,000	58.71	24,264,650
Poland	480,000	58.71	28,180,800
Netherlands	550,000	58.71	32,290,500
Germany	690,000	58.71	40,509,900
<b>TOTAL bbl/d</b>	<b>3,410,000</b>		<b>200,100,450</b>
<b>* Subject to change</b>			

<http://americanactionforum.aaf.rededge.com/uploads/files/research/Russia-OilExport1.png>



Source: EIA: Global Trade Atlas

<http://americanactionforum.aaf.rededge.com/uploads/files/research/Russia-OilExport1.png>

During the initial years of this century about 2/3<sup>rd</sup> of Russian export of crude oil used to deliver in the Eastern and Central European countries such as Poland, Ukraine, Belarus, and Germany. However, rest of the productions was sold in the open world energy market. For the purpose of selling crude oil in an open market, Russia requires good routes and its maritime ports. It is true that Russia has been facing some difficulties to export crude oil due to its old total capacity and transport network. The export of oil through pipelines is being monopolized by the Transneft. It is a “state owned pipeline monopoly” and having “exclusive jurisdiction” on this mode of transit. On the other hand, crude oil producers have plan and ambitions to export more and more oil to the market, but “bottlenecks in the Transneft system prevent its export capacity from meeting oil producer’s” market desire (Pirog 2007).

However, lower prices of crude oil having a bearing on its transportation and only pipeline transit could make required profit in the lower price scenarios. High oil prices in the first decade of the century enabled Russia to ship its 40% of crude oil exports through rail, roads, and river routes. “The rail and river routes could become less economically viable if oil prices fall sufficiently”. Therefore, Russian government in general and various ministries related to energy resources in particular are serious about the export infrastructure. Government and Transnet are making every effort to improve the situation for a better gain and restore the old structure in a proper place.

As far as total capacity is concerned, “only about four million bbl/d can be transported in major trunk pipelines; the rest is shipped by the rail and river routes”. The alternative transport system/mode is used for refined petroleum in particular. The problem lies with the investment. It is clear that “unless significant investment flows into improving the Russian oil pipeline system, non-pipeline transported exports probably will grow” (Pirog 2007).

On the other hand, in eastern vectors, Yuko was one of the major oil exporters to China and it was a matter of concern that Government’s involvement and its breakup initiatives regarding Yukos may affect the oil exports from rail to Chinese regions. Currently, rail routes “are the only way to transport Russian crude oil to East Asia. Russia is exporting about 200,000 bbl/d crude oil via rail to the northeast China cities of Harbin and Daqing and to central China via Mongolia” (Pirog 2007). It is also important to understand that it was happened in spite of the Lukoil’s dominance and being the chief Russian oil supplier to China. Though, some consortia have started production and export of crude to the East Asian region from the Sakhalin Island, and additionally, other than oil, have a plan to export natural gas to the American market. It would first be taken “via pipelines to the Siberian mainland and then from liquefied natural gas (LNG) terminals” (Pirog 2007).

As far as other players are concerned, Chinese market is not a free run for the Russian companies. They have been challenged by Central Asian supplies because China is interested in diversification and maximum supply security from the neighboring or nearby sources. In this situation; e.g. “Russia faces competition for China’s oil market from Kazakhstan, which, with China, completed in late 2005 the construction of a pipeline from Atasu in central Kazakhstan to Alaskankou on China’s western border. Eventual capacity will be 190,000 bbl/d” (Clark 2005; Pirog 2007).

However, the most interesting crude oil supply channel may go to the United States. A proposed crude oil pipeline from westward Timan-Pechora basin and West-Siberian basin to the Murmansk (Barents Sea) would transit crude to the American markets. Murmansk deepwater tanker terminal may transport 1.6million bbl/d to 2.4million bbl/d of crude oil to the American oil market by tankers. This oil could roughly reach to the destination within nine days, which is much faster delivery than the transport of crude from Africa or the Middle-East. Moreover, LNG facilities have also been

suggested at the Arkhangelsk (south-east) and Murmansk terminal, which could focus on natural gas export to the American gas market (Pirog 2007).

Nonetheless, most of the Russian crude oil is being shipped using tankers goes from Black Sea to Mediterranean and Asia. Novorossiysk port is the main point of this transportation. Though, “transit through the shallow and congested Bosphorus Straits is limited by Turkey for environmental and safety reasons, limiting the effective capacity of pipelines to Novorossiysk” (Schleifer 2005; Pirog 2007). Another important source of oil supply is the Baku-Tbilisi-Ceyhan (BTC) pipeline. It runs from Azerbaijan (potentially from Kazakhstan as well). Oil shipped from this pipeline is a challenge to the Russian crude oil. It is posing a tough competition (The Oil Daily 2006) and compelling Russia to think strategically, rather only through the prism of market. The Azeri crude oil production was increased sharply in 2007. Since Baku-Tbilisi-Ceyhan pipeline has sufficient capacity, “the Azerbaijan International Operating Company consortium has stopped using the Baku-Novorossiysk pipeline” (Pirog 2007; FSU Oil & Gas Monitor April 25, 2007).

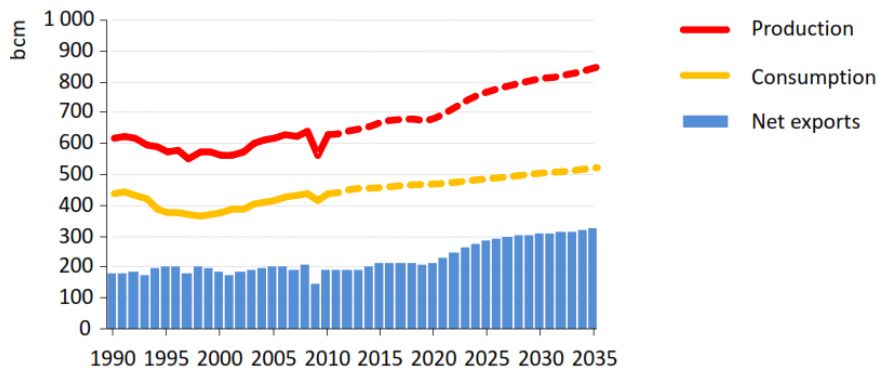
#### **Baku-Tbilisi-Ceyhan (BTC) pipeline**



<https://static01.nyt.com/images/2008/08/14/world/0814-for-webOIL.jpg>

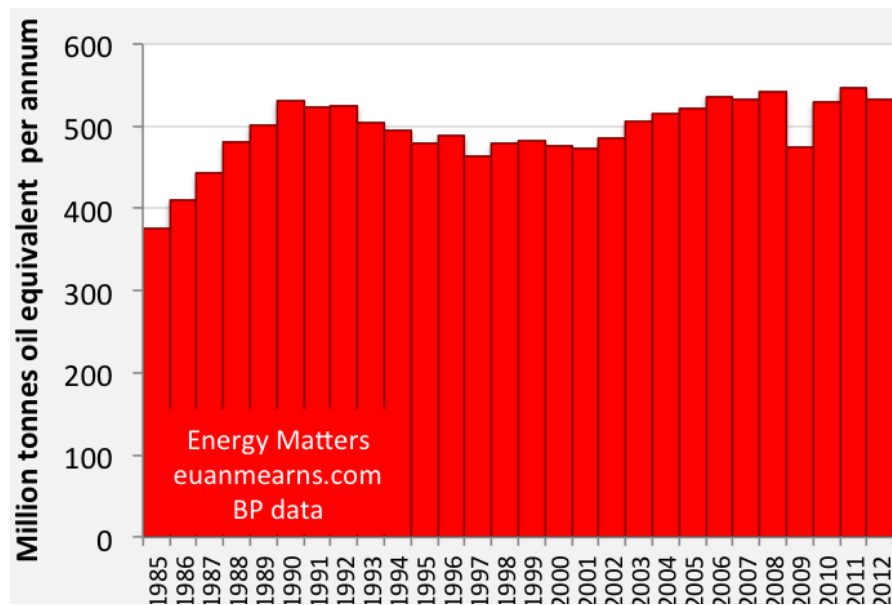
## NATURAL GAS

### Russia's Natural Gas Balance



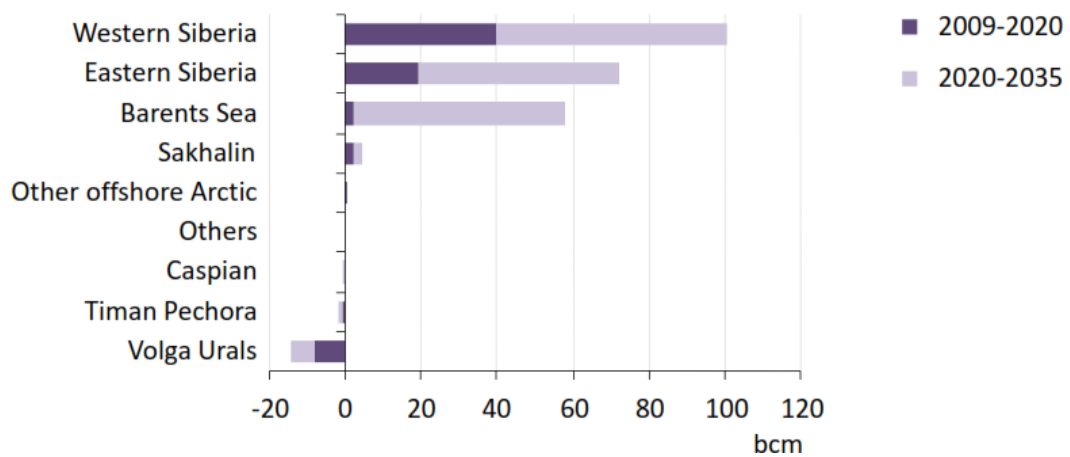
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### Russia Gas Production



<http://euanmearns.com/russian-power/>

### Changes in Russian gas production by region, 2009-2035



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### Russian Natural Gas Exports (2000-2010)<sup>34</sup>

Year	Total (bcm)	Value million USD	CIS (bcm)	Non CIS (m/t)	Average Price of Export USD/ 1000 cm
2000	193,9	16644,1	134,0	59,9	85,84
2001	180,9	17770	131,9	48,9	98,25
2002	185,5	15897,3	134,2	51,3	85,69
2003	189,4	19980,9	142,0	47,3	105,51
2004	200,4	21853,2	145,3	55,1	109,05
2005	209,2	31670,5	161,7	47,5	151,36
2006	202,8	43806,2	161,8	41,0	216
2007	191,9	44857,4	154,4	37,5	233,66
2008	195,4	69107,1	158,4	37,0	353,69
2009	168,4	41971,4	120,5	47,9	249,27
2010	177,8	47739,3	107,4	70,4	268,48

Former Soviet Union countries and the Eastern Europe has been Russia's major export market for its natural gas. Customer countries of this region not only received a secured supply since long, Russian natural gas sector also got reliable partners and market to develop the supply network in the region. It has made Russia in an advantageous, but at the same time in a dependent vulnerable position for its major exports. Therefore, Russia had started to diversify its natural gas export options. It had given focus on "its exports to meet the rising demand of European Union countries, Turkey, Japan, and other Asian countries". Gazprom needs to increase production and make access to "more reliable export routes to the region...to attain its long-term goal of increasing its European sales" and meet their demands.

Russian new efforts to expand its market share have created some problems in their relations. The dominance of Gazprom in the European market has made other small existing or big potential players exasperated. They along with European Union trade representatives have raised the issue of "two-tiered pricing system, which charged higher prices on exports than on domestic sales". Russian strategy is "to grant domestic independent natural gas producers access to Gazprom's pipelines, and, in

<sup>34</sup> Russian Exports of Natural Gas For 2000-2010 (According to the Russian Federal Customs Service and the Federal State Statistics Service) Updated September 26, 2011  
[http://www.cbr.ru/statistics/print.aspx?file=credit\\_statistics/gas.htm](http://www.cbr.ru/statistics/print.aspx?file=credit_statistics/gas.htm)

response to calls for fair pricing”. Strategically, Russia has been charging double prices from “Russian industrial consumers”; however, “the new price level still is less than half of the prices charged at the German and Ukrainian borders”. As a corrective measure, finally, Russia has decided to increase gradually its domestic natural gas prices over the next few years and attempted to double them by 2011(Reed 2006). Russia could do this because as a major natural gas supplier and dominant exporter to some of the European consumers, it has the ability and leverage to set the prices (Gelb 2007).

### Russian Gas Exports to European Countries 2003–2013 (bcm\*)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>WESTERN</b>											
Austria	6	6	6.8	6.6	5.4	5.8	5.4	5.6	5.4	5.4	5.2
Belgium	0	0	2	3.2	4.3	3.4	0.5	0.5	0	0	0
Denmark	0	0	0	0	0	0	0	0	0	0.3	0.3
Estonia	0.8	0.9	1.3	0.7	0.9	0.6	0.8	0.4	0.7	0.6	0.7
Finland	5.1	5	4.5	4.9	4.7	4.8	4.4	4.8	4.2	3.7	3.5
France	11.2	14	13.2	10	10.1	10.4	8.3	8.9	8.5	8.2	8.6
Germany	35	40.9	36	34.4	34.5	37.9	33.5	35.3	34.1	34	41
Greece	1.9	2.2	2.4	2.7	3.1	2.8	2.1	2.1	2.9	2.5	2.6
Ireland	0	0	0	0	0	0	0	0	0	0.3	0.5
Italy	19.8	21.6	22	22.1	22	22.4	19.1	13.1	17.1	15.1	25.3
Latvia	2.4	1.2	1.4	1.4	1	0.7	1.1	0.7	1.2	1.1	1.1
Lithuania	2.9	2.9	2.8	2.8	3.4	2.8	2.5	2.8	3.2	3.1	2.4
Netherlands	2.3	2.7	4.1	4.7	5.5	5.3	4.3	4.3	4.5	2.9	2.9
Switzerland	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Turkey	12.9	14.5	18	19.9	23.4	23.8	20	18	26	27	26.7
United Kingdom	0	0	3.8	8.7	15.2	7.7	11.9	10.7	12.9	11.7	16.6
Sub-Total	100.6	112.2	118.7	122.5	133.9	128.7	114.2	107.5	121	116.2	137.8
<b>EASTERN</b>											
Bosnia and Herzegov	0.2	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.2
Bulgaria	2.9	3	2.6	2.7	2.8	2.9	2.2	2.3	2.5	2.5	2.9
Croatia	1.2	1.1	1.2	1.1	1.1	1.2	1.1	1.1	0	0	0.2
Czech Republic	7.4	6.8	7.4	7.4	7.2	7.9	7	9	8.2	8.3	7.9
Hungary	10.4	9.3	9	8.8	7.5	8.9	7.6	6.9	6.3	5.3	6
Macedonia	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Poland	7.4	6.3	7	7.7	7	7.9	9	11.8	10.3	13.1	12.9
Romania	5.1	4.1	5	5.5	4.5	4.2	2.5	2.6	3.2	2.5	1.4
Serbia	1.9	2.3	2	2.1	2.1	2.2	1.7	2.1	2.1	1.9	2
Slovakia	7.3	7.8	7.5	7	6.2	6.2	5.4	5.8	5.9	4.3	5.5
Slovenia	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5
Other countries	0	0	0	0.4	0.5	0.6	1.2	2.1	1.3	0.8	1.2
Sub-Total	44.6	41.8	42.9	43.9	39.9	43	38.5	44.5	40.7	39.6	40.8
<b>GRAND TOTAL</b>	<b>145.2</b>	<b>154</b>	<b>143.5</b>	<b>166.4</b>	<b>173.8</b>	<b>171.7</b>	<b>152.7</b>	<b>152</b>	<b>161.7</b>	<b>155.8</b>	<b>178.6</b>
Deliveries under long term contracts**					158.8	168.5	142.8	138.6	150.3	139.9	166

\*data in Russian cubic metres – to convert to European units reduce by 7.97%. \*\*deliveries under long-term contracts represent volumes which are believed to be delivered from Russian gas fields to Europe; the higher totals include gas delivered by Gazprom but sourced from elsewhere.

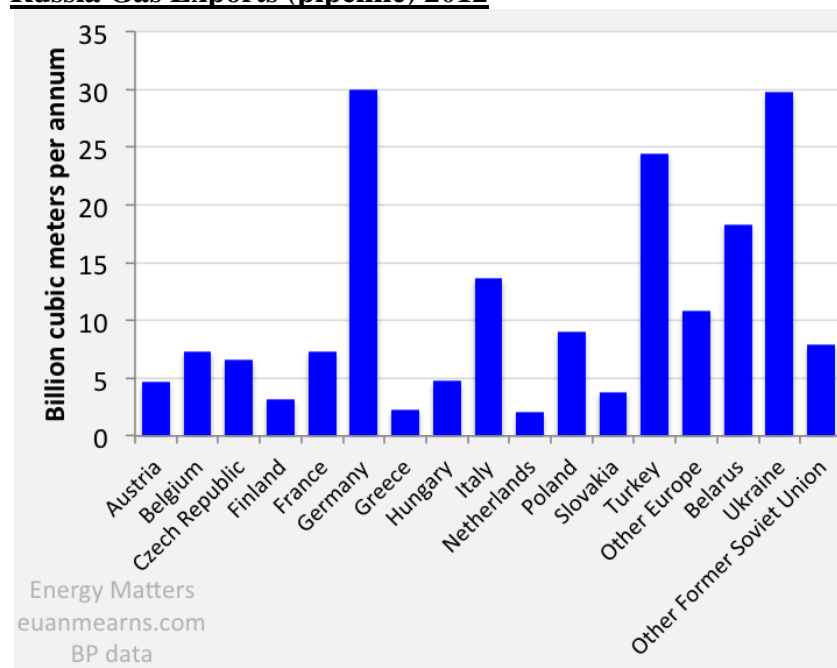
Sources: Gazprom in Figures: 2005–2009, p.56; 2008–2012, p.63; 2009–2013, p.67; Stern (2005), Table 3.1, p.110; Long term contract data from GazpromExport.

<http://www.energypost.eu/wp-content/uploads/2014/11/OIES-gas-study-Table-1-as-a-JPEG-2.jpg>

Gazprom used some harsh measures to set the norms as well. It had threatened some consumers to cut-off the supply of natural gas if they do not agree to follow the new and higher price bands. In case of non-payments, even Russia had actually gone for cut-off the gas supply. Gazprom had the backing of Russian government. It had secured the required support for doing all this because “as the only seller of Russia’s gas, Gazprom is Russia’s largest earner of hard currency”. Russia was doing all this not simply because of geopolitical reasons or building corrective market mechanism; it was happening due to domestic reasons as well. For example, “Russia’s natural gas exports to Europe declined markedly in January 2006 as a result of severely cold weather in Russia that greatly increased Russian gas consumption, and also reduced oil exports somewhat. The cold conditions lasted through the month” (FT 2006).

As far as Asian gas market is concerned, like crude oil export in the European market, Russia has been facing competition from Kazakhstan to acquire its market share. Uzbekistan and Turkmenistan are other hurdles in the way of Russian supply, because even their natural gas could be piped to China through Kazak routes (FSU Oil & Gas Monitor, Dec 7, 2005). Therefore, Russia has worked hard to expand its pipeline network in the region having all these Central Asian considerations in the mind and strategy. However, it is much more focused on Chinese market and its supply security in terms of a big consumer.

**Russia Gas Exports (pipeline) 2012**



<http://euanmearns.com/russian-power/>

## Russian Energy Policy

Russian energy policy approaches and new mechanism with the advent of Putin has been much discussed in terms of state control of the energy resources. It was mainly debated because the government had attempted “to take control of the country’s energy resources, and to try to use that control to exert influence elsewhere”. The argument given by the western scholars that “the push for control was partly the motivation behind the government’s prosecution of Mikhail Khodorkovski, CEO of Yukos, who acquired state-owned assets during privatization and adopted open and ‘transparent’ business practices while transforming Yukos into a major global energy company” (Pirog 2007). Apparently, the story of Yukos looks simple where it was broken up and the principal assets of the company were sold off to manage its unpaid tax and debts. Simultaneously, Yukos’ key subsidiary of oil production Yuganskneftegaz, was also sold to the Baikal Finans Group at the state run auction.

Though, there was only one bidder and government raised \$9.4billion for the auction. Western industry and company have a different cost analysis and says that the original market value of the company was its double. The most interesting part of the whole development was appeared when later on; the winner group of the auction sold this unit to the state oil company, i.e. Rosneft<sup>35</sup>. “Yuko’ creditors voted to liquidate the company on July25, 2006; and the Moscow arbitration court confirmed the vote” (FSU Oil & Gas Monitor 2006; Pirog 2007). Gradually, rest of the shares (remaining portion of the company) of Yukos has also been sold off since then. On the other hand, Gazprom - another state monopoly of natural gas trade- took over Sibneft by buying its 75% of shares. It was Russia 5<sup>th</sup> largest oil company (Pravda 2005).

These two significant takeovers of the government had given some new signs to the industry and left the impression that the new establishment is to follow an aggressive energy policy to consolidate its hold on energy resources. Though, Duma voted for giving exclusive rights to make exports of natural gas to the Gazprom (Buck & Buckley 2006); on January 31, 2006 President Putin hinted a lesser aggressive policy with some

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<sup>35</sup> “It subsequently was revealed that Baikal Finans was a group of Kremlin insiders headed by Igor Sechin, Deputy Head of the Presidential Administration and close associate of President Putin. Sechin has been Chairman of Rosneft’s board of directors since July 2004. The de-facto nationalization of Yuganskneftegaz was declared ‘the fraud of the year’”(Andrei Illarionov: President Putin’s chief economic advisor [osnews.com/ money/2004/12/28/illarionov.shtml](http://osnews.com/money/2004/12/28/illarionov.shtml))

possible changes by announcing that state is not going “seek control of more oil companies” (FSU Oil & Gas Monitor, Feb. 1, 2006). However, at the same time, Russia moved to limit participation by foreign companies in oil and gas production and Gazprom gained majority control of the Sakhalin energy projects (Pirog 2007).

As far as Eastern Europe was concerned, Russian companies, which were closely linked with the government or establishment of the Russian state, started to use their leverage in its purchase of energy entities abroad to establish control over supply of energy resources. A good example of this development could be seen in the case of Lithuanian refinery where Yukos acquired majority of shares by slowing of crude oil supply to the lone refinery among the Baltic States. It was finally sold at a reduced rate. The other case could be focused to understand the mechanism in progress wherein “the Transneft pipeline monopoly diverted the flow of oil shipments to Primorsk, a Russian port, stopping flow to the Latvian port of Ventspils” (Pirog 2007). Ariel Cohen found these actions of Transneft “as a move to obtain control of the firm that operates the Ventspils terminal” (Cohen 2003). In addition, Transneft did not finalize the agreement to carry Kazakhstani crude oil to Lithuania which certainly undermines the attempt of KazMunaiGaz of Kazakhstan to buy that refinery. But, unfortunately, some unwarranted developments have taken place and “an agreement was reached for Yukos to sell the refinery to a Polish firm” (Reuters 2006).

Another case of Russian efforts to get control of energy resources is a takeover of the Sakhalin Energy Investment Company (SEIC). Gazprom acquired its majority of interests on December 21, 2006. This takeover came from the Royal Dutch Shell. However, Sakhalin Energy Investment Company would remain as “operator of the Sakhalin II project (FSU Oil & Gas Monitor Jan. 10, 2007). A new mechanism was developed wherein existing SEIC partners (big shareholders) would reduce “their stakes by 50%... Shell will retain a 27.5% stake, with Mitsui and Mitsubishi holding 12.5% and 10% stakes, respectively”. In fact, Russian establishment had “effectively rewrote the production sharing agreement for Sakhalin II, providing for a large annual dividend to Russia before the project’s shareholders had recovered their capital expenditures as stipulated in the original agreement” (Pirog 2007; FSU Oil & Gas Monitor May 2, 2007).

However, Ukraine, Belarus, Georgia, and Baltic Sea have been important for the

Russian transit of energy resources. Russian attempts to increase or maintain control over the supply routes could be highlighted by another example in the region. It has focused on “the routing of new and planned export pipelines”; e.g. “Russia has agreed with Germany, with the support of the United Kingdom (UK), to supply Germany and, eventually, the UK directly by building a natural gas pipeline under the Baltic Sea, thus bypassing Ukraine and Poland. In late January 2006, Gazprom was negotiating with Uzbekistan to obtain control of three of that country’s gas fields” (Kovalev 2006). Furthermore, Russia is hopeful to participate in gas pipeline venture that is being constructed between Greece and Turkey (Hope 2006).

On the other hand, price mechanism of gas transmission has remained a contentious issue for more than a decade. While any action taken by Russia or its representatives associated with the driving forces of this mechanism have been portrayed as overaggressive act. Gazprom was attempting to raise gas prices to Ukraine in 2005. It was only “a fraction of the world market price in return for its transmission of the gas to the market level”. Since both parties could not reach at any amicable agreement; on January 1, 2006 Russia reduced the pressure of gas flowing via Ukrainian pipeline networks. But Ukraine remained undeterred and started to use some amount of that gas which was intended to western European consumers<sup>36</sup>. On a simple complain of these countries, and taking problems of its reliable consumers into consideration, Russia restored the gas supply properly and even in a short period of time. The reputation of Russia in the supply market was certainly at the stake. It was not ready to risk its repute “as a reliable energy supplier” (Guardian Weekly Dec 23, 2005-Jan 5, 2006; The Washington Post Jan 3, 2006; The New York Times, Jan 3, 2006).

On January 4, 2006 the dispute was settled but temporarily. Russia had to pay in cash rather in kind and in this case not the supply of natural gas to Ukraine. It means, the transit fee was increased for the Ukrainian pipeline deals along with “Gazprom would sell gas at its asking price to a trading company that would mix Russian gas with less expensive gas from Central Asia and sell the mixture to Ukraine at the higher price that Ukraine had indicated it was willing to pay, but much lower than Gazprom’s price” (Smith 2006; The Washington Post 2006; Oil Daily 2006). It is also stated by one report that Gazprom was interested to acquire some sort of ownership in the Ukrainian

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<sup>36</sup> “A large share of Russia’s natural gas exports to Western Europe passes through Ukraine and Belarus, which withdraw a certain amount of gas from the pipelines for its own use”.

pipeline system (Oil Daily Jan 5, 2006; CSR Report RS 22378, 2006). However, the image of Russia as a reliable supplier of natural gas was suffered furthermore due to severe cold weather. In the late January 2006, the gas prices were intended to rise, but contrary to supply more natural gas to Europe, export volume was cut below the contracted amount. For the time being, only some temporary agreements on gas prices were reached between Ukraine and Russia. Finally, in October 2006 Ukraine reached to the conclusion to pay “a moderate price for gas in return for political and other favors (FSU Oil & Gas Monitor 2006; Gas Monitor 2006; Pirog 2007).

Ukrainian case was not the only bitter experience in gas supply lines. Price disputes with Moldova in the early January 2006 reached roughly at the same conclusion when Russia cut off the supply of gas. Even countries which had concluded an interim agreement with the Gazprom remained helpless and could not receive Russian gas for two weeks (Buckley & Laitner 2006). “Gazprom appeared to be preparing to cut off gas supplies to Belarus and Georgia” in late 2006 unless these significant transit states agreed to pay a much higher price in 2007. Georgia went for an agreement to double its gas prices asked by Gazprom (Gazprom Press Release & BBC Dec 22, 2006). On January 1, 2007 Gazprom and Belarus signed an agreement for five-years, provided Belarus would pay increased prices for gas. It was not a simple increase. Now, Belarus had to pay more than twice against the old prices. Additionally, Gazprom would buy 50% of gas pipeline network of Belarus (WSJ & The Washington Post 2007).

However, the contention was not ended here with the settlement of gas disputes. The very next week in January 2007 “Russia shut off the flow of crude oil to and through Belarus following its announcement of an oil export tax and Belarus’ imposition of a customs duty on oil transiting Belarus to other export markets, and taking some of the oil flow as payment of the customs duty” (Oil Daily 2007; WSJ 2007). New negotiations resulted very soon and crude began flowing once again on January 10. But consumer nations criticized “the failure to warn that a shut-off was possible”. In this case any hefty panic was not erupted because destination countries held sufficient inventories to manage the situation at least in the short term (White & Chazan 2007). Secondly, Belarus also took some prompt and intelligent initiatives and its “lifting of the transit duty helped the countries reach a tentative agreement (Pirog 2007; Oil Daily & The Washington Post 2007).

It is true that if not the Ukrainian, at least Belarusian, Georgian, and Moldovan cases dented the repute of Russia as a reliable supplier of natural gas. It heightened the concerns of regular and uninterrupted supply. It also encouraged the consuming states to look for other options. It pushed a thought for “non-Russian energy sources”. Some West European countries along with several CIS nations, started to think of diversification of energy supplies which should be away from Russian (re)sources. This approach and some other geopolitical developments resulted in positive and Russia became “more agreeable and even cooperative with, western projects; and it has signed an agreement with Azerbaijan and Kazakhstan on Caspian seabed borders essentially based upon shore mileage”. It was the same Russian policy makers who “initially opposed western investment in Caspian Sea energy projects, insisted that oil from the region be transported through Russian territory to Black Sea ports, and argued for equal sharing of Caspian Sea oil and gas” (Pirog 2007). This policy and approach was due to various energy agreements between Central Asian states and Russia wherein various routes cross their territories through the Russian pipeline networks.

It was also true that Russia needed modern extraction and oil and gas exploration technology while there were many interested foreign companies which held the same. Therefore, any “proposal to tighten restrictions on the extent to which foreign oil companies can participate in Russian oil and natural gas production and other ventures is potentially significant and perhaps a move against Russia’s own interests”. There was a report that “foreign companies or companies with 50% foreign participation would not be allowed to develop fields with more than 513 million barrels of oil and 1.77 billion cubic feet of natural gas (FT June 14, 2006).

Eventually, Russian administration decided to allow foreign investors to get developed its oil and natural gas fields having a simple consideration of existing needs to diversify this sector as soon as possible. For example, it “decided to rule out foreign equity participation in developing Shtokmanovskoye, but will allow foreign company involvement as contractors and owners of the operating company” (FSU Oil & Gas Monitor April 11, 2007). It is also said that “Russia tried to use potential participation by American firms in development of the large Shtokmanovskoye gas field as leverage in the negotiations to gain entry into the World Trade Organization (WTO)” (FSU Oil & Gas Monitor July 26 & Dec. 13, 2006; Oil Daily 2006; Reed 2006).



In the second instance, 13%-14% stakes of Rosneft, the “state owned oil company”, were sold in July 2006 through Initial Public Offerings (IPOs). It was a direct attempt to lure foreign investments by Russia. It had shown that Russia was even ready to sell the shares of its national champions. It was naturally hoped that “investing in the Rosneft IPOs would gain them easier access to participation in Russian oil and gas projects”, which was a big question for western majors in the industry (Mufson 2006; White & MacDonald 2006, FT July 15-16, 2006). On the other hand, major East-Asian states like South Korea, Japan, and China are also carrying out every effort to get access to the huge energy resources of Russia. They are aware that “largely undeveloped energy resources of eastern Siberia” could strengthen their supply security in the long run. These states are struggling hard “to meet their increasing energy needs while reducing dependence on the Middle East”. Japanese and Chinese companies are challenging over the new energy projects in Russia. Getting access to various oil pipeline routes is their major concern and bone of contention in high biddings (Pirog 2007).

### **Existing and Proposed Pipelines**

If crude oil and natural gas transit through pipeline trade provides secured windows to nations of genesis and consuming destinations; it binds them for a long term as well. This trade structure makes diversification hard and cumbersome. Parties cannot change size of trade, location of resource destination, and even distribution networks in an easy manner. But this is the nature of this trade and Russia is one of the countries whose trade has all these considerations. The limitation of size and location of export infrastructure has compelled Russia to build new networks. It is involved not only in new projects, but also “to expand existing Russian oil and natural gas export pipelines and related facilities”. It has some contentious as well as recognized projects vis-à-vis limited resources. These plans and ventures could expand Russian network and enrich the export capacity of crude oil and natural gas to conventional as well as potential energy markets. Russia needs to restructure and modernize the existing export facilities and setting new networks to cover potential destinations. Some of its projects are widely discussed.

For instance, Druzhba pipeline is the largest oil transit route from Russia to Europe. More than four thousand long Druzhba oil pipeline has a capacity of 1.2million bbl/d to 1.4million bbl/d of oil delivery to various destinations. It starts from southern

Russia close to Kazakhstan. It receives oil from the Caspian Sea and Urals. At the Mozyr in Belarus it splits into two significant transit routes. The first channel goes via “Belarus, Poland, and Germany”, while the other one goes from Belarus to “Ukraine, Slovakia, the Czech Republic, and Hungary” (following figure). Russia has started to increase the capacity of network between Poland and Belarus. The plan goes to extend the network up to the United States. The extension to Germany (Wilhelmshaven) could reduce the tanker traffic in Baltic Sea. It could let Russia to deliver crude oil via Germany to the U.S. (Pirog 2007).

### Druzhba and Adria Oil Pipelines



[http://blog-imgs-26.fc2.com/y/t/a/ytaka2011/Druzhba\\_Pipeline\\_800.jpg](http://blog-imgs-26.fc2.com/y/t/a/ytaka2011/Druzhba_Pipeline_800.jpg)

The Adria crude oil pipeline system was originally planned to upload “Middle Eastern oil at Omisalj and pipe it northward to Yugoslavia and then to Hungary”. However, the pipeline connects Croatian Adriatic Sea port Omisalj to Hungary. Transit states and pipeline operators have been attempting to reverse its flow and providing a new delivery outlet to Russia. It is relatively a simple step on the Adriatic Sea vis-à-vis oil transportation facility to Russian producers. However, if Russia goes to connect the pipeline with its Southern Druzhba system, it would require an agreement on the one hand with Ukraine and Belarus, while Hungary, Slovakia, and Croatia on the other

hand. Though, they have “signed a preliminary agreement on the project in December 2002”, but negotiations over environmental and tariff issues made the pace of development slow.



Source: EIA- Russia Country Analysis Brief.

The maximum capacity of Adria pipeline has been estimated around 300,000bbl/d of Russian crude oil, but “in the first year of reversal” it could deliver only around 100,000bbl/d. Another significant crude oil pipeline system is “the Baltic Pipeline system (BPS)”. It carries Russian crude oil from Tyumen Pechora and West Siberian “oil provinces westward to the newly completed port of Primorsk on the Russian Gulf of Finland” (following figure).

### BALTIC PIPELINE SYSTEM (BTS)

Fig. 1



<http://gpf-europe.com/upload/iblock/4b1/baltic%20pipeline%20systemk%20btsk.gif>

The carrying capacity of the Primorsk port has been increased up to around 1million bbl/d, while government had a plan to expand this network and raise the throughput capacity up to 1.2million bbl/d. The Baltic Pipeline system provides a direct outlet to the northern European oil market. It reduces Russian dependence on old routes via Baltic States. Pirog (2007) argues that “the re-routing of Russian crude through the BPS has incurred considerable cost to those countries”. However, Russia has said that sea ports would get precedence where “Russia has a stake over foreign ones”. Russia holds some other considerations such as “the waterways through which tankers leaving from Primorsk and most other Russian export ports must transit limit tanker size, and therefore the price competitiveness of their cargoes”.



There are some proposed pipelines which would deliver oil from the Russian “Western Siberian and Tyumen-Pechora basins west and north to a deepwater terminal at Murmansk or Indiga on the Barents Sea”. As mentioned earlier, it would to carry 1.6million bbl/d to 2.4million bbl/d of crude oil from Russia to the U.S. it would be delivered “via tankers in only nine days, much quicker than from the Middle East or Africa”. Furthermore, as to export natural gas in the American markets, Arkhangelsk and Murmansk have been suggested as the starting points for the Liquefied Natural Gas (LNG) exports. LNG facilities on these places would ease the efforts to catch the big American markets.



## Northwestern Oil Pipelines



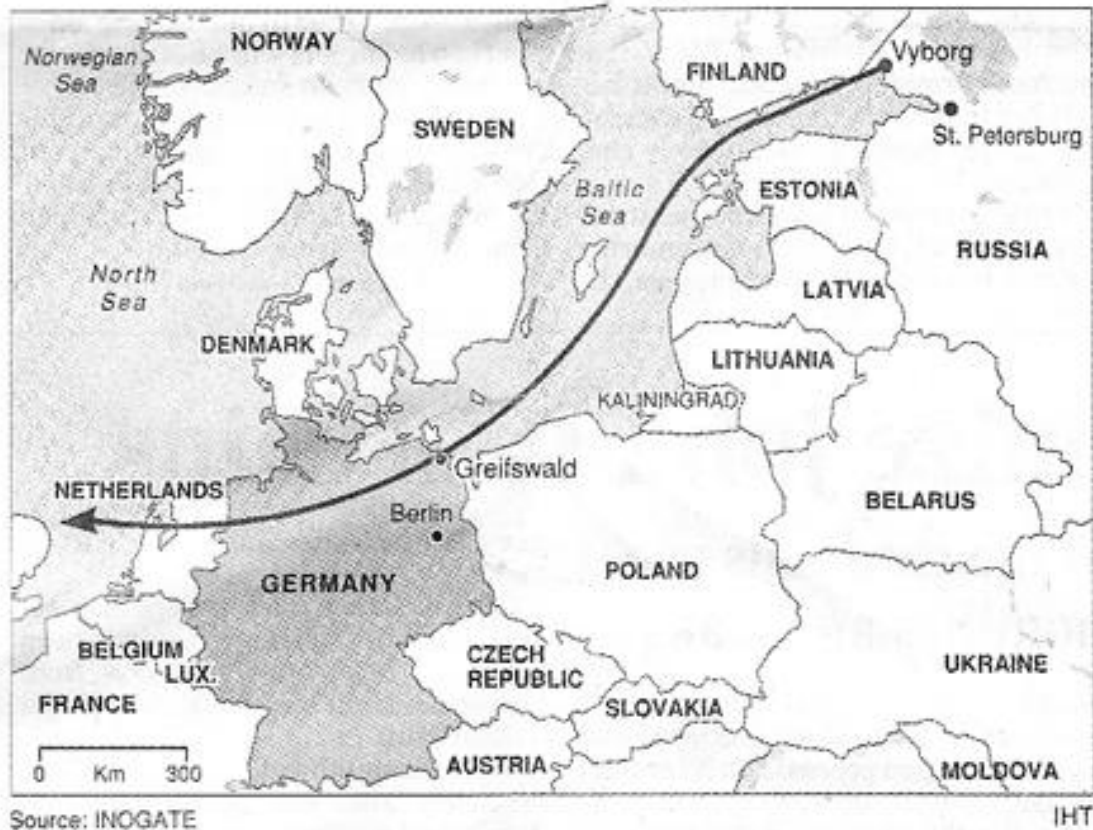
Source: EIA- Russia Country Analysis Brief. <http://robertamsterdam.com/legacy-files/primorsk.jpg>

However, economic viability of the Murmansk project has been questioned by none other than the CEO of Transneft. On the contrary, “the Indiga route would be closer to the Tyumen-Pechora oil fields and shorter...(but) the port of Indiga ices over during the winter, a disadvantage that may be reduced or eliminated if Arctic ice melting continues”.

It is not only American market in focus; Europe’s most significant consumer for Russian energy export Germany is also in focus. The following Russian pipeline route for natural gas via Baltic region has been planned to bypass conventional Soviet time routes passing through Ukraine and Belarus. It is designed to co-finance by Germany.

Another alternative pipeline named “Trans-Balkan Oil Pipeline” was planned to carry oil from the Caspian and Southern oil fields of Russia via Bosphorus. Initially the cost was calculated roughly around \$1.2 billion. The carrying capacity of this 570 miles long pipeline would be of 750,000bbl/d. This 36” crude oil pipeline from the port of Burgas in Bulgaria through Macedonia to the port of Vlore in Albania “would be supplied by oil delivered to the Black Sea through existing pipelines... (and) then be shipped across the Black Sea by tanker from the Russian ports of Novorossiysk and Tuapse, or the Georgian ports of Supsa and Batumi, to the port of Bourgas in

Bulgaria”. From Vlore oil “could be loaded on tankers for transit to the European and the U.S. markets”. All three Balkan states have signed the project. The project involves many partner companies like Gazprom Neft, Rosneft, Transneft, Hellenic Petroleum, Technoexportstory, Latsis Group, Prometheus Gas and the Government of Greece, while its operator name was Trans-Balkan Pipeline B.V.



<http://www.roconsulboston.com/Pages/InfoPages/Businesspages/Oilmaps/RussiaLines.html>

### Alternate Route

Russian, Greek and Bulgarian officials are discussing a proposed pipeline that would allow some crude-oil supplies to bypass the Bosphorus.

--- Current route  
 --- Proposed route



[http://www.novinite.com/media/images/2011-04/photo\\_verybig\\_127049.jpg](http://www.novinite.com/media/images/2011-04/photo_verybig_127049.jpg)

## Facts & Figures: Trans-Balkan Oil Pipeline

	Indicators of Project	Stages of the project		
		Stage I	Stage II	TOTAL
<b>I</b>	<b>Burgas - Alexandroupolis TOTAL:</b>			
1	Crude export volumes	35	50	50
2	Approximate length of line pipe, D ~ 42'	250-300	0	250-300
3	Number of intermediate pump stations	0	1	1
4	SPM	2	0	2
5	Number of berths of the Jetty	2	1	3
6	Approximate length of unloading line D ~ 48'	25	0	25
7	Tank farm capacity, total thou m3	1380	460	1840
8	Tankers received, deadweight, thou m3	80 - 300		
<b>II</b>	<b>Burgas (Bulgaria):</b>			
1	Number of berths of the Jetty	2	1	3
2	Booster station	1	0	1
3	Tank farm capacity, total thou m3	480	160	640
4	Tankers received, deadweight, thousand tones	80 - 150		
<b>III</b>	<b>Alexandroupolis (Greece):</b>			
1	SPM	2	0	2
2	Approximate length of unloading line D ~ 48'	25	0	25
3	Tank farm capacity, total thou m3	900	300	1200
4	Tankers received, deadweight thousand tones	80 - 300		

<http://www.tbpipeline.com/project/facts>

However, “another 300km Russian-oil pipeline from Burgas and Alexandroupolis thereby bypassing the Bosphorus” was also planned. This Euro 600million project was conceived 11 years ago and cosigned by Greece, Bulgaria, and Russia. While an American company named AMBO LLC “the project developer and coordinator” was given charge to build this “900km east-west pipeline to the Adriatic coast in Albania linked to Burgas”. It was said that “oil cargoes through the Turkish Straits could be disrupted due to weather or tanker and other cargo congestion.

# Trans-Balkan Pipeline Burgas-Alexandroupolis



## History

March 2007	June 2010	February 2011	2011-2012	Early 2013
A three-party intergovernmental agreement on pipeline construction was signed	The Bulgarian prime minister said Bulgaria withdrew from the project	Bulgaria is expected to take the final decision on its participation in the project	Expected construction period	Expected date of launch

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## Trans-Balkan Pipeline (TBP): Official Project Overview

“The Burgas-Alexandroupolis project was launched in implementation of the [Agreement](#) between the Government of the Russian Federation, the Government of the Republic of Bulgaria and the Government of the Hellenic Republic Relating to the Cooperation in the Construction and the Operation of the Burgas-Alexandroupolis Oil Pipeline.

The priority goal of the Project is to create a new reliable and environmentally safe oil supply route for Europe, which will both help relieve the congested Bosphorus and Dardanelles straits and increase European energy security.

The implementation of the Project will create a new transportation route for shipping Russian and Caspian origin crude oil by tankers from Russian Black sea ports to the port of Burgas (Bulgaria), and then via the pipeline to the port of Alexandroupolis (Greece) with further loading onto tankers and delivery to the European and world markets. The Company is intent on developing a project which meets the requirements both of the authorities and stakeholders. Based on the Public and Authorities consultations in both Countries, considering current situation in both locations and environmental terms and conditions the Project envisaged two alternative unloading options for Bulgaria and Greece: a conventional jetty in Burgas Bay located next to the existing oil terminal and a modern single-point mooring installations (SPM) in Greece.

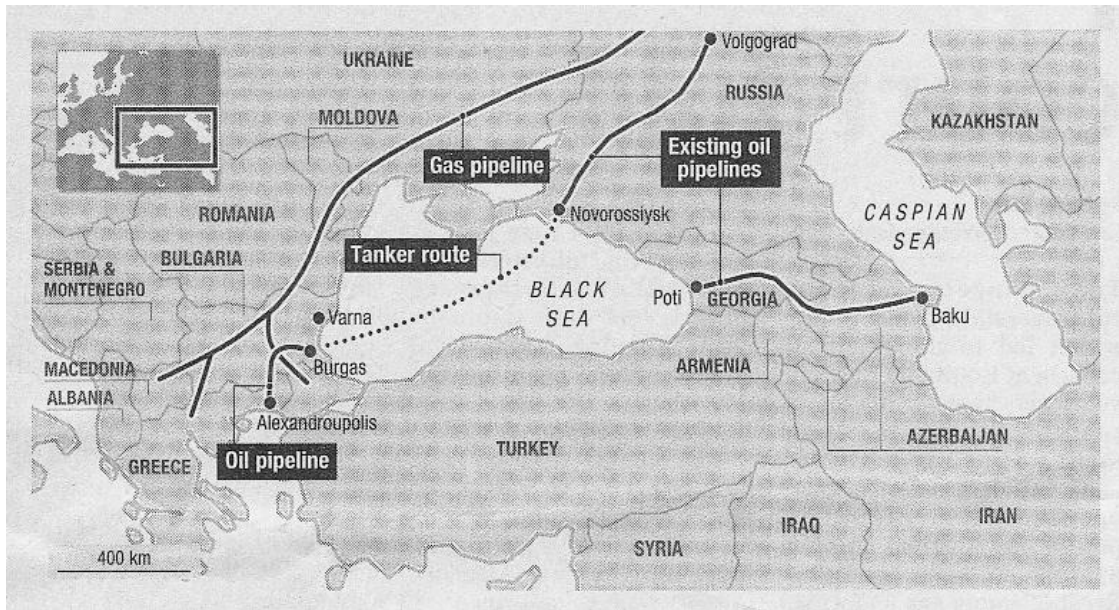
The approximate total length of the Burgas-Alexandroupolis pipeline route is about 300 km. The possible throughput capacity of the pipeline at the first stage is to be around 35 MMTA with a further increase up to 50 MMTA.

The owner of the Project is the international company Trans-Balkan Pipeline B.V., registered in Amsterdam (the Netherlands), established expressly for the construction and operation of the Burgas-Alexandroupolis oil pipeline system”.

**From official website:** <http://www.tbpipeline.com/project/overview>



## Natural Gas Pipelines to Europe



<http://www.roconsulboston.com/Pages/InfoPages/Businesspages/Oilmaps/RussiaLines.html>

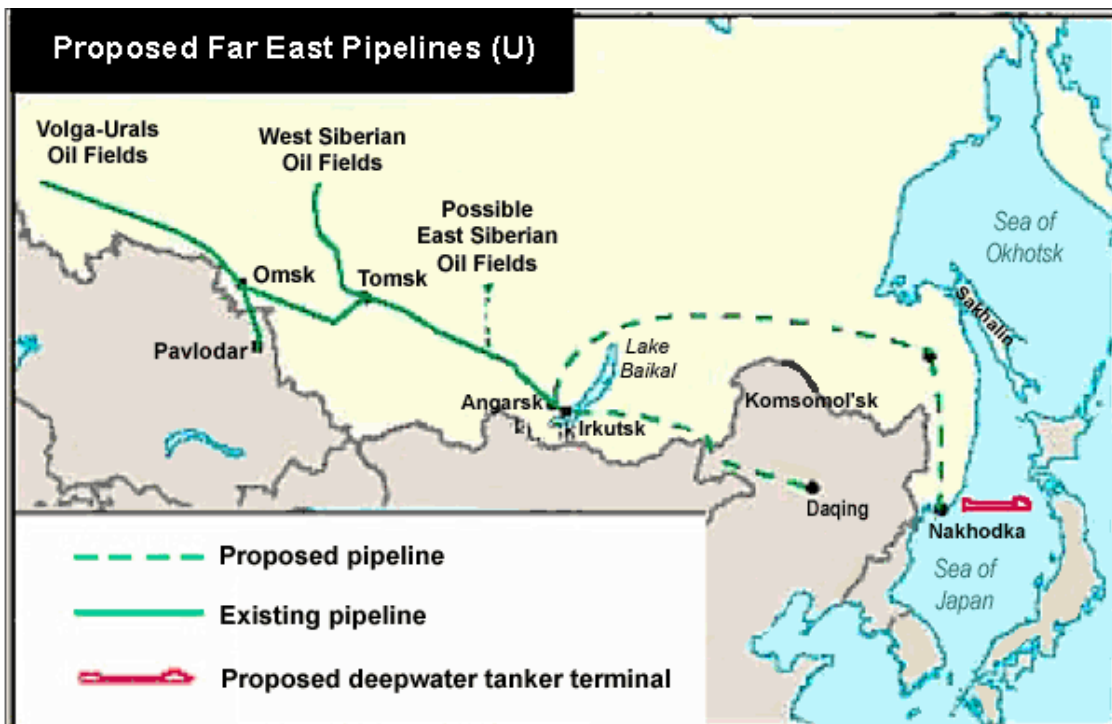
As far as East Asian energy market is concerned, China holds large potential avenues for crude oil as well as natural gas. Russian companies have serious considerations to build a pipeline network from Taishet (a Russian city located north-west of the Angarsk) to Daqing in China or to the port city Nakhodka in Primorsky Krai in Russia (*“Nakhodka is a port city in Primorsky Krai, Russia, located on the Trudny Peninsula jutting into the Nakhodka Bay of the Sea of Japan, about 85km. east of Vladivostok”*). These routes go by the Baikal Lake which creates environmental problems to the speedy development of the project. The longer route of Nakhodka could provide a new port in Pacific for shipping Russian crude oil by tankers to Asian market especially Japanese and possibly North-American as well. Japanese offer to finance the project has shown their eagerness to develop these routes swiftly. They have offered \$2 billion for the development of oil field and \$5 billion for the other construction purposes (Katz 2004).

Whilst Chinese are more interested in the Daqing route in spite of the fact that they could receive energy exports through Nakhodka route as well. Chinese are committed to finance \$12billion by 2020 to developing infrastructure facilities and Russian energy sector (Blagov 2004). Chinese did not neglect the Nakhodka route project in spite of knowing the fact that “a terminus at Daqing would give China control”. On the other hand, this project would provide Russia access to several markets. However, due to

United Nations acknowledged world heritage site of Lake Baikal, Russian “environmental safety supervisory body rejected the shorter route... (which) would pass too close to” the Lake (Watkins 2006).



[http://media.economist.com/sites/default/files/cf\\_images/20040501/CAS933.gif](http://media.economist.com/sites/default/files/cf_images/20040501/CAS933.gif)



Source: US EIA- Russia Country Analysis Brief.



[http://blogs.ft.com/beyond-brics/files/2013/04/ESPO\\_2013\\_0.png](http://blogs.ft.com/beyond-brics/files/2013/04/ESPO_2013_0.png)

The “Blue Stream natural gas pipeline” has a 565 billion cubic feet annual design-capacity. This 750 mile pipeline connects Turkey with the Russian pipeline system. Its 246 miles goes under the Black Sea. In December 2002 it has become operational and gas began to flow eastward. However, in March 2003 Turkey halted its delivery.

### Blue Stream & South Stream Natural Gas Pipeline

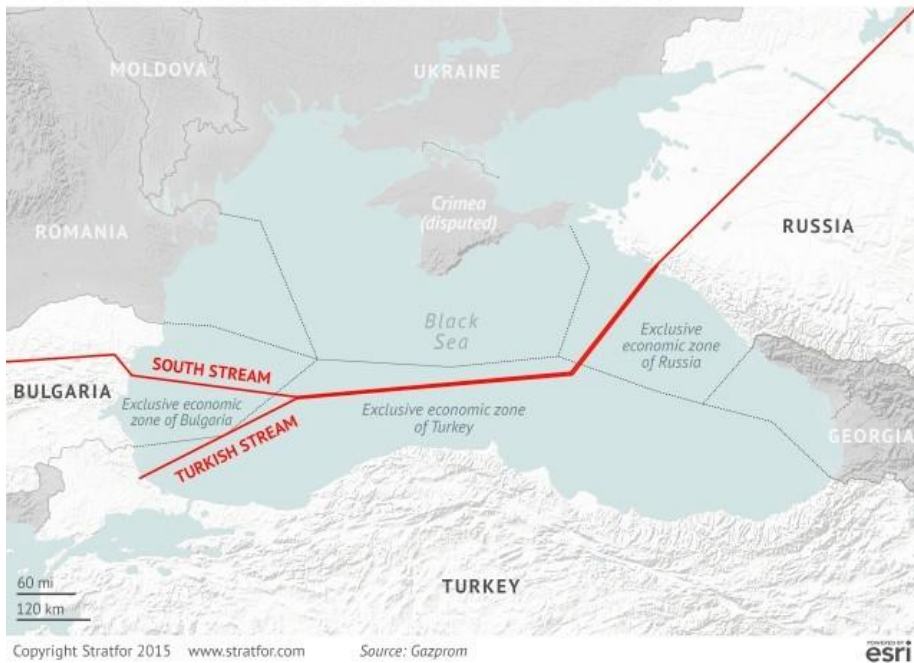
#### Turkish Stream soll South Stream ersetzen



<https://arirusila.blogactiv.eu/2015/08/30/comeback-of-south-stream/>



### PROPOSED TURKISH AND SOUTH STREAM PIPELINES



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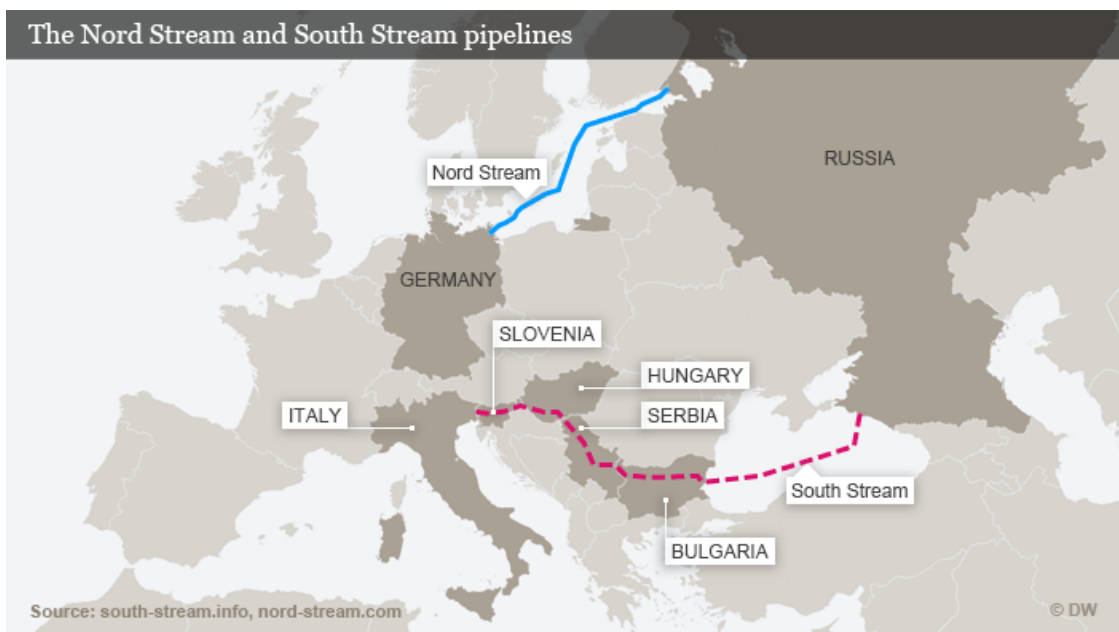


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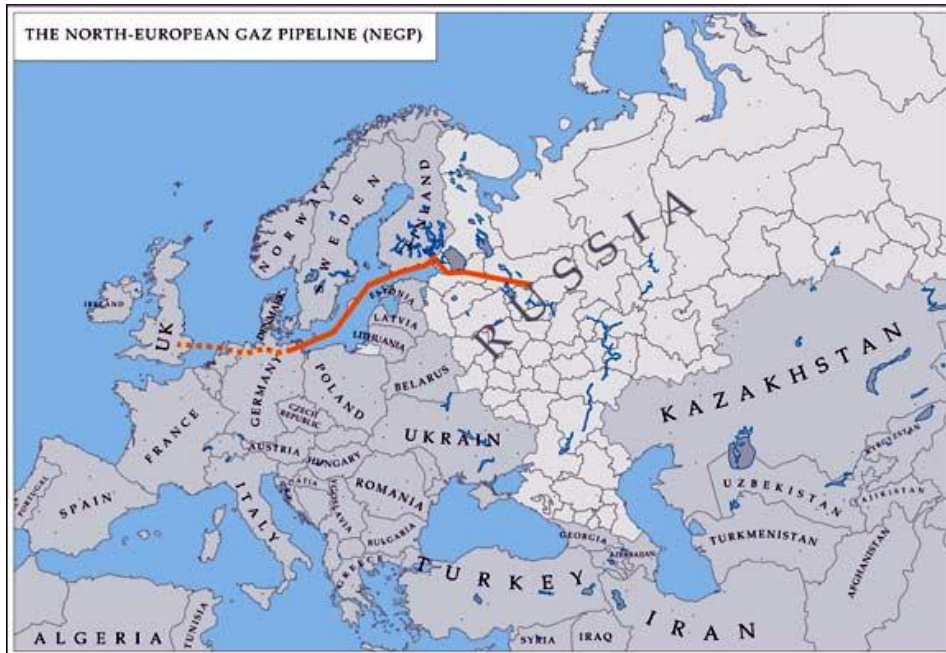
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Turkey invoked a clause in contract which allows “either party to stop deliveries for six months”. The main reason was given as the Turkish leaders were unhappy with the pricing structure (Katik 2005). It was thought that other than price mechanism there were factors regarding some commitments of Turkey to get additional natural gas as compared to its imminent “domestic consumption and agreements to transship gas to other countries”. In this context, in November 2003 they reached on an agreement while in December 2003 the gas flow was resumed again.



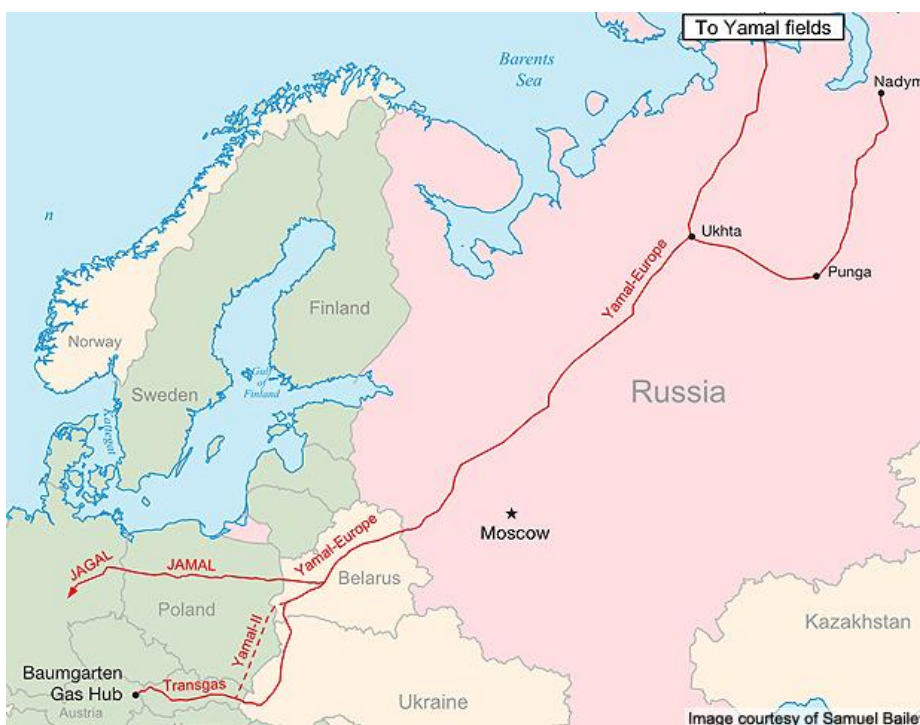
[http://www.dw.com/image/0,,16432278\\_401,00.gif](http://www.dw.com/image/0,,16432278_401,00.gif)

In June 2003 a “North European Gas Pipeline (NEGP)” or North Trans-Gas Pipeline was proposed by Russia and Britain. It was extended over 3220km via Baltic and North Sea. it starts from Russia and goes through Gulf of Finland to reach Denmark and the United Kingdom (Smith 2005).



<http://www.hydrocarbons-technology.com/projects/negp/images/1-gas-pipeline.jpg>

Russian future strength lies in Yamal like projects. This project has been planned with more than one route.



<http://www.hydrocarbons-technology.com/projects/yamal-europegaspipe/images/1-image1.jpg>





<https://s3.eu-central-1.amazonaws.com/euobs-media/18d43375e9bd0019e715ec6c259bde49.png>



[http://www.gazpromquestions.ru/fileadmin/\\_processed\\_/csm\\_Map\\_Yamal\\_Europe\\_eng\\_e3f36e8d03.jpg](http://www.gazpromquestions.ru/fileadmin/_processed_/csm_Map_Yamal_Europe_eng_e3f36e8d03.jpg)

The first Yamal-Europe pipeline brings one trillion cubic feet of Russian natural gas to Poland and Germany through Belarus. There is a plan to add one more branch as the Yamal-Europe II to supply additional one trillion cubic feet. The expansion of this network lured Poland which “wants a route entirely through its own country and then to Germany... while Gazprom is seeking a route via southeastern Poland and Slovakia (Yamal II)”. It is also important to see that rather to take the existing Ukrainian route; Gazprom is taking Poland into consideration and bypassing Ukraine.

E.ON and BASE of Germany and Gazprom had come to an agreement for joint venture on September 8, 2005. It was to build a pipeline originates from the St. Petersburg region and goes through the Baltic Sea. It was a big initiative of Russia to capture market in Europe (RIA Novosti 2005). More than 1125km pipeline is a boost for supply security to Russia. On the other hand, in the mid-May 2007 Russia announced to build a pipeline in agreement with Turkmenistan and Kazakhstan. Construction of this pipeline was to feed “Central Asian natural gas into Russia’s network of pipeline to Europe... the pipeline is to send mainly Turkmenistan gas in a route along the Caspian Sea coast through Kazakhstan into Russia” (Pirog 2007; WSJ May 14, 2007). Thus, this project could “send substantial quantities of Central Asian natural gas through Russia to European markets”.

One more significant energy route has been planned by TNK-BP along with “the Chinese National Petroleum Company” and South Korean “state-owned Korea Gas Corporation”. It would connect Russian “Kovykta natural gas field” which holds 2tcm of gas reservoirs to the Chinese North provinces “across the Yellow Sea to South Korea” (TNK-BP ‘Kovykta Project 2005). This pipeline will have a delivery capacity of 40bcm of natural gas a year. The project has been designed to deliver its half of the natural gas to meet out Chinese demand while rest of the delivery would fulfill South Korean requirements along with “domestic market en route (Harrison 2002/03).

### **American Intentions**

Since Russia and the United States are major energy producing as well as consuming states; their policies and patterns of dealing the trade affects energy markets, welfare, and economy of both states in a broader perspective in general. It is generally asked that:



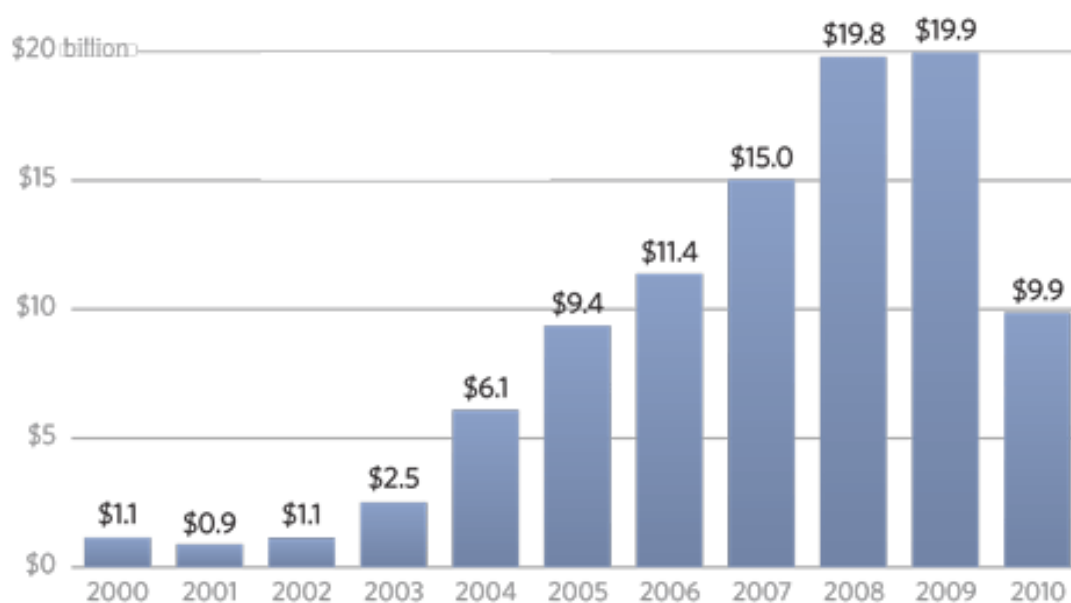
*“other things being equal, should Russia considerably increase its energy production and its ability to export that energy both westward and eastward, it may tend to ease the supply situation in energy markets in both the Atlantic and Pacific basins. In the Atlantic arena, more Russian oil could be available to the United States. In the Pacific area, there would tend to be more supply available to countries trying to assure themselves energy supplies, such as China and Japan. This may ease the global competition for Persian Gulf oil.*

*On the other hand, the Russian government’s moves to take control of the country’s energy supplies noted earlier may have the effect of making less oil available on the world market. This could occur if Russia’s tendency to limit foreign company involvement in oil and gas development limits the introduction of the most modern technology, or if Russia intentionally limits energy development and production. Possibly as important as Russian oil and gas industry developments is the associated potential for U.S. suppliers of oil and gas field equipment and services to increase their sales in Russia” (Pirog 2007).*

It is clear that Russia cannot exploit its full potential of oil and gas without the use of western or most modern technologies. Its potential growth is limited in the development of exploration and production. Though their economic cooperation has expanded since the disintegration of the USSR; it has not reached up to the expected point. Liberalization of trade, structure of central economic planning and system, the flow of mutual trade, and above all investment have remained very (s)low. The blame for this kind of low environment has been given to the successive leadership of the new Russian Federation. American oil and gas field machine and other equipments export accounted only for 14% in 2002 vis-à-vis all goods exported to Russians and it was only 7-8% in 2006. This data shows only a modest growth in the supply of oil and gas field machine and equipments export.

On the other hand, American direct foreign investments in Russian have increased as well since the collapse of the Soviet Union. But again, their level of expected growth and potential is far below. The investments are not diversified and “largely concentrated in the transportation, energy communications, and engineering sectors” (CRS Report RS 21123, March 28, 2013). America was the third largest foreign direct investment nation as of Sep.30, 2006. Thus, it is true that these trade relations and “Russian energy trends and policies have (definite) possible implications for the U.S. energy security”. Russia is a large supplier of energy resources to the world energy market and its stability is in the interests of the United States as well. “Russia’s role as a possible major exporter of energy to the United States, and in the changed patterns of world energy flows that could result from the completion of new Russian oil and natural gas export pipelines and related facilities or the expansion of existing export pipelines and related facilities” (Pirog 2007).

## U.S. Foreign Direct Investment in Russia Wanes



**Source:** U.S. Department of Commerce, Bureau of Economic Analysis, International Data: Direct Investment and MNC, <http://www.bea.gov/iTable/iTable.cfm?ReqID=2&step=1> (accessed April 25, 2012).

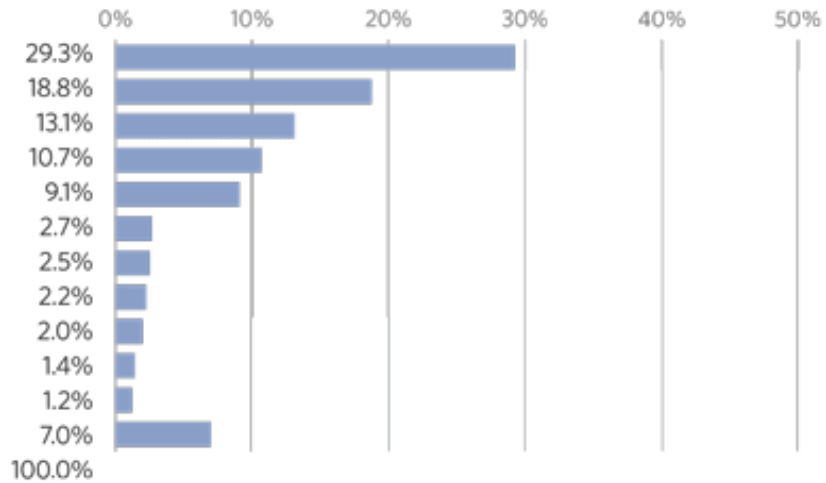
<http://www.heritage.org/research/reports/2012/05/after-wto-membership-promoting-human-rights-in-russia-with-the-magnitsky-act>

<http://www.heritage.org/~media/images/reports/2012/05/bg2687/brussiatradechart2.ashx?w=500&h=415&as=1>

## U.S. Trade with Russia: Exporting Machinery, Importing Energy

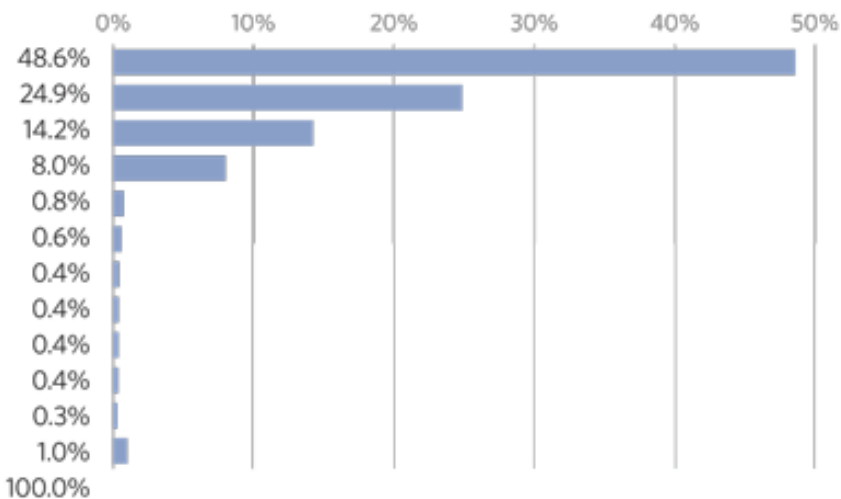
### U.S. Exports to Russia, FY 2011

Sector	Value (millions)
Machinery (except electrical)	\$2,424.0
Transportation equipment	\$1,554.3
Chemicals	\$1,086.3
Food manufactures	\$888.1
Computer and electronic products	\$753.5
Electrical equipment, appliances, and components	\$220.9
Agricultural products	\$208.2
Miscellaneous manufactured commodities	\$185.2
Other fabricated metal products	\$165.3
Other animals	\$117.4
Plastic and rubber products	\$102.2
Miscellaneous (merchandise not listed above)	\$580.1
Total	\$8,285.5



### U.S. Imports from Russia, FY 2011

Sector	Value (millions)
Petroleum and coal products	\$16,794.6
Oil and gas	\$8,596.3
Primary metal manufacturing	\$4,924.6
Chemicals	\$2,769.0
Fish and other marine products	\$268.3
Transportation equipment	\$210.3
Nonmetallic mineral products	\$149.7
Used (second-hand) merchandise	\$140.4
Miscellaneous manufactured commodities	\$135.6
Other fabricated metal products	\$127.7
Wood products	\$105.3
Miscellaneous (merchandise not listed above)	\$350.8
Total	\$34,572.6



Source: U.S. Department of Commerce, International Trade Administration, TradeStats Express, <http://tse.export.gov/TSE/ChartDisplay.aspx> (accessed April 25, 2012).

<http://www.heritage.org/research/reports/2012/05/after-wto-membership-promoting-human-rights-in-russia-with-the-magnitsky-act>

<http://www.heritage.org/~media/images/reports/2012/05/bg2687/brussiatradechart1750px.ashx>

**Crude oil and Petroleum Products imports from Russia to the U.S.(Thousand Barrels)**

<b>Year</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>July</b>	<b>Aug</b>	<b>Sep</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>2000</b>	898	3,485	1,952	2,481	1,359	2,242	2,412	2,276	2,655	3,427	1,485	1,710
<b>2001</b>	5,904	5,126	1,641	3,438	2,716	1,423	2,520	3,652	3,725	1,044	663	931
<b>2002</b>	1,877	1,420	2,956	5,750	11,487	6,944	6,814	7,305	6,763	9,153	7,663	8,558
<b>2003</b>	5,609	7,581	7,981	3,961	6,455	15,809	17,063	12,751	8,244	2,894	2,124	2,239
<b>2004</b>	4,227	5,347	6,027	11,155	7,016	12,963	12,293	7,938	7,029	9,143	14,711	11,302
<b>2005</b>	10,451	12,979	15,799	19,797	11,324	10,487	19,032	7,344	13,973	13,486	6,497	8,512
<b>2006</b>	6,776	8,524	6,805	6,589	19,248	12,904	13,164	15,049	16,103	11,332	6,702	11,450
<b>2007</b>	10,768	6,767	14,109	16,682	15,462	8,558	16,542	12,909	11,671	14,022	14,103	9,481
<b>2008</b>	12,155	13,083	12,466	12,053	14,268	22,914	17,740	15,185	12,999	12,214	13,343	11,844
<b>2009</b>	15,983	13,377	20,138	23,361	25,200	17,345	19,735	15,882	14,579	11,945	12,748	11,923
<b>2010</b>	14,353	11,850	15,115	17,604	22,293	22,791	22,295	24,371	19,427	20,298	16,579	

U.S. Energy Information Administration

[http://tonto.eia.doe.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTIM\\_NUS-NRS\\_1&f=M](http://tonto.eia.doe.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTTIM_NUS-NRS_1&f=M)

Americans are concerned about economic policies, various existing and potential regulatory regimes. It is said that “structural problems and inefficient government regulations and policies have been a major cause of the low levels of trade and investment with the United States”. The trading community in America believes “the climate to be improving”; however, potential investors have complains over the existing structure of investment think that overall environment is inhospitable. There are problems regarding “lack of effective intellectual property rights protection, burdensome tax laws, jurisdictional conflicts among Russian federal, regional and local governments, inefficient and corrupt government bureaucracy, and the lack of a market-friendly commercial code as impediments to trade and foreign investments”. Moreover, “forced breakup of Yukos has” created an environment of suspicion in the minds of private investors.

## **Collision: Energy, Foreign Policy, & Geopolitics**

The linkage between energy issues and foreign policy in the Eurasian region is significant in terms of diversification and new pipelines. The question of ‘energy deterrence’ (Dellecker et al 2011) and recurring uncertainties with Russian supply has become a mooted point among few countries. If energy producing states are concerned for demand security, the consumer states have their paranoiac apprehensions for supply security. Both are heading for a new situation. Since, a new power projection and geo-economic shift has taken place in the new energy market; the concept of energy security has also been changing. Now it has a changed course of action even in the post-Soviet space or in the Asia-Pacific region. Having these changes in to account, Russia differentiates various states in terms of close and distant ‘others’. The impact of decision making of state apparatus on policy of production and supply toward these states has become serious issues. The tendency of centralization has become central to policy makers. Since, new ventures and market sensitivities are more directly linked with the foreign policy issues; financial realities of pipeline constructions and rivalries for the Caspian gas market have become critical and making profound influence on the foreign policy move(r)s (Dellecker & Gomart 2011).

The Caspian pipeline impact is well noticeable in Russia-EU relations as well. Western efforts are in full swing in diluting the Russian dominance. They are involved in pressure tactics and dragging Russia from a dominant position to “rather an equal partner in developing the oil resources of the Caucasus and Central Asia”. West is more interested in “the creation of a level playing field that allows Russian and Western corporations to participate in the development of Eurasian energy resources on an equal footing” (Cohen 1996). And interestingly, Russian policies towards the region are being viewed as a policy of divide-and-rule (Manning, Wilson & Jaffe 2001). Moreover, Klare (2008) emphasized that energy interdependence and resource crunch lead to cyclical instabilities, which creates a new battleground for geostrategic primacy. These geo-strategic moves are going to influence Russia, China, Europe and others over the Caspian Sea basin’s energy and oil supplies (Burns 2006).

Russian energy relations with the newly independent states are more significant regarding the eastward contractual obligations, and Turkmenistan, Kazakhstan,

Uzbekistan, and Azerbaijan are noteworthy in particular. They have net production and export capacity. Russian approach toward this region has been perceived suspiciously in the Western circles and few of them even extend this approach to the extent that Russia is attempting to create an OPEC-style gas cartel (Cohen 2007). It is true that tariff and transit fee has been agreed among the states and it provides Russia a better access to *export ports* as well as *border points* in neighboring countries; Russia allows Kazakhstan, Azerbaijan and Turkmenistan to obtain its transit routes for some of their oil across the Russian territory as well. On the other hand, Georgia, Belarus, Ukraine etc. have their transit and consumer value for major Russian energy exports. However, the fact remains that Russia dominates in crude production and holds locations of major pipeline networks (Russia Energy Survey 2002).

Since the Rose Revolution in November 2003, Georgia has started to follow a pro-Western approach. Its aspiration for NATO membership made relations more complicated in the region where Russia retaliated by pressurizing Georgia and given support to South Ossetia and Abkhazia. Their economic ties were disrupted. In 2005, Gazprom enhanced the gas prices, while in 2005-06, due to the pipeline sabotage, supply was disrupted to Georgia. Gazprom announced the gas supply cut off plans to Georgia unless it agreed to price hikes and sold its main pipeline to Gazprom. However, the transit value in terms of Azerbaijan and Turkey made Georgia strong to face the challenges. In addition, the U.S. sponsored Nabucco pipeline could help Georgia and may attempt to change the equations in the region. So, these events show that Russia is able to disrupt pipelines through Georgia to Europe (Woehrel 2010; Belkin & Nichol 2012).

**Figure: Nabucco Gas Pipeline**



[https://upload.wikimedia.org/wikipedia/commons/thumb/8/80/Nabucco\\_Gas\\_Pipeline-en.svg/2000px-Nabucco\\_Gas\\_Pipeline-en.svg.png](https://upload.wikimedia.org/wikipedia/commons/thumb/8/80/Nabucco_Gas_Pipeline-en.svg/2000px-Nabucco_Gas_Pipeline-en.svg.png)

On the other hand, Belarus is dependent on subsidized Russian oil and gas. In 2006, Russia pressurized to sell the Beltransgaz, a natural gas firm, by intimidation of quadrupling the gas prices. In January 2007, they threatened to cut off the supply and came to a favorable conclusion. The confrontation did not stop at this point. Russia reduced the subsidy on the crude oil supply which involved European consumers as well. Furthermore, in January 2010, Russia demanded revision of oil agreements to strengthen its refineries and Rosneft Oil Company. It is apparent that Russia was interested in creating more equity stakes in the Belarusian firms. Now, Belarus is looking for diversification of supplies by imports from Venezuela, Iran, Azerbaijan, and Kazakhstan (Woehrel 2010). Therefore, the link between energy and foreign policy has become pivotal in determining the behavior of Russia in the newly independent states in terms of a new energy world order. In this situation the whole near abroad region has become their vital interest. And it is more apparent in its near abroad. These issues made the European states more anxious about the dependency on Russian energy resources (Hill & Fee 2002; Rutland 2008; Stanislaw 2008).

As far as Europe is concerned, the current energy import has risen to more than 50%, which is projected to jump drastically to 70% by 2030. Russia provides more than 25% that is the biggest source for much of the continent. However, the distribution is very uneven; e.g. Germany depends on Russia for natural gas, but Spain depends on southern resources. Norway has some export potential, but that is not a member of the EU; while others are essentially consumers. Therefore, in any case, a modest discovery of energy resources or weak diversification is not going to help Europe in any way. Having future scenarios into consideration, Britain (formerly a net energy exporter) along with other countries, is interested in extended pipelines from the Russian sources. The new Russian foreign policy concept (2013) has also shown the UK as positive and more prospective target than ever before. Russia would like to extend its relations with Britain in the same positive and cooperative manner as it has developed with Germany, France and Italy (Monaghan 2013). Furthermore, being an exporter, Russia finds itself in a superior bargaining place. In fact, existing control of supply routes provides Russia a big upper hand.

The supply routes to the Europe remain concentrated for a long time. Up to the ascendancy of Putin, roughly 95% of natural gas supply outside of new states



transited through Ukraine. Even in 2006, 80% of Russian gas transition to Europe was through Ukraine (Kimmage 2006; Cohen 2007). Therefore, Russia has initiated various plans and projects to diversify natural gas transmission to reduce dependence on these concentrated routes. However, consumer states individually or collectively, e.g. E.U., are trying to manage their growing dependence by diversifying energy resources and supplies as well (Yergin 2006).

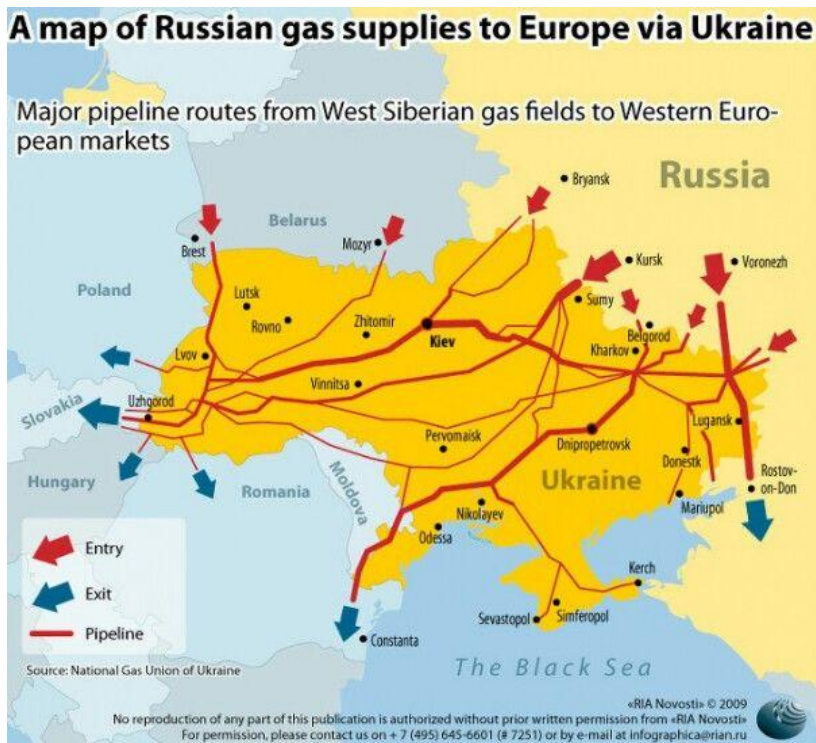
In the current set-up, Europe requires an uninterrupted, safe, and affordable energy supply from Russia, which is the main consumer market for Russian oil and natural gas. The huge dependence causes serious concerns of constant energy supply in the region (Heinrich 2008). Though, in the 1960s, the Soviet Union had delivered oil and gas to Western Europe on a long-term contract basis; these days, consumer-supplier relations have been influenced by various market factors along with the old geopolitical reasons. A reliable as well as sustainable demand and supply has become a cause for concern (Petrovic-Orttung-Wenger 2009). Therefore, if Russia has a major concern for European markets, on which its exchequer depends a lot, Europeans concern is how to manage their dependence on imported natural gas (Yergin 2006).

Since, the supply routes to Europe have remained concentrated for a long time; consumer states individually or collectively (EU) are trying to manage their growing dependence by diversifying energy resource supplies (Yergin 2006). Up to the ascendancy of Putin, roughly 95% of natural gas supply, outside of the newly independent states, transited through Ukraine. Even in 2006, 80% of Russian gas transition to Europe was through Ukraine (Kimmage 2006; Cohen 2007). Therefore, Russia has initiated various plans and projects to diversify natural gas transmission to reduce dependence on these concentrated routes.

### **Ukrainian Crisis**

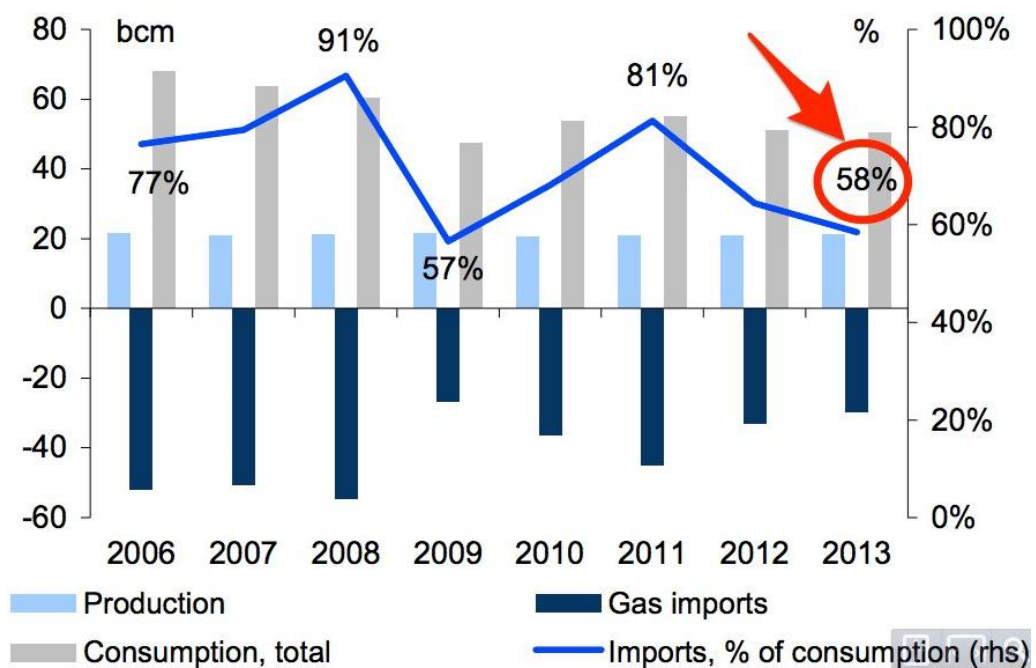
For the last few years, the transit value has become a point of lurement, contention, or bargain with various regional as well as major world powers. Most recently, the Ukrainian crisis has translated this value in a geopolitical tug of war. Ukraine's relation with Russia as well as the EU has been fluctuating since the 2004 Orange Revolution. Ukraine, the second-most populous former Soviet republic, and Belarus receive 56%-60% and 65% of natural gas import deliveries respectively from Russian

sources (BP 2014). The Belarusian transit corridor ‘Kobrin-Brest’ (especially for Poland) and Yamal-Europe (Torzhok-Kondratki-Frankfurt/Oder) supply natural gas to Netherlands, Germany, United Kingdom, Belgium, and Poland with a total capacity of 38bcm/year.



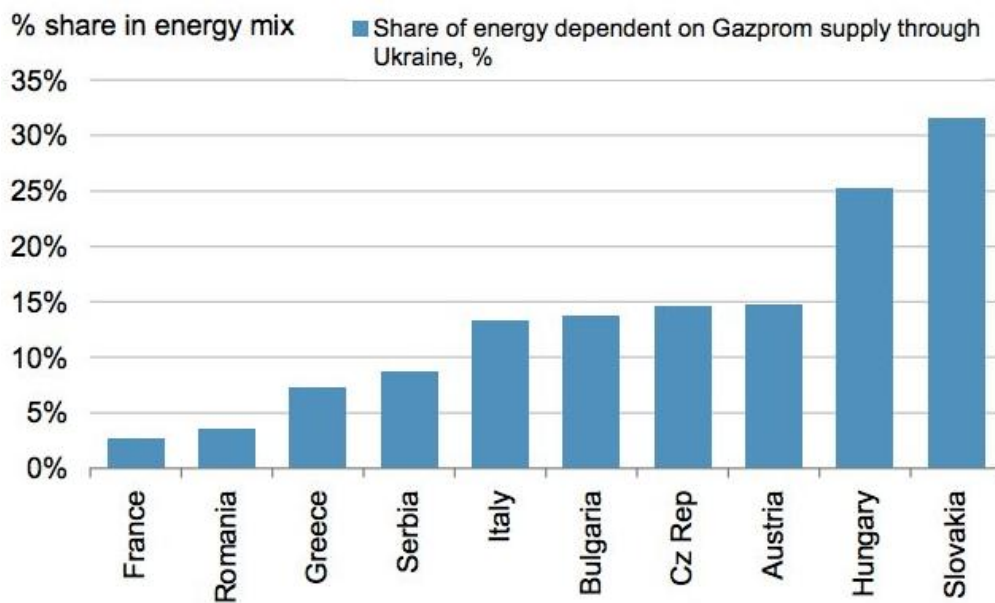
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### Ukraine Imports 58% of Gas Consumed from Russia



<http://www.businessinsider.in/Russia-threatens-to-cut-off-gas-supplies-to-Europe-by-Friday/articleshow/46368318.cms>

## European Vulnerability to Ukrainian Gas Transit Interruption

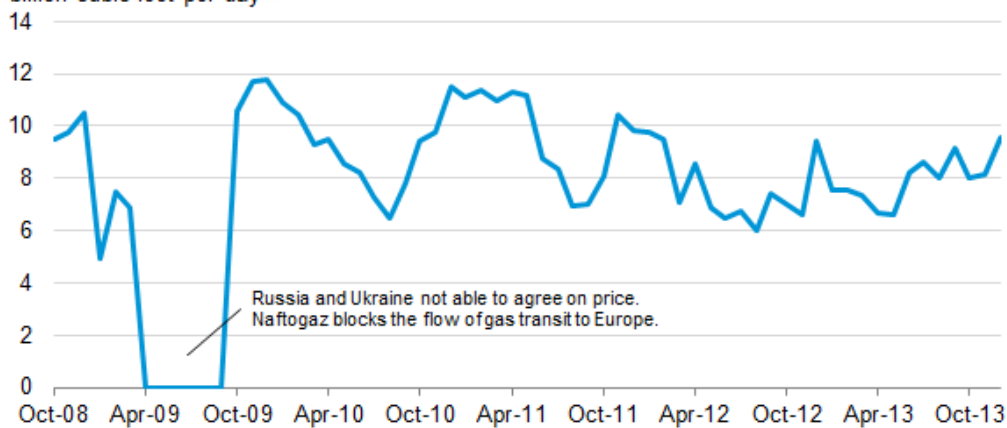


<http://www.businessinsider.in/Russia-threatens-to-cut-off-gas-supplies-to-Europe-by-Friday/articleshow/46368318.cms>

### Russian natural gas exports to Europe through Ukraine

(October 2008-December 2013)

billion cubic feet per day



<http://www.eia.gov/todayinenergy/images/2014.03.14/chart2.png>

<http://www.eia.gov/todayinenergy/detail.cfm?id=15411>

### Gas Delivery Volume via Ukraine to European Region including Turkey

Year	Total Transit	Transit to EU+	Ratio %
2000	120.6	109.3	90
2001	124.4	105.3	84
2002	121.4	106.1	87
2003	129.2	112.4	86
2004	137.1	120.4	87
2005	136.4	121.5	89
2006	128.5	113.8	88
2007	115.2	112.1	97
2008	119.6	116.9	98
2009	120.0	116.9	97

Source: Gonchar, Martynuk, and Chubyk in Tugce Varol Sevim (2013)

## Capacity and flows for Russian gas in March 2013

Route	Capacity (mcm/day)	Flow in March 2013 (mcm/day)	Spare capacity (mcm/day)
Nord Stream	150.7	66.6	84.1
Yamal Europe (Kondratki)	97.4	97.1	0.3
Beltransgaz (Wysokoje)	15.8	10.7	5.1
Ukraine-Poland (Drozdowice)	16.6	13.8	2.8
Ukraine-Slovakia (Velke Kapusany)	323.0	122.0	201.0
Ukraine-Hungary (Beregdaroc)	56.4	14.4	42.0
Ukraine-Romania (Mediesu Aurit)	9.1	0.2	8.9
Ukraine-Romania (Orlovka-Isaccea)	96.0	58.3	37.7
Flows via Ukraine	501.1	208.7	292.4
Flows via other routes	263.9	174.4	89.5

[http://gpf-europe.com/upload/medialibrary/6b6/table\\_6.jpg](http://gpf-europe.com/upload/medialibrary/6b6/table_6.jpg)

## Supply cuts in Europe during the 2009 crisis

	Cut	Response and backup
<b>Austria</b>	66%	Imported gas from Norway and Germany Gas storage and alternative fuels
<b>Bulgaria</b>	100%	No alternative gas imports Gas storage and alternative fuels
<b>Croatia</b>	40%	Gas storage and increased domestic production
<b>Czech Republic</b>	71%	Imported gas from Norway and via Belarus/Germany Gas storage and increased domestic production
<b>France</b>	15%	Industry covered shortfall
<b>Germany</b>	10%	Imported gas from Norway, the Netherlands and via Belarus/Poland. Gas storage
<b>Greece</b>	80%	Booked more LNG supplies Switched gas power plant to oil
<b>Hungary</b>	45%	Imported gas from Norway Gas storage and alternative fuels
<b>Italy</b>	25%	Imported gas from Libya, Norway and Netherlands
<b>Poland</b>	33%	Imported gas from Norway and via Belarus Gas storage and alternative fuels
<b>Romania</b>	34%	No alternative gas imports Gas storage and increased domestic production
<b>Slovakia</b>	97%	No alternative gas imports Gas storage and alternative fuels
<b>Slovenia</b>	50%	Imported gas from Algeria via Italy Gas storage and alternative fuels

Source: [http://gpf-europe.com/upload/medialibrary/40c/table\\_4.jpg](http://gpf-europe.com/upload/medialibrary/40c/table_4.jpg)

### Gas prices paid by Ukraine, Moldova and Belarus in 2006-07 (\$/tcm)

	2005	2006	2007
Ukraine	50	95	130
Moldova	80	110-160	170
Belarus	47	47	100

Source: Gromadzki & Kononczuk (2007).

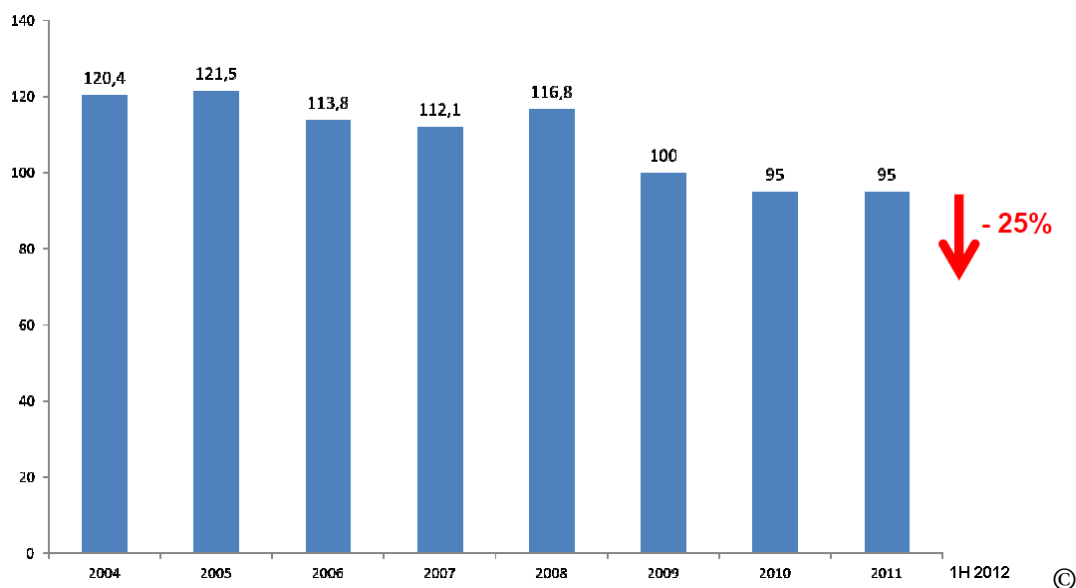
However, via Ukraine; Bulgaria, Greece, Turkey, Macedonia and Romania receive gas through the three lines of Ananyev-Tiraspol'-Izmail & Shebelinka-Izmail (26 bcm/year); Romania by Hust-Satu-Mare (2 bcm/year); Hungary, Serbia, and Bosnia by two lines of Uzhgorod-Beregovo (13 bcm/year); Poland by the two lines of Komarno-Drozdowichi (5 bcm/year); and along with two lines of Dolina-Uzhgorod (17 bcm/year), Yamburg-Western border- Uzhgorod- (26 bcm/year), Urengoy-Uzhgorod (28 bcm/year), Orenburg-Western border-Uzhgorod- (26 bcm/year) pipelines supply natural gas to Slovakia, Czech Republic, Austria, Germany, France, Switzerland, Slovenia, and Italy. So, out of total existing Russian export capacity of 257bcm/year; Ukrainian transit route accounts for 142bcm/year, which is the highest of Russian supply to Europe. This intense transit corridor advantage placed Ukraine in a bargaining position with Russia as well as the EU. Russia sells gas at a lower price to transit states not only due to their transit value, but also to lure them to join the Russian dominated trade bloc (Soldatkin & Pinchuk 2011; Reznik & Meyer 2013).

Having this extraordinary transit value in the Russian gas trade with Europe, Ukraine expects some extra benefits and concessions from the Russian state monopolies. However, this value attracts many more geopolitical forces to manage Russia and contain its energy strength through Ukraine. Since the Orange Revolution (2004), serious trust deficit has been erupted in the Ukraine-Russia relations. Western efforts of regime change have been taken as a sinister game in the Russian neighborhood and an expansionist effort of NATO. The desire to drag and ultimately fuse Ukraine in the western block resulted bitterness in trade and transit affairs.

As was happened in 2006 and 2009; on June 15, of this year, Russia again cut off gas supply to Ukraine. However, Gazprom has been providing sufficient amount of gas to the Ukrainian pipelines which can meet the European requirements (i.e. 15% demand of the EU), but not the Ukraine's need. The Slovakian grid operator had confirmed

where these pipelines arrive at the European Union, that they did not find any amount of reduction in gas pressure or import volumes (Bloomberg June 16, 2014). In fact, along with Ukraine's huge gas debt of \$4.5 billion, a price dispute has also been erupted between these two nations. Due to certain geopolitical reasons, the issue of new prices had become central to the disruption of natural gas to Ukrainian market. Moreover, various arguments regarding the new price mechanism of Gazprom ignore some facts. Carden (Oct. 3, 2014) reasonably points out that in 2009, Gazprom in an agreement had given the option to purchase natural gas on the short and medium term basis to the Naftogaz. Kiev was in agreement to purchase Russian gas at a considerable discount in the short-term; however, it was ready to pay (possibly) higher than market rate in the medium term. This high price was 'in return for lower than market priced gas in the 2009' and Ukraine owes \$3.5-\$5 billion in back payments. While, Noël, Pierre (Sep. 16, 2014) argues that Ukraine has received cheap and free gas from Russia by using its transit value and guarantee of supply Russian gas to Europe. It has bargained Russia for huge rents knowing that Moscow would not cut off the supply to its biggest market. In other words "Europe has been and extremely useful hostage, allowing Kiev to abuse its power in negotiations with Russia".

### Russian gas transit through Ukraine declines steadily



POLINARES Consortium 2012, 2012 POLINARES working paper n. 73 December 2012

### **Offers, Hopes, and Actions**

However, according to Igor Shuvalov, Russia will offer cheap gas if Kiev is ready to join the Moscow led economic block and close down the free-trade talks with the EU (Bloomberg Dec. 2, 2013). He further stated that “No one other than Russia can provide Ukraine with the necessary funds so quickly and in such quantity...A gas agreement could help relieve Ukraine of a huge problem. We can also give them a loan, but we will not help them without commitments on their part”. On the other hand, though, President Viktor Yanukovich had reiterated ‘European integration’ as the country’s goal; the dilemma prevailed. He had shown his bend towards repairing the economic ties with Russia by abandoning talks with the EU. The abandonment of the EU free-trade accord on 21<sup>st</sup> November, which was due to sign at the Lithuania summit on November 28-29, 2013, sparked aggressive public disapproval demonstration wherein protesters occupied Kiev city hall and Independence Square in December. Failing to sign the accord inspired various outside forces to fuel the protests. On Dec. 14, 2013 in Kiev, American Senators Chris Murphy from Connecticut and Republican Senator John McCain from Arizona addressed a massive crowd in support of overthrowing an elected government. Murphy told the gathering that ‘You are making history...If you are successful, the United States will stand with you every step of the way.’ While, McCain assured that ‘American stands with you.’ (Choiniere Oct. 5, 2014). These statements against a legitimate and democratically elected government were sufficient for the President Putin to assume the unrest as a charade, concocted, and carefully orchestrated western plot controlled by covert CIA and NATO forces to change the regime in their interests. More than 17% of ethnic Russian population of Ukraine was a big support for Putin’s action. It is concentrated in the eastern and southern regions.

This led one of the fastest and startling courses of actions by Russia. The moment Mr. Yanukovich left the country on February 22; within a week pro-Russian forces seized various key buildings in Crimea, by all means, backed by the paranoid Moscow. Next week on March 6, Crimea’s parliament voted to join the Russian Federation; voters chose to secede through referendum on March 16; Crimean parliament declared independence and formally applied to join the Russian Federation on March 17; and a decree signed by the President Putin to annex the Crimea on March 21, in Russia.



NATO Secretary-General Anders Fogh Rasmussen called this whole crisis as the ‘21<sup>st</sup> century revisionism.’ However, if we add the story of Donbas(s) where following the developments in Crimea, the Luhansk and Donetsk Oblast declared them as the People’s Republic on April 8 and held referendums on May 11, on the separation from Ukraine. Since then, pro-Russians are fighting against the Ukrainian forces for their autonomy where a claim of the Soviet identity has also played a significant role. This is a comfortable situation for Russians in which they can penetrate the eastern Ukraine from the south-west region. Along with Abkhazia and South Ossetia; the Crimean annexation has given a message to the West that they should keep their promises made at the time of Soviet disintegration regarding the NATO’s expansion.

In spite of worsening situation in Ukraine, the fundamental strategy of the West in the leadership of the U.S. did not change. Russian actions were taken for granted. They adopted, if not completely hostile, an aggressive strategy of sanction and isolation to deal with Russia. At the very beginning of Ukrainian crisis; Barack Obama (March 3, 2014) indicated that if Russians ‘continue on the current trajectory that they’re on, that we are examining a whole series of steps – economic, diplomatic – that will isolate Russia and will have a negative impact on Russia’s economy and its status in the world’ and made strong support to the interim government of Ukraine. However, just after two weeks, Vladimir Putin (March 18, 2014) reminded “a whole series of controlled ‘colour’ revolutions” and a policy of few western powers; i.e. ‘who is not with us is against us’. He further stated that Russia would ‘always defend the interests of ethnic Russians and Russian-speakers in Ukraine by political, diplomatic, and legal means.’ In support of Crimea’s accession, he said ‘Together we have done a lot, but a lot more remains to be done, more tasks to resolve.’ It was read in a different manner by Russia’s immediate neighboring countries including Ukraine and the West collectively.

### **Sanction Politics**

These developments led the United States and EU to impose sectoral sanctions against Russia which includes military industrial complex and various sectors of economy. Since March 2014, blocking property and visa bans have been imposed on certain government officials. The U.S. Treasury Department’s Office of Foreign Assets Control (OFAC) and the U.S. commerce Department’s Bureau of Industry and

Security (BIS) have identified those people who are involved or can contribute to the Ukrainian crisis. Their Specially Designated Nationals (SDN) List include people and entities connected with energy industry like Igor Sechin- President of Rosneft, Gennady Timchenko- owner of the Volga Group which is a financier for energy sector, pipeline construction company Stroytransgaz, Transoil, and United Shipbuilding Corporation that is involved in shipbuilding for the energy industry. Newly imposed sanctions include restrictions on export of oil and gas related items for deepwater, Arctic offshore, and shale projects in Russia. However, European Union imposed sanctions on energy related transactions suited for deepwater oil exploration and production, Arctic oil exploration and production, shale oil projects in Russia. Transfer of high technology and technical supports are also restricted (Savage C. et al. Sep.11, 2014).

On September 11, a White House press release had given the resolve to impose mounting costs on Russia. And the U.S. will deepen and broaden sanctions in Russia's financial, energy, and defense sectors which will increase political isolation and economic costs to Russia. However, even after the downing of Malaysian Flight MH17, EU has crafted sanctions very carefully where it had to share the burden on all 28 states as well as to protect specific interests of the Union. These sanctions 'restrict Russia's access to EU capital markets...Ban future EU exports and imports of arms and related materiel...Prohibit sales of dual-use goods and technology for Russian military end-users...(and) Ban sales of certain oil exploration equipment and technology'(Archick & Mix Sep. 16,2014). Though Obama stated that new combined EU-US measures would 'have an even bigger bite'; these sanctions are not fully harmonized. Both have some crucial variations on services, projects (oil exploration), and Russian individuals or otherwise; e.g. certain oil exploration services have been restricted by the EU only to the future contracts; i.e. contracts ratified after August 6, 2014, which is not with the U.S. concurrence where sanctions are applied retroactively to the contracts signed before they were put in place (EPIC Aug. 2014).

<b>Financial sector</b>	
<b>Companies in EU sanctions list</b>	Sberbank of Russia, VTB, Gazprombank, Vneshekonombank, Rosselkhozbank, Russian National Commercial Bank
<b>Companies US sanctions list</b>	Sberbank of Russia, VTB, Gazprombank, Vneshekonombank, Rosselkhozbank, Bank of Moscow

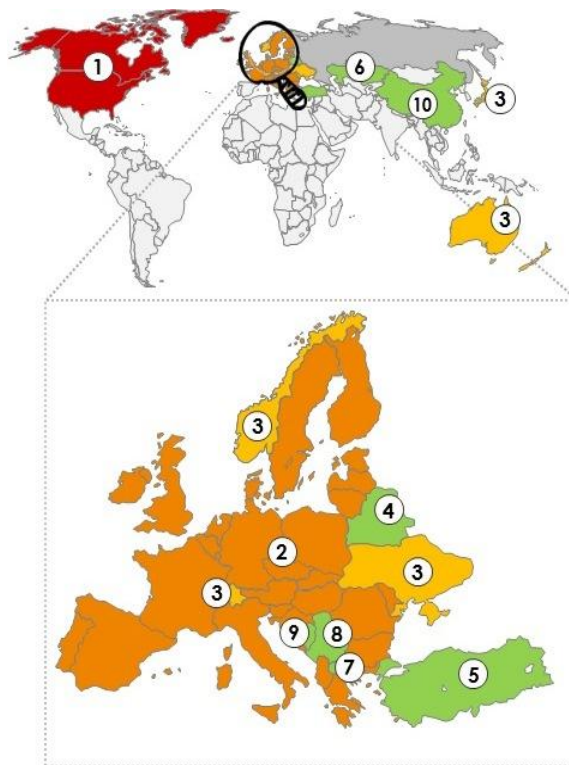
<b>Oil &amp; Gas sector</b>	
<b>Companies in EU sanctions list</b>	Rosneft, Gazprom Neft, Transneft, Chernomorneftegaz, Feodosia, Novatek
<b>Companies in US sanctions list</b>	Rosneft, Gazprom Neft, Transneft, Chernomorneftegaz, Gazprom, Lukoil, Surgutneftegaz, Novatek
<b>Military-Industrial Complex</b>	
<b>Companies in EU sanctions list</b>	Almaz-Antey Concern, Kalashnikov, Basalt, Uralvagonzavod, Oboronprom, United Aircraft Corporation, Sirius Concern, Stankoinstrument, Khimkompozit, Tula Arms Plant, Tekhnologii Mashinostroeniya, Vysokotochnye Kompleksy
<b>Companies in US sanctions list</b>	Almaz-Antey Concern, Izhmash, Kalashnikov, Basalt, Uralvagonzavod, KB Priborostroeniya, NPO Mashinostroeniya, KRET, Sozvezdie

<b>FINANCIAL SECTOR</b>	<ul style="list-style-type: none"> <li>• EU and US investors are barred from issuing any debt for 5 largest state-owned Russian banks and from buying or selling new bonds or equity (with a maturity of more than 30 days)</li> <li>• Largest banks (60% of banking system assets) are limited in attracting funding</li> <li>• EBRD and EIB have stopped funding projects</li> </ul>
<b>OIL &amp; GAS SECTOR</b>	<ul style="list-style-type: none"> <li>• A ban on investments for oil, gas and minerals extraction</li> <li>• A ban on the sale of equipment for offshore drilling and oil extraction</li> <li>• A ban on providing oilfield services in Russia: deepwater drilling, field development of Arctic and shale oil reserves</li> </ul>
<b>MILITARY-INDUSTRIAL COMPLEX</b>	<ul style="list-style-type: none"> <li>• Embargo on the import and export of arms and related material to / from Russia</li> <li>• A ban on export of "dual-use" goods and technologies for military use in Russia</li> </ul>
<b>OTHERS</b>	<ul style="list-style-type: none"> <li>• Company-specific sanctions, and individual sanctions against a number of persons</li> <li>• A ban on investment and the equipment supply for infrastructure, transport, telecommunications and energy of Crimea and Sevastopol</li> </ul>

<http://eng.altcr.ru/library/sanctions-brief-overview/>

<b>SANCTIONS OVERVIEW</b>		Table 1
	<b>Equipment designated for</b>	
Equipment export ban	Deep water Offshore Arctic Shale oil production	
	<b>Ban on credit lasting longer than 30 days to state banks and oil companies</b>	
	<b>Banks</b>	
	Sberbank	
	VTB Bank	
	Gazprombank	
Financial instruments ban	Vnesheconombank	
	Rosselkhozbank	
	Bank of Moscow (US only)	
	<b>Oil companies</b>	
	Rosneft	
	Transneft (EU only)	
	Gazprom Neft	
Sources: EU Commission, US State Department		

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**Countries that have applied sanctions against Russia:**

1. USA and Canada
2. European Union
3. Other countries: Norway, Switzerland, Japan, Australia and Ukraine







**Key countries that have not applied any sanctions against Russia up to date:**

4. Belarus
5. Turkey
6. Kazakhstan
7. Macedonia
8. Bosnia and Herzegovina
9. Serbia
10. China



<http://eng.altrc.ru/library/sanctions-brief-overview/>

	impact	reaction
<p>«ROSNEFT»</p>  <p>РОСНЕФТЬ</p>	<ul style="list-style-type: none"> <li>Restriction of access to US/EU financial markets</li> <li>Western companies refuse to participate in several joint projects (Exxon Mobil etc.)</li> <li>A ban for western companies on supply of equipment and oilfield services</li> </ul>	<ul style="list-style-type: none"> <li>The company has requested 1.5 trillion rubles help from the National Wealth Fund</li> <li>Purchase of Russian and Venezuelan assets of the Weatherford company</li> <li>Equipment localization (the aim of 70% by 2020 is announced)</li> </ul>
<p>«SBERBANK», «VTB», «ROSSELKHOZBANK»</p>  <p>СБЕРБАНК ВТБ РОССЕЛХОЗБАНК</p>	<ul style="list-style-type: none"> <li>Restriction of access to US/EU financial markets</li> <li>A ban on issuing any debts and making transactions with securities of these banks (with a maturity of more than 30 days) by western investors</li> </ul>	<ul style="list-style-type: none"> <li>Sberbank borrowed a 2 trillion ruble loan from Central Bank</li> <li>Sberbank is looking for the funding opportunities on Asian markets</li> <li>The state will purchase shares worth 239 billion rubles from VTB and Rosselkhozbank at the expense of NWF</li> </ul>
<p>«URALVAGONZAVOD»</p>  <p>УРАЛВАГОНЗАВОД</p>	<ul style="list-style-type: none"> <li>Freezing of joint projects with foreign companies: manufacture of locomotives with «Caterpillar» and subway trains with «Bombardier»</li> <li>Difficulties in attracting cheap loans, as most of the Russian banking system is affected by sanctions</li> </ul>	<ul style="list-style-type: none"> <li>For a number of military programs the company is raising funds from private banks that are not under sanctions</li> </ul>
<p>«DOBROLET»</p>  <p>ДОБРОЛЁТ</p>	<ul style="list-style-type: none"> <li>Closure of operations due to the cancellation of leasing, servicing and insurance contracts with the company by European organizations</li> </ul>	<ul style="list-style-type: none"> <li>Establishment of a new low-cost airline</li> <li>The company is now discussing opportunities with Asian leasing companies, which might be able to supply aircrafts</li> </ul>

<http://eng.altrc.ru/library/sanctions-brief-overview/>

However, even the caution of the European Union on sanctions could not bring off certain large entities of Russia; e.g. oil companies Rosneft, Transneft, Gazprom Neft; defense groups Oboronprom, Uralvagonzavod and the United Aircraft Corporation;

and banks include Gazprombank, Sberbank (Russia's largest), VTB Bank (Bank of Moscow), Vnesheconombank (state development bank), Rosselkhozbank (agricultural bank). Morgan Stanley assumes that its shale production and virgin Arctic fields are at risk, while Barclays assess a declining production ratio in 2015. In light of these sectoral sanctions, IEA's recent oil market report (August 12) has assessed that "EU sanctions are highly selective, exclude agreed contract, and can only be extended past one year by consensus. Their 'perimeter' seems loosely defined, potentially leaving room for finding ways around the most constraining measure." It further elucidates that "Neither set of sanctions will have any tangible near term impact on supplies. Even for medium term, their impact appears questionable."

The most interesting aspect of these sanctions is that the U.S restrictions are applicable to both oil and gas production while EU does not include gas sector and Gazprom. The separation of oil and gas industry is simply hostage to energy dependence of Europe where more than 30% requirements are met by Russia. This division further helps Russia to import machinery and specialized equipments for unconventional gas production. In fact, it is difficult to distinguish shale oil production equipments and shale gas apparatuses. The similarity of purpose makes restrictions blunt regarding unconventional oil extraction. Similarly, joint ventures of Russian oil companies enjoy some other waivers from existing sanctions regime. Therefore, existing ambiguity and differences in the nature of sanctions impede and undermine the impact as well as reduce the effectiveness of the same.

Therefore, it is apparent that Europe is not that much aggressive and keen to punish Russia as the U.S. desires and wish for bashing Vladimir Putin. Along with major banking institutions, sanctions list of the U.S. Treasury Department includes Gazprom (Neft), Transneft, Lukoil and Surgutneftegas, it certainly troubles the European minds. The difficulty, difference, and dilemma of (re)action have been appeared at various stages. It is not only confined to the split between the continental and island states in Europe, but also carving up nations among the least and most energy dependent countries. Since, financial and military concerns vary from state to state; the approach and willingness to comply with the intensity of sanctions are different. Though, the geography has a role to play; it does not guarantee to stick up for the

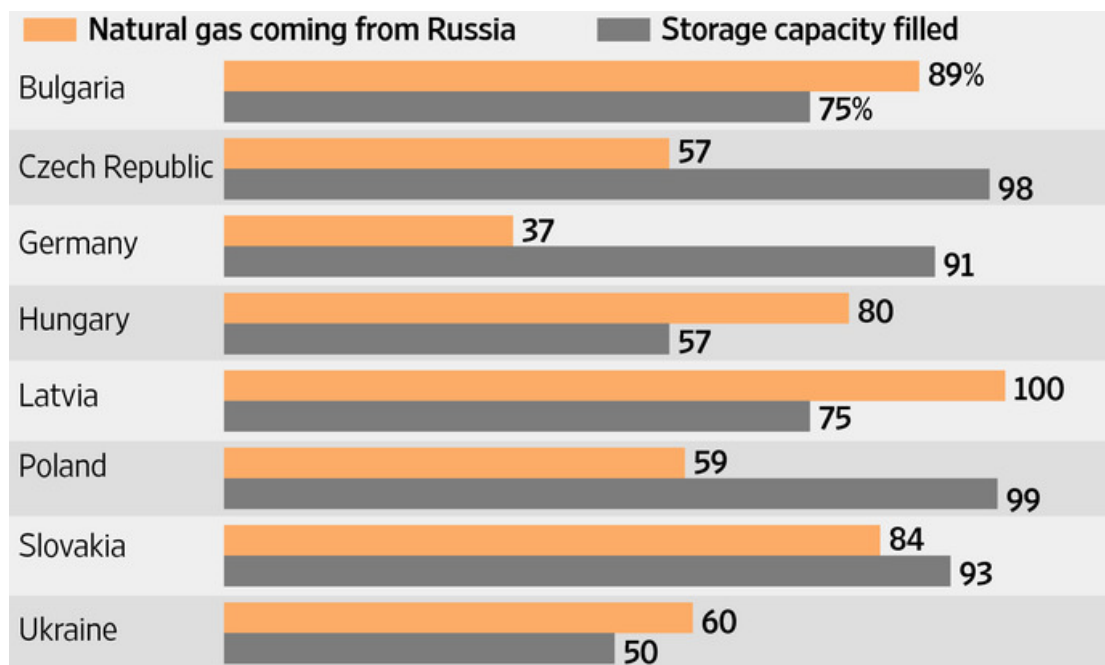
neighboring voice. Neither the Scandinavian countries nor Visegrad states have a single stand, albeit they belong to a separate regional (geographical) entity. In fact, simply by using the phrase 'European Union' does not reveal their united or monolithic structure and neither has it represented their unified singular stand against Russia.

Norway and Iceland, two NATO member countries, do not have the EU membership; however, Sweden and Finland, two EU member states are not NATO nations in the Scandinavian region. While Denmark has a membership in both organizations but Greenland has none. This antipodal stand has been reflected in their approaches toward sanctions against Russia as well. Though, at first, Norway had some tough stand on Russia, but later on, it did not favor for a strong presence of NATO in Ukraine. Initial sanctions hit them harder than several other nations because of a ban on the transfer of high technology for Arctic, deepwater, shale production and exploration, in which it has been deeply involved more than many other states. It is the biggest oil and gas producer in Western Europe and have sovereign wealth fund of \$860 billion. This fund has stopped trading in Russian market which held roughly \$8billion in stocks and bonds at the end of 2013. Sweden and Finland has taken a tough stand due to security concerns in Baltic region. In addition, Georgia, Poland and Ukraine are also playing their role behind the tougher stand of Sweden. The vocal support of conservative factions to Kiev has some sort of sub-organizational characteristics and obligations in addition to the loyalty of political elites. It is known that Sweden was persuaded by Poland for its Eastern Partnership (EaP) program, wherein three Caucasus republics; i.e. Armenia, Georgia, Azerbaijan, along with Belarus, Moldova and Ukraine were involved. Since, these six post Soviet Union republics set out an east European expression, and Russia purported the program as a measure to expand the sphere of influence in search of oil; Sweden at least made a difference in its regional manifestation. However, an open support to Kiev was not only debated and criticized in Sweden and Finland, but also reduced the process and thinking of getting membership of NATO in light of Ukrainian crisis.

Poland, along with Baltic States Lithuania, Latvia, and Estonia, alleges Russia that Ukrainian crisis is an act of aggression against a sovereign state. Polish government may have their own agenda but the skepticism of Baltic republics lie around their

demographic distribution. Though, Lithuania has a marginal 6.3% ethnic Russians; Latvia and Estonia have sizable inhabitants in their total population; i.e. 26.9% and 25.6% respectively. Thus, size of territory, population, and energy dependence (Lit. 92%, Lat. 72%, Est. 69%) make them worry when Russia emphasizes to protect the interests of its compatriots anywhere in the world. However, in spite of the huge energy dependence (91%), Poland has taken a strong stand. In fact, its yearning for creating a sphere of influence in Eastern Europe brings back various ideas and programs like EaP and Visegrád Four/Group (V4).

**Proportion of natural gas needs met by Russia for selected countries and the current level of their storage capacity. Estonia, Finland, Lithuania and Latvia receive all of their gas from Russia**



Source: Eurogas; Gas Infrastructure Europe (The Wall Street Journal)  
<http://www.wsj.com/articles/eastern-europe-braces-for-energy-shortages-as-russian-gas-flows-fall-1410517559>

V4 comprises of four Central European nations- Poland, Hungary, the Czech Republic, and Slovakia. Poland’s hawkish approach stands isolated on sanctions against Russia in this group. Other three states do not perceive Ukrainian crisis as a threat to the Central Europe. Slovakia understands sanctions are unnecessary and harmful, while Czech does not view Russian actions in Ukraine (Crimea and Donbass) as invasion but a civil war. However, in spite of having some cultural connections and issues regarding Hungarian ethnic minority in the southern Ukraine, Hungary goes by neutrality. Likewise, Romania has its Moldavian cultural concerns



in addition to the diaspora in Ukraine; hence, it has not taken a firm stand on various issues. Nonetheless, when dovish actions and approaches of these three nations have been criticized strongly, it is worth reminding that China has adopted more favourable stand for Russia. Its support has not been targeted with the same intensity for the same reasons. However, natural gas dependence of these smaller states provides sufficient reason to take that status-quo like stand for their domestic peace and stability.

In addition, by the first week of October, Russia has started to manage its gas supply for some European states where complaints of reduced supply has been registered by Slovakia and Poland in particular. Interestingly, along with Hungary, these states are making reverse flow of natural gas to Ukraine, when Russia had cutoff its supply in June. At the same time, they are criticizing Russia for making gas as a tool in a political fight where it has become an instrument of political posturing. However, most recently, European Commission has managed to put forward a deal between Russia and Ukraine wherein Ukraine has to pay \$3.1 billion of debt with the arrangements of pre-pay for gas month by month at above market rates until April in return for 5billion cubic meters. But the Ukrainian distributor Naftogaz requires 5bcm additional supply from Russia to keep EU supplies uninterrupted, if they do not receive reverse flow of natural gas. Though, the German Chancellor Angela Merkel and EU Commission chief Jose Manuel Barroso have urged Vladimir Putin and Russia not to escalate the gas war; Andrew Rettman (Oct. 2, 2014) quoted the former German chancellor Gerhard Schroeder, working for Gazprom, that the European Union should take back economic sanctions to improve the situation and Russia sanctions are “wrong... I want to say that loud and clear.” The stand and voices of these two Chancellors reminds us Henry Kissinger (2014) to close this discussion, who very recently said that “The economic system has become global, while the political structure of the world remains based on the nation-state”, which is probably the best explanation of energy geopolitics and the Russian dilemma of economy and status.

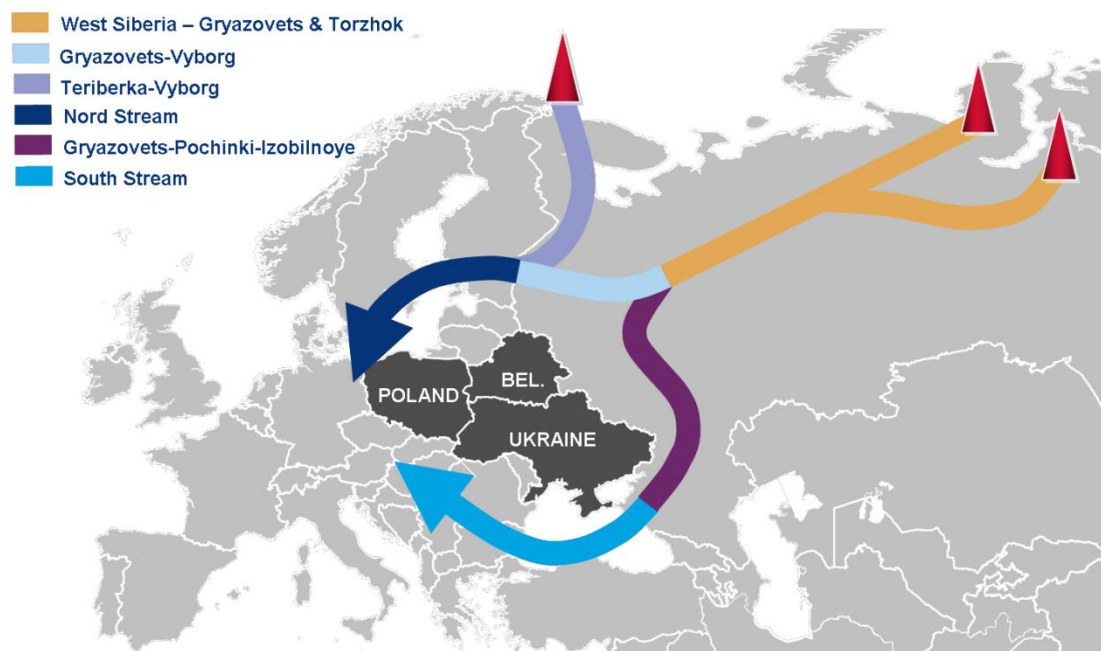
### **Push for Diversifications**

The United States has been talking of Russian energy leverage for a long time; however, shale revolution has made the same energy card available to them. They are planning to target established as well as potential Russian energy markets. This has

made it clear that Russia has no option but to diversify its markets in the long run. Fresh oil and gas fields are also required for new energy supplies. In this context, Asia-Pacific region has a large potential market, while Russia’s Far East and Arctic region holds sufficient energy to carry out the entire new demands.

On the other hand, since, Russian budget revenue, export, and GDP substantially depend on energy sector; serious long term measures against the trading interests could lead a new bandwagon politics. Therefore, Russian Asia-oriented energy and trade policy is a timely and pertinent move to strengthen the economy and maintain its budget revenues. On the other hand, though, the United States and EU sanctions highlighted various problems of Russian oil and gas sector; they cannot disengage Russia’s energy industry from European dependence and development as well. In short, currently Europe has no option but to rely on Russian oil and gas. Even, in near future, their Middle-Eastern, American, or African options would have a tough price competition with Russian pipeline supplies. The huge pipeline network and long-established supply credit of Russia has an edge against any new player. Therefore, any new supply has to compete with Russian energy giants; it is not the other way round.

**“Gazprom’s Strategy to Diversify Supply Routes and Bypass Transit Countries”**



Source: Wood Mackenzie

Though, sanctions and restrictions are some foreign policy tools of strong nations and international institutions; the subsidized supply and dependence are strong available instruments to challenge them as well. The military industrial complex and permanent seat in the Security Council provide a back strength to the Russian energy sector. It is not that kind of technology shabby country as has been portrayed in the western media. Of course, it requires critical and advanced technology for deepwater, Arctic, and shale oil exploration; however, it does not mean that only Russian energy sector is at the stake. Western energy giants are equally involved and hoping to reap a huge profit from the new oil and gas fields in Russia. Europe and America stand at different platforms for their energy (in)dependence and their geopolitical interests are also varied. Royal Dutch Shell, ExxonMobil, Schlumberger, or Halliburton have been allowed to carry on their existing business. In fact, the West wants to penalize Russia without cutting off supply to the market, which means global market stability and consumer prices are more serious concerns. That is why, until recently, business as usual was carried out by these energy giants. Now, for the first time, sanction measures have halted the Kara Sea project, a joint venture of Exxon Mobil and Rosneft; while Schlumberger started to move out U.S. and EU employees (Bloomberg 2014). However, it is doubtful that how long this sanctions regime would continue.

Since, other than the United States, Russia has the biggest exploration prospects for ExxonMobil; logic of laissez-faire was also given in favor of trade continuation. It was said by Kramer that Exxon “reports to shareholders, so it looks for deals it thinks will turn a profit, and it’s not in the business necessarily of promoting U.S. foreign policy interests...Exxon is not an arm of the U.S. government.” And drilling at Universitetskaya-1, Russia’s first Arctic well substantiate this logic. Sanctions may create hurdle, but not the flow of oil and revenue to Russia (Carroll et al 2014). It is apparent that energy interests of western companies or states are far bigger than they project. Their national/security interests seem to be prime in their every (re)action.

However, sanctions are not a panacea for every problem. It is more likely to create additional geopolitical crises in years to come. If Russian energy projects get hurt due to lack of critical technologies, financial restrictions, or other market forces for a long time; it would build some new equations in world politics that can shift geopolitical realities not only in Asia but also in other regions. In terms of market, a new trading

zone could also evolve in the most populous region of the world, where de-dollarization would make a long leap-frog. This new trading zone could undermine the west dominated financial institutions in the long run. In other words, an Asian 'Asia Pivot' would become a reality wherein Russia-China take-or-pay gas deal would be the first mile stone in this direction. Therefore, neither aggressive western behavior nor demonizing Russia is going to work. It would strengthen the desire to achieve their lost status in world politics. Though, Russia does not seem to expand its territories; however, any aggression in the sphere of influence, or infringement of vital interests would provoke them for a new (mis)adventurous expedition.

### **Geopolitics of Diversification**

Diversification of energy resources does not appear that they are away from geopolitics. Leverett (2006/07) talks about a shifting of oil-geopolitics and focuses on the "axis of oil" that is a real strategic problem. He pointed out that the real story is rooted in Russia's rising (energy) market power... and (in) Russia's state-owned pipeline system. Control over energy resources provides "market power", which is a source of political power and strategic influence as well. The hydrocarbon abundant nations "are increasingly inclined to use" this strength for political purposes. Hence, energy resources are directly related to three factors of geopolitics; i.e. *market power*, *political power* and *strategic influence*. However, energy security; i.e. sufficient energy resources at reasonable prices for the foreseeable future, is one of the most significant elements in the geopolitics of energy resources. It should be free from serious risks of major disruptions; i.e. sustainable and stable supply at affordable prices (Hancher & Janssen 2004; Haghighi 2007; Özgür Özdamar 2009). However, Yergin (2006:70-71) interpret it as "simply the availability of sufficient supplies at affordable prices".

On the other hand, growing energy deficient economies like India and China interprets energy security in terms of regular, reliable and affordable supply. Their dependency factor on producer states is inevitable. Their requirements are compelling to diversify imports. Even Japan is bound to diversify its trade and investment due to its stark scarcity of domestic resources. It is looking for energy partners after cutting off 30% of its supply when it shuttered the nuclear reactors following the March 2011 Fukushima Daiichi meltdown (Colman 2013). Current situation of these nations show

that Klare (2008) was very right in his analysis when he had stated that energy considerations would become the most important global concerns. Oil will cease to be a trading commodity; rather it will become a preeminent strategic resource on the planet. His new energy paradigm rightly analyzes the situation from continents to nations to oil companies, and finally down to the pipeline routes. Further, in terms of strategic partnerships, global energy structure could roughly be divided in producer, transit, and consumer states (Česnakas 2010) where interests of National Oil Companies are crucially involved.

During the Soviet era, energy enterprises had many geopolitical concerns. They were actively involved in overseas activities. One of their primary concerns was to influence the consumer states. However, in 1990s, they started to acquire stakes in the upstream/downstream sectors, and European oil and gas supply has become their main focus. LUKOIL and Gazprom took aggressive steps for being more competitive in a new energy world order. Facing aggressive tendencies of the open market was a new phenomenon for them. State assistance was required to sustain them. On the other hand, state in turn could get support in terms of revenue, financial assets and diplomatic clouts as well. So, they have been turned out to be instrumental in state policies which could make influence in the near abroad and strengthen the sphere of influence in the CIS region.

**“Major Russian gas export pipeline capacities toward Russia”**

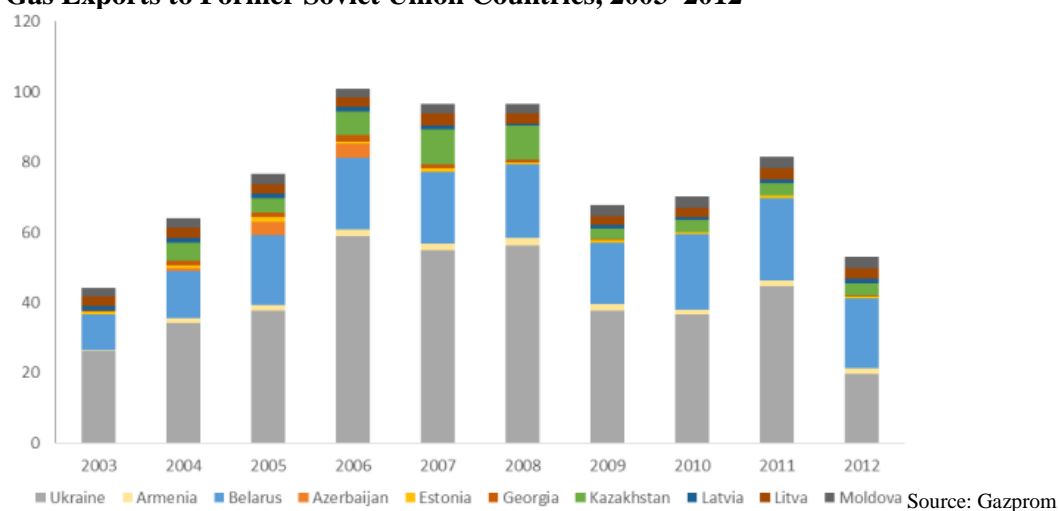
Pipeline	Capacity	Destination of exports
<b>Via Ukraine:</b>		
Orenburg-Western border (Uzhgorod)	26	Slovakia, Czech, Austria, Germany, France, Switzerland, Slovenia, Italy
Urengoy-Uzhgorod	28	Slovakia, Czech, Austria, Germany, France, Switzerland, Slovenia, Italy
Yamburg-Western border (Uzhgorod)	26	Slovakia, Czech, Austria, Germany, France, Switzerland, Slovenia, Italy
Dolina-Uzhgorod - 2 lines	17	Slovakia, Czech, Austria, Germany, France, Switzerland, Slovenia, Italy
Komarno-Drozdowichi - 2 lines	5	Poland
Uzhgorod-Beregovo - 2 lines	13	Hungary, Serbia, Bosnia
Hust - Satu-Mare	2	Romania
Ananyev-Tiraspol'-Izmail & Shebelinka-Izmail - 3 lines	27	Romania, Bulgaria, Greece, Turkey, Macedonia
<b>Total via Ukraine:</b>	<b>143</b>	

<b>Via Belarus:</b>		
Yamal-Europe (Torzhok-Kondratki-Frankfurt/Oder)	31	Poland, Germany, Netherlands, Belgium, UK
Kobrin-Brest	5	Poland
<b>Total via Belarus:</b>	<b>35</b>	
St. Petersburg-Finland - 2 lines	7	Finland
Blue Stream (design capacity)	16	Turkey (possible to Greece, Macedonia)
Nord Stream 1 and 2	55	Germany, France, Czech and other
<b>TOTAL EXISTING EXPORT CAPACITY:</b>	<b>256</b>	
<b>NEW PIPELINES:</b>		
South Stream	63	Bulgaria, Serbia, Greece, Italy and other
Nord Stream 3 and 4	55	Germany, France, Czech and other
<b>TOTAL PLANNED EXPORT CAPACITY:</b>	<b>374</b>	
<b>Contracted exports guaranteed for 2020-2025 (TOP volumes)</b>	<b>140</b>	

Source: ERI RAS

The producer or exporting states are primarily concerned with the security of demand and selling their products. It generates overwhelming share of government revenues. This huge earning provides a cushion to run the government as well as managing the budgetary allocations for domestic or diplomatic international concerns. This has inspired Russia to reassert its control over strategic resources. It has been focusing on pipelines and other market channels to establish the primacy in shipping hydrocarbons to international markets. Russia is capable of being a reliable energy supplier in the growing Asian market. In fact, lopsided energy distribution and new technology has given a signal that energy is going to be vital in world politics in decades to come (Abdelal & MiTrova 2013; Stanislaw 2008). It is largely responsible for many misadventures as well.

#### Gas Exports to Former Soviet Union Countries, 2003–2012

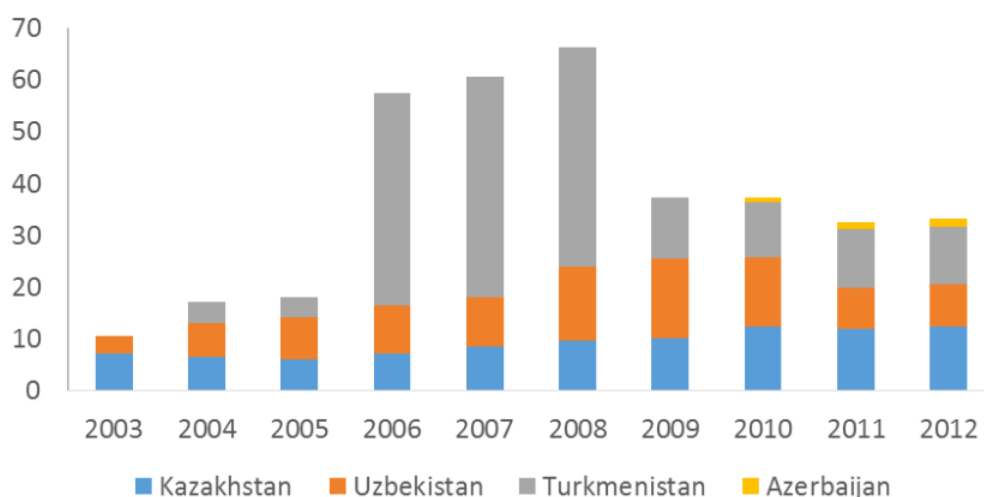


The ascendancy of Vladimir Putin brought energy sector under increased state control. His proposed Eurasian Gas Alliance puts emphasis on the tight relationship between Russian energy sector and the State (Hill & Fee 2002). Slowly, global influence of Russia has become interlinked with its oil and gas enterprises. Economic activities of energy ventures turned again into the geopolitical motives. Russian geopolitics of energy demonstrated its desire to reclaim its superpower status. The intimidation for Ukraine, Moldova, Georgia, Latvia, Estonia, Belarus, Armenia to cut off supplies (Poussenkova 2010; Woehrel 2010) validate their geopolitical interests as well as influence in its near abroad. Ukraine and Belarus in particular emerged on Russia's radar target due to their transit value. Russia is excessively dependent on these states for natural gas transit to European customers. Though, Russia has adopted the policy of carrot and stick (subsidy and disruption) to deal these nations, but that does not hit the mark over and over again.

As far as China is concerned, either we believe in the logic of 'looking East', 'de-dollarization', and 'strategic alliance' between Russia and China, or not; but the current gas deal has the potential to make a geopolitical shift with a commodity backed axis. Coincidentally, Russia is going to act as the President of the Shanghai Cooperation Organization (SCO) until the next summit in 2015. It has its energy agenda for making an 'Energy Club'. During the Dushanbe summit (11-12 September, 2014) in Tajikistan; along with President Vladimir Putin and Xi Jinping; Iranian Hassan Rouhani's participation has made the idea more crucial. Along with six (Russia, China, Kazakhstan, Uzbekistan, Kyrgyzstan and Tajikistan) existing member states; the summit meeting has finalized the procedures for expansion wherein Iran, Pakistan, India are in their priority list to be new members. If these three states together with Mongolia join the group, it will have command over 50% of the global gas and 20% of oil reserves. On the other hand, Turkey, which is pivotal in the Western energy strategy, could also get a full member status. In this framework, SCO would represent half of the global population as well. Since, the Western dominated global order is against the ethos of SCO; it aspires for an Asian security architecture free from the U.S. domination and its allies.



### Russian Imports of Central Asian and Caspian Gas (bcm)



Source: Gazprom

Furthermore, Russia, Iran, and China could make a major turnaround in the energy sphere. All are interested in Central Asian resources where Turkmenistan has assured the supply of natural gas to all these three states. Since, Iran's oil export mostly flows to India, China, Japan, South Korea, and Turkey; it desires to connect and export Central Asian energy to Ankara, while Turkey has a plan to become a hub for the European supply as well. The Iranian northern Caspian region is connected with Turkmen gas field via Dauletabad-Sarakhs-Khangiran pipeline. However, Russia is interested in Caspian Coastal Pipeline to cluster the Central Asian gas, and simultaneously going with Azerbaijan to challenge the pipeline diplomacy of the U.S in the Caspian Sea region, which includes Kazakhstan, Uzbekistan, Turkmenistan and Iran. The region has been acknowledged as a potential Quagmire and bountiful alternative to the Persian Gulf (Klare 2004) as well. The Chinese and U.S. interests make Russia cautious about their short as well as long term moves. American arms and troop's assistance to Georgia is a fresh episode in the minds of Russians. The entire scenario constructs a 'Russian perception' which set off to explore for a new sources of power. Undoubtedly, apart from defense deals that are directly connected to their military industrial complexes; they find solutions in their energy resources.

Fortunately, the situation has been improved for Iran. It could be taken as favourable in terms of existing sanctions regime. On the one hand, there are many other reasons for Iran to be satisfying; First, Crimea face off with the West has reduced the pressure on Russia to heed on American sanctions and recommendation. Second, Western involvement in Iraq has increased the importance of Iran due to their vested interests.

European tug of war with Russia on Ukrainian gas disruption and Donbass (East of the Ukraine) crisis has also mitigated the Western approach towards Iran. Lastly, it is not only Russia; many significant Russian energy importing European nations are also likely to invest in Iran. Germany, which rely 30% of its energy imports on Russia, France (17%), Italy (28%), United Kingdom (13%), Sweden (46%), Austria (9%), and even China have rushed to invest in Iran since late last year when they observed the proceedings of lifting sanctions on Iran. China has stated that its energy collaboration with Iran ‘and other Middle East countries are very open, transparent and legitimate,’ and they are with the conformity of relaxed restrictions on oil imports from Iran since June (Xinhua Jan. 2014).

However, these developments are not startling for Iranian oil and gas ministry. In December 2013, Iran had prepared an investment strategy for the next eight years and planned to attract about \$70 billion in its oil and gas industry. While in January 2014, it urged to invest in oil and gas sector at the World Economic Forum in Davos as well. Regarding this new approach and hope, Lukoil initiated negotiations with the National Iranian Oil Company for the development of oil and gas fields along with exploration in the Caspian Sea. Lukoil had been engaged in Anaran block in northern Iran for the exploration before it pulled out due to Western imposition of sanctions on Iran.

Recently, on August 5, 2014, Iran and Russian Ministry of Energy have signed a Memorandum of Understanding for a multi-billion dollar deal for trade in the oil and gas sector including power generation and power grid infrastructure. These energy projects and supply of hydrocarbon resources could benefit Russian mega energy companies. Use of local currencies in trade could reduce their dependence on Dollar or Euros, which is a problem in existing sanction regimes. Initially, this deal was for the purchase of up to 25 million tons (about a quarter of all Iranian oil) by Russia per year. However, finally it appears that they would have a transaction of about 2.5-3 million tons/year at a slightly cheaper than the cost of Brent, which could worth \$2.35 billion. It is equivalent to 10% of Russian oil export to the Asia-Pacific. Russians could re-export this crude oil or may process for petroleum products. Russia has processing capacity in Ukraine and Belarus. Furthermore, cooperation in establishing mini-refineries, purchase of electricity from Russia, and developing gas fields are other potential and pipelined areas between these two energy rich nations.

Though, serious concerns were raised by the U.S. in January on the \$1.5 billion/month oil-for-goods trade deal negotiations; Russia made it clear that ‘the Iranian side has offered(Russia) to participate in arranging crude oil shipments, including to Russia...Volumes are to be determined by market demand.’ It was further clarified that cooperation between those two ‘countries does not violate the UN Security Council’s resolutions’ (Xinhua Aug. 2014).

Another significant development took place on October 1, 2014, when the Eurasian Economic Union came closer to reality. Kazakhstan and Russia ratified the treaty. This Customs Union along with Belarus is scheduled to be started from January 1, 2015. Moscow’s agenda of forming an Energy Club would be strengthened by the joining of Armenia and Kyrgyzstan respectively by the end of October and December 2014. Regarding Customs Union, Ukraine is well aware of the fact that it can grab ‘a different price for gas’ and would shrink the current-account gap by committing the membership of the customs union like Armenia, which is not going to strike the EU pact. Igor Shuvalov, the First Deputy Prime Minister, said that ‘we are negotiating in an open and transparent manner with Armenia about our ties and everyone understands that we are giving Armenia a specific price for gas because they are signing the whole package of agreements on the customs union.’ Ukraine can cut its huge energy costs and diversify those funds for other developmental projects. So, by using the power of energy resources, Russia has been seriously pursuing other republics to join the Union which has the potential and plan to be modeled as the EU.

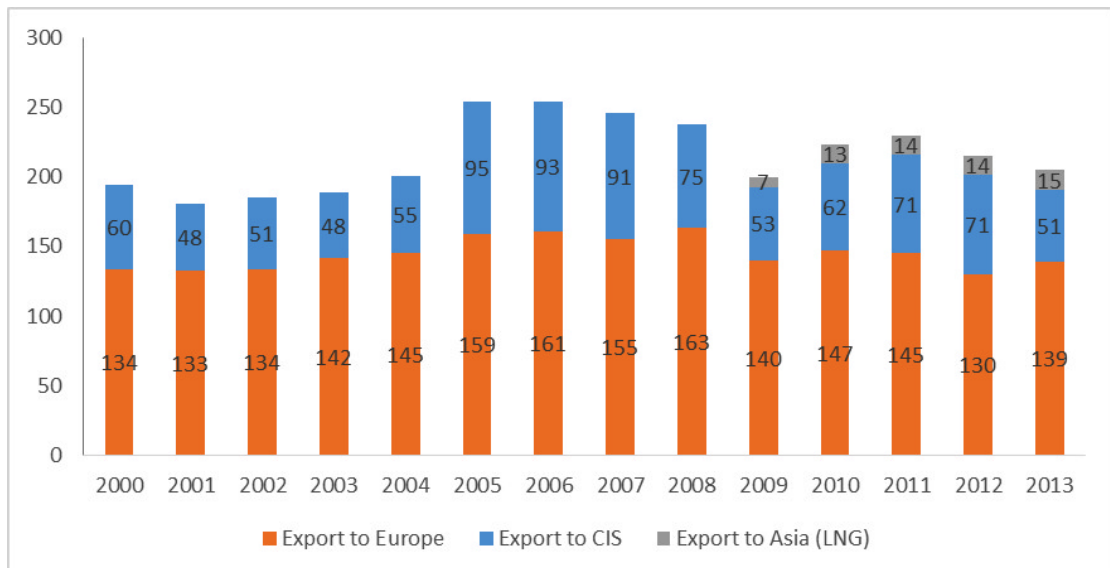
### **Russia Moves toward Diversification**

Energy trade has been influenced by international politics, decision-making, huge investment, and new technological advancement along with changing scenarios. Interestingly, all these elements have been reckoned with major obstacles in the progress of new supplies (Yergin 2006). However, Russian companies are ready to challenge these obstacles; e.g. Gazprom has made its Confucian strategy and planning to go to the Middle East through the Levant basin. On the other hand, Russia has to face a challenge of stronger European Union lobby or “cartel” of gas consumers. This pressure group is making all its efforts to ratify the Energy Charter that does not meet the Russian hopes and interests. To cope-up with these challenges, Russia started to use its presence at the WTO by making its case against the EU energy policy.

Moreover, since August 2007, Russian moves toward the Arctic Ocean drew political and scholarly attention. It is significant not only in terms of oil and gas, but also in terms of geopolitics. Therefore, ultimately, these various factors have promoted and strengthened the idea of diversification. By all means, Europe, CIS, and East Asian regions have been engulfed by this idea and constraints as well.

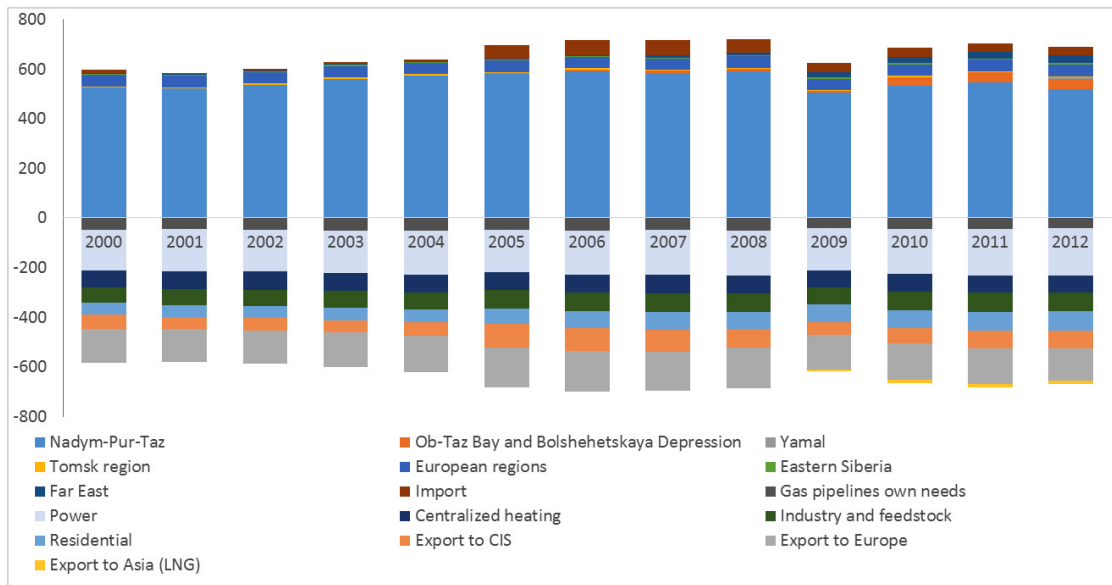
The diversification of oil and gas industry, and seeking a new energy market is a difficult task for all the nation states. It is simply because this industry has not only been distinct from other industries, oil and gas is extremely different from other normal commodities as well. It is different not only in terms of politics, but also in terms of economics (Yergin 1991). It has never been a static market commodity; rather it has the most volatile tendency in the long as well as short term. That is why, since 1973, consumer states have done everything for sustainable supply of energy resources in an impulsive energy market. However, unlike oil market, gas is highly regionalized, and implies transactions that are more geographically concentrated (Reymond, 2009). Once pipelines built, it cannot be removed. It locks the seller and buyer into a long-term relationship (Naughten 2007). Therefore, pipelines accentuate interdependence.

### Russian Gas Exports Dynamics (bcm)



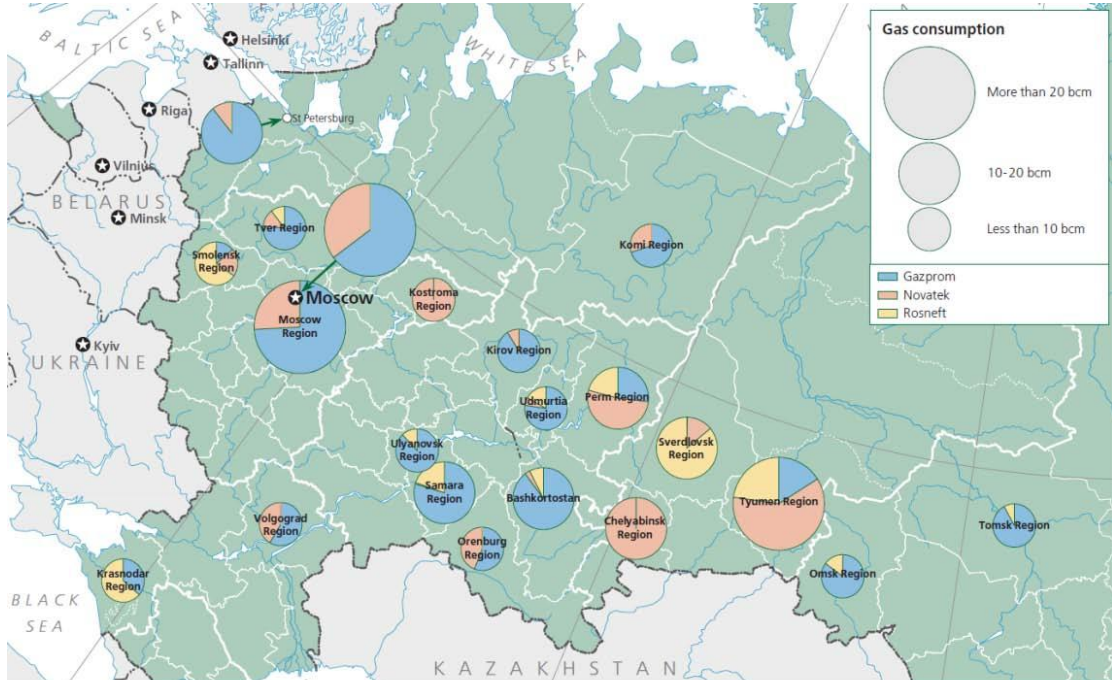
Sources: Federal State Statistics Service, ERI RAS

## Natural Gas Supply/Demand Balance in Russia, 2000–2012 (bcm)



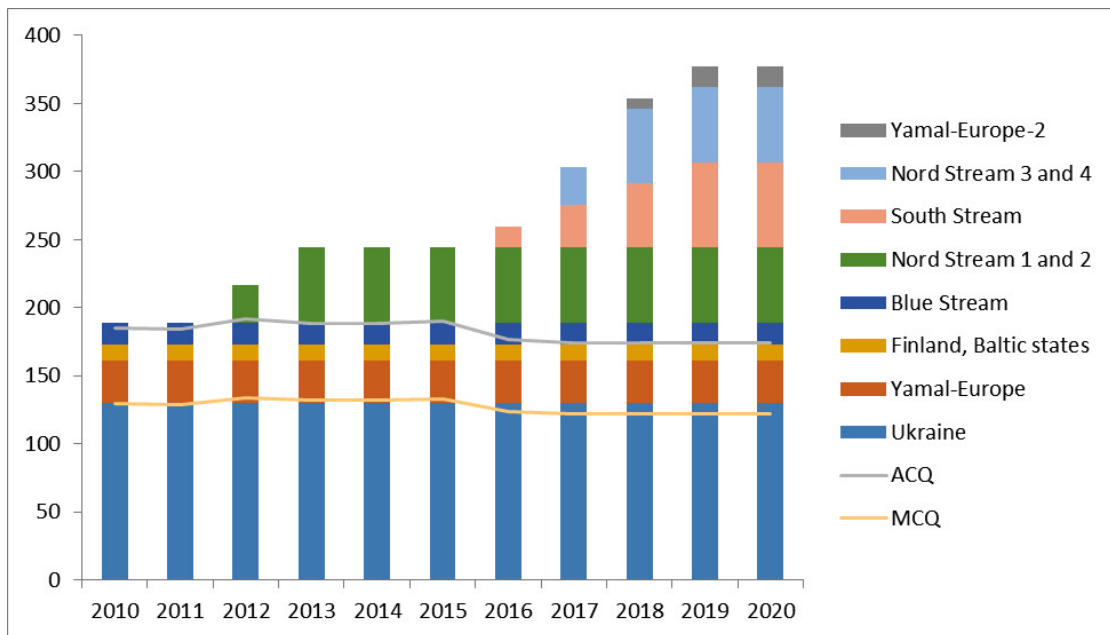
Sources: Federal State Statistics Service, Energy Research Institute of the Russian Academy of Sciences (ERI RAS)

## Market Share of Gas Producers in Some Regions



Sources: Gazprom, Sberbank Investment Research

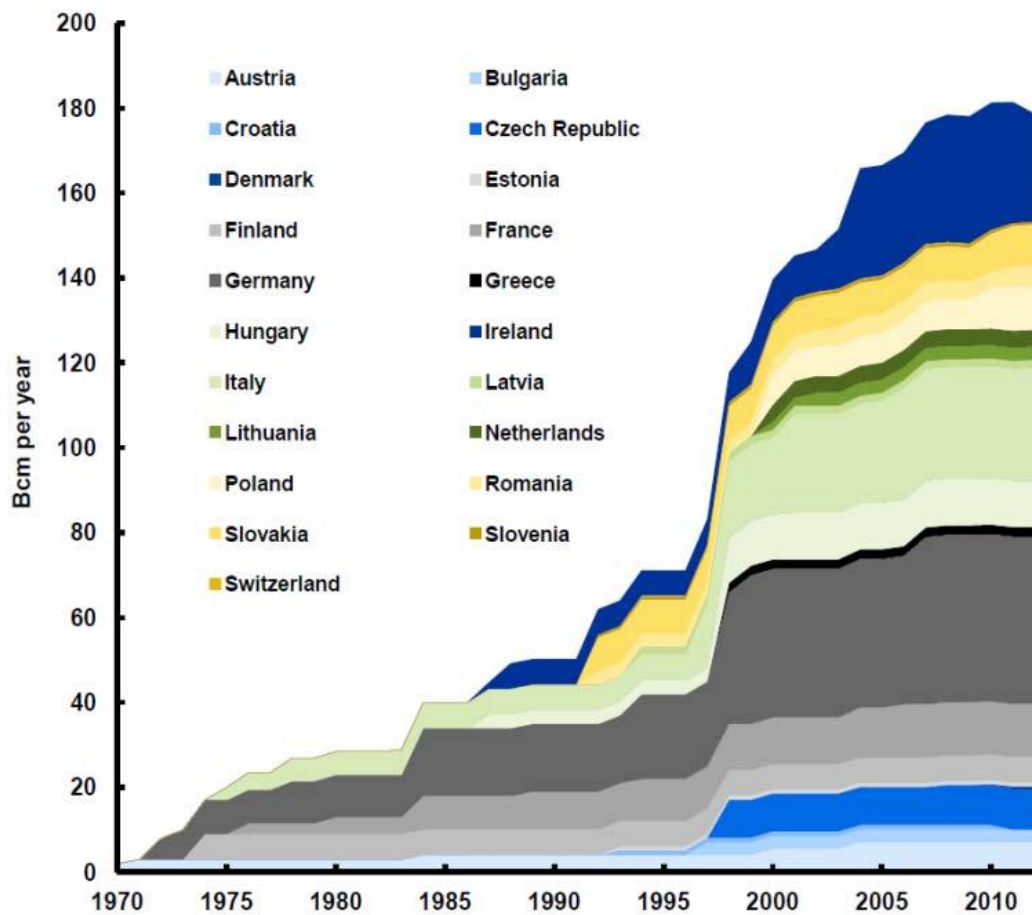
### Russian Gas Transportation Capacities to Europe (bcm)



Sources: Gazprom, Sberbank Investment Research

### Russian Gas Export Contracts for Supplies to European Countries, 2005–2012

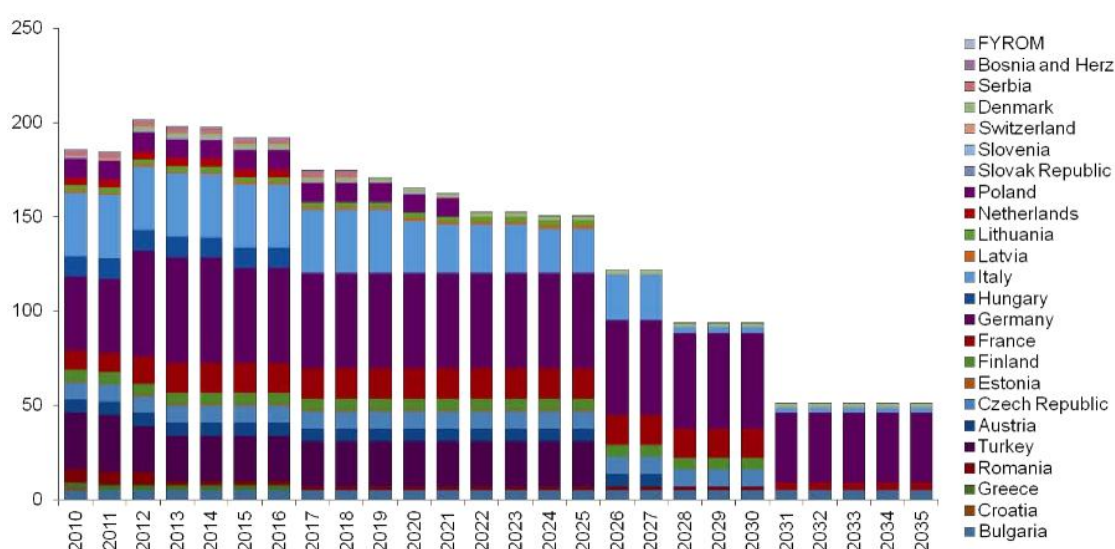
#### Gas contracts with Russia



Source: IHS CERA.

Source: CERA

## Duration and Volume of Russian Contracts for Delivery of Gas to Europe (bcm)



Source: Cedigaz, ERI RAS

### Forecast of the Russian energy export for the period up to 2030

Indicators	2005 actual	2008 actual	Phase 1	Phase 2	Phase 3
<b>Total energy export (million tons of coal equivalent)</b>	865	883	913—943	978— 1,013	974—985
same (in % as compared to 2005)	100	102	106—109	113—117	113—114
<b>including:</b>					
<b>crude oil (million tons)</b>	253	243	243—244	240—252	222—248
<b>natural gas (billion m<sup>3</sup>)</b>	256	241	270—294	332—341	349—368
<b>coal (million tons of coal equivalent)</b>	58	70	72—74	74—75	69—74
<b>electricity (net export, billion kWh)</b>	12	17	18—25	35	45—60

Source: Ministry of Energy, *Energy Strategy of Russia for the Period up to 2030* (Moscow: Ministry of Energy of the Russian Federation, 2010), pp. 136.

As far as Russian economy is concerned, it has move a successful step toward stability, but still remains dependent on energy exports that make it vulnerable to external supply shocks. So, not only for making a cushion, but also to explore new markets; Russia has started to look East Asia as its potential long term destination. Its policy toward Asia is more tactical rather than strategic. The question of building long-term and favorable relationships with rising powers is yet to be solved by Russian policy makers (Wallander 2007).



Though, Russia is ready to make huge investments in various new infrastructure plans to fulfill Japanese requirements; China comes first to the Russian policy makers. It aims to grab 15% of the global liquefied natural gas (LNG) market by 2020 that is very difficult to hold. However, for China, Russia constitutes an ideal supplier. It has large oil and gas fields in East Siberia along with its Far East regions. By this move, Russia can make a strong foot in East Asia (Guillaume 2010). Russia intends to invest \$100 billion to create a new Asian production and transportation energy system in the next two decades. On the other hand, China is hoping to import roughly 20% of its total energy from Russia in the coming decades. This shows a good indication for the ‘Russian energy complex’ that has started turning to the East. Russia’s new reserves are better destined for the Asian rather to the Western markets (Weitz 2008; Ferdinand 2007). However, Russian strategy, along with other means, is focused on to ‘manipulate strategically’<sup>37</sup> the behavior of its clients (Stulberg 2007).

In Russian energy strategy, Chinese market is not going to collude with the European bazaar in short or medium term. Due to the vast and expanded reservoirs of natural gas, Russia would supply gas to china without impeding its established European market. This division of supply is fruitful for Russia in terms of supply security. In fact, it could deliver two big markets without depending on one region. It also shows the production capacity and supply strength of the Russian companies. This power of energy frightens and alarms the European states as well as the U.S. which is instrumental in dealing with the West.

In this context, since Chinese oil and gas consumption is far higher than its production; they are well aware of Russian significance in their continuing growth and development. Recently, China has surpassed the United States in oil imports. In December 2012, it has become the world’s leading importer for the first time in nearly four decades; while at the same time, North Dakota, Ohio and Pennsylvania together produced 1.5 million barrels of oil a day, i.e. more than Iran exported (Engel & Windrem 2013). Moreover, oil production of the U.S. is ready to outstrip the measure of crude the country imports for the first time since 1995 (EIA 2013; Reuters 2013). Their net imports of liquid fuels, including crude oil and petroleum products, would fall to their lowest level since 1987 (Crooks & Fifield 2013).

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<sup>37</sup>“Strategic manipulation involves restructuring a target’s decision situation, alignment choices, and risks to maximize the appeal of a favorable outcome or minimize the appeal of an unfavorable one”.

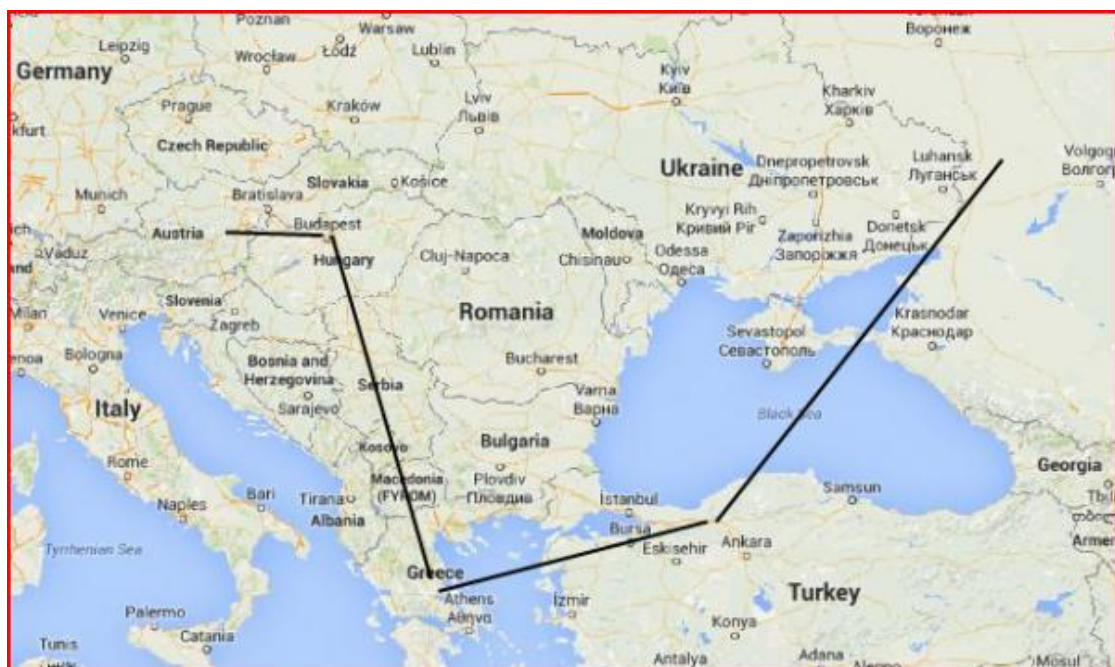
In spite of all these new records and development in the American energy industry; Russia still counts sixth in its total imports of petroleum products and fifteenth in crude oil which is ahead of Iraq, Nigeria, Kuwait, Ecuador, and Brazil to the U.S. (EIA 2013). Even in the second week of October 2014, Russian prized oil has been arriving at the U.S. West Coast. Russian Sokol light oil from the Far East region has been reaching in California for the first time in last six years. It is being brought to the western states from Korea since May (Bloomberg Oct. 3, 2014). This situation strengthens the oil industry in Russia and provides enhanced bargaining power in dealing with the West. On the other hand, American shale gas boom or ‘fracking revolution’ through the hydraulic fracturing and Asia’s rising demands have rendered a perfect environment to Russia wherein Europe would remain the main market, while East Asian states would become the major target for the energy diversification plans.

Recently concluded Russia-China long-term gas deal - ‘Holy Grail’ in western press - presents the best example of a new Russian diversification strategy for the new energy world order. Last year, in March (2013), a memorandum of understanding was signed between Gazprom and China National Petroleum Corporation (CNPC). On May 21, 2014, both countries have stricken a deal to supply natural gas for the long 30 years. It is a \$400 billion contract to sell 3.7bcf/d (38bcm) gas to CNPC starting in 2018. The largest Gazprom deal ever has the potential to nearly double the size depending on future internal needs of China. The feed gas for the eastern ‘Power of Siberia’ route’ will come from the new East Siberian developments wherein Kovykta and Chayanda fields of Gazprom are significant. Initially, \$55 billion will be invested by Gazprom to develop the projects, while China would make \$25 billion in advance payments. For a Russian point of view, these Siberian resource earnings would help develop Russian gas industry to connect the eastern parts of extraction with the Western parts that require appropriate infrastructure at the Russia-China border. Current deal does not cover the ‘western pipeline route’ which connects Chinese western border with the West Siberian gas fields. However, in October 2009, CNPC and Gazprom had made a framework agreement regarding Altai project that envisages a pipeline from Siberia to the western borders. It has the potential to divert gas supply from Europe to China. Furthermore, the gas deal has a significant psychological value. It will secure investors confidence which the U.S-EU sanctions have made their best to wear down.

Thus, supply can be diversified from the East to the West or vice versa. In this respect, the Eastern route gas supply would be noteworthy for the strategic cooperation in the long run. Russian leading foreign trade partner China has some ambitious goals, and this deal is just one long-term milestone. Moreover, they have envisaged granting preferential mineral extraction tax regimes. A decade long rigorous discussion ended positively and paid Russia well to diversify its market sustainability. However, most importantly, this deal has pushed both the nations to become natural partners which further opens the door for stronger financial and economic ties and trade in their own currencies. Increasing bilateral trade in ruble and renminbi is certainly a caution point for dollar transactions, because the world's fastest growing economy is going to keep pace for the next thirty years.

On the other hand, Russia has started to diversify energy resources by a new acquisition strategy as well. It has attempted to broaden and widen the pipeline infrastructure. Various new pipeline projects have been launched, e.g. the South Stream pipeline project that would extend under the Black Sea to Bulgaria with a south stems extending to Italy, and a north junction to Hungary; (Kahn 2007).

### **How Black Sea is Crucial**



<http://www.nourishingobscurity.com/wp-content/uploads/2015/02/new-pipeline-option-600x359.png>

## South Stream Pipeline



### PLANNED SOUTH STREAM AND NABUCCO GAS PIPELINES



[https://i2.wp.com/newsimg.bbc.co.uk/media/images/45891000/gif\\_45891665\\_nabucco\\_south\\_stream\\_gas\\_pipelines\\_map466.gif](https://i2.wp.com/newsimg.bbc.co.uk/media/images/45891000/gif_45891665_nabucco_south_stream_gas_pipelines_map466.gif)

As far as acquisition is concerned, new places of energy resources, e.g. Arctic, have been taken into hands. Huge investments in projects other than Russia have also been started; e.g. LUKOIL investments in the upstream projects are on track. In fact, various investments have been aimed at acquiring assets abroad in companies having lower production costs. In addition, Gazprom has started to expand in Europe to make a strong foothold in downstream projects as well. It would provide Gazprom a better competitive ability and global reach in the market (Poussenkova 2010).

## **Russian-European Complications**

Russian relations with the European Union substantially depend on its supply of energy products. The Russian gas disputes of 2006, 2009, and 2014 with Ukraine have made energy a priority in their relations. Year 2006 was the first experience, when European Union nations faced a crisis due to transit of energy through Ukrainian routes where the supply was cut off by Russia. This cut off did happen due to price and subsidy deals and pacts in between Russia and Ukraine, but the outcome has become very serious and wider in nature. A new kind of politicization of energy supply has taken place in relations among Russia and individual European Union member states as well as European Union as a whole too. The disruption was seen as a gas war between two nations but it has impacted many others as well. Since, other states had good or friendly relations vis-à-vis energy supply and other market products; the issue had become important for long term supply or demand security. Various dimensions of relationship between Russia and the European Union states have become prone to analysis through the new energy security lenses (Baev 2008).

Though, Russia has a huge dependence on transit states of East European countries, especially on Ukrainian and Belarusian routes, it has been a reliable energy supplier to the European states even after formal disintegration of the USSR. Roughly, thirty two nations get their energy supplies from the Russian oil and gas companies. Other than few handful states, usually these nations have neutral market relations with Russia. However, it is also true that sometimes due to various historical reasons or contemporary geopolitics of the region; relations between these two blocks get tense.

Energy dimension has always been a focal point in the European Union's relations with Russia, be it political or the ever growing economic affairs. Their trade relations are heavily entwined with the supply of Russian energy resources. The Eurostat figures for 2006 and 2008 shows the significance of trade partnership where it establishes Russia as the 3<sup>rd</sup> biggest trading associate of the European Union, which is applicable to both for imports and exports. For all of their exports, Russian share was 6%, whereas for imports it was about 10%. And this trading status is largely due to import of energy resources. In fact, energy is the primary driver for their increasing interdependent economies. Data for these years clearly shows that "energy imports cover (in value) 25% of all EU imports, with Russia's share being about two-thirds...

Some 50% of all gas and 30% of all oil imports into the EU-27 comes from Russia, whereas more than 50% of all Russian energy exports go to the European Union” (Jong 2008).

And, at this point of time, it was always expected that the figures would grow further, both in terms of volume as well as money. Since, energy trade is different from other commodities, which involve primarily economic dimensions of exchange mechanism; it holds political and strategic dimensions as well. Energy trade has increasingly interlinked politics with other subjects. Thus, energy policy making and design are now ever more influenced by the political equation, understanding and perceptions.

Politics and perception have secured an unending place in the European Union - Russia energy relations. It has not only elongated the complexities of energy market mechanism, but also advanced the linkages of other components with the direct state decision making process. Political control and influence virtually defied the rules of laissez-faire economy. Other than state, not a single component of this trade is strong enough to change the ongoing trends. They could be supplementary or facilitator to the state moves, which ultimately set the global energy trends in motion. It is equally true in case of European Union where each and every state follow its own energy policy because of historical and infrastructural reasons. They do not follow any combined supply security strategy because of internal political differences as well. States have different opinions within the Union on the instrumentality and magnitude of energy resources in general, and about the leverage of Russian energy resources in particular. However, the question of supply security or demand security is concerned with the existing physical infrastructure and politics of individual states-, which include their regional aspirations or international scenarios as well. Whereas transportation is, additionally, vital component for the end use transmission of the energy resources.

On the whole, the external or internal energy policy dimensions are also influenced by the previous experiences of individual states regarding energy trade and are helpful to making perception of both producer as well as supplier. However, nowadays, transit routes and states are also getting required significance to construct a good or bad perception of a trader. Institutional mechanisms and related arrangements, which facilitate “commercial trade relations have their own particular dimensions; such as

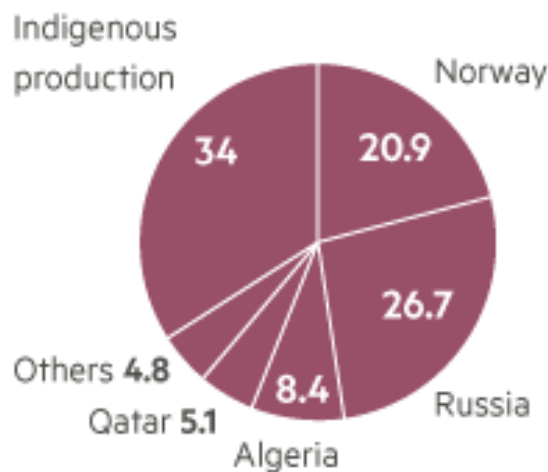
the role of Gazprom and its bargaining powers” (Jong 2008). While, the international legal instruments which cover the energy trade as well as investments have become more significant as compared to previous years.

### **Russia-EU Trade Relations in the Global Energy Market**

It is not only the European Union or any individual state in a far-flung region; procuring regular and affordable energy supply is the fundamental factor to the sustainable economic growth for every nation state. Though, European Union, along with other states in the region, has a technological edge in the ways and patterns to using the energy resources, the energy imports are not going to be reduced in years to come. In spite of the increased energy efficiency due to technological advancements, the European Union “figures indicate a rise in primary energy demand from some 1,800 Mtoe (million tons of oil equivalent) in 2005 to almost 2,000 Mtoe in 2030” (Jong 2008).

### Sources of EU gas

% of total (2013)

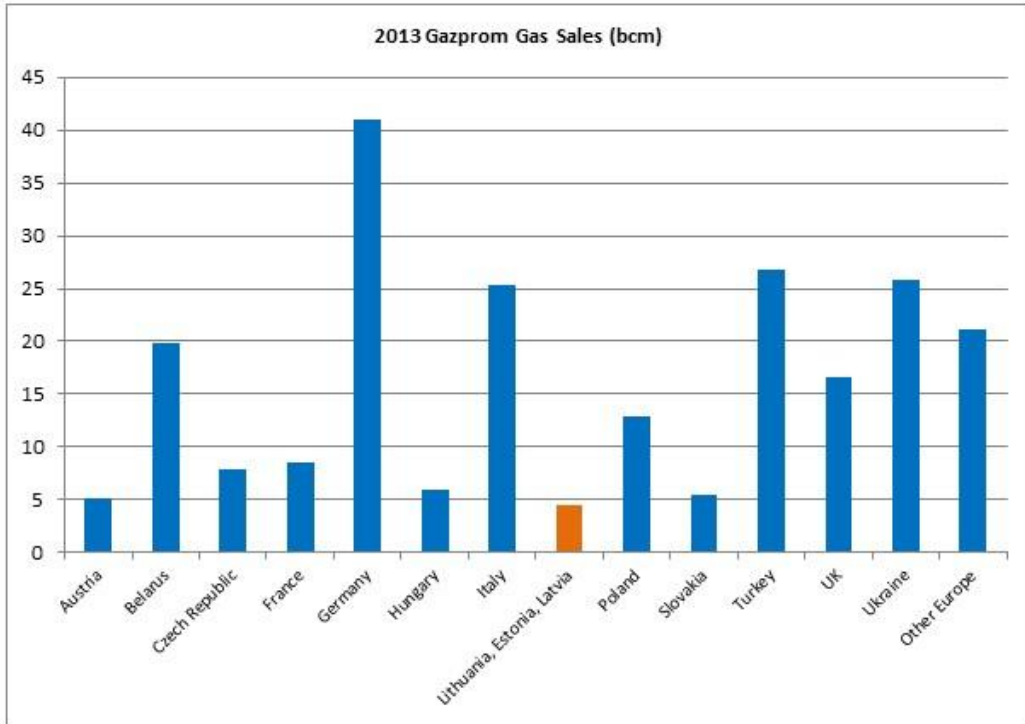


Source: Eurogas

FT<sup>38</sup>

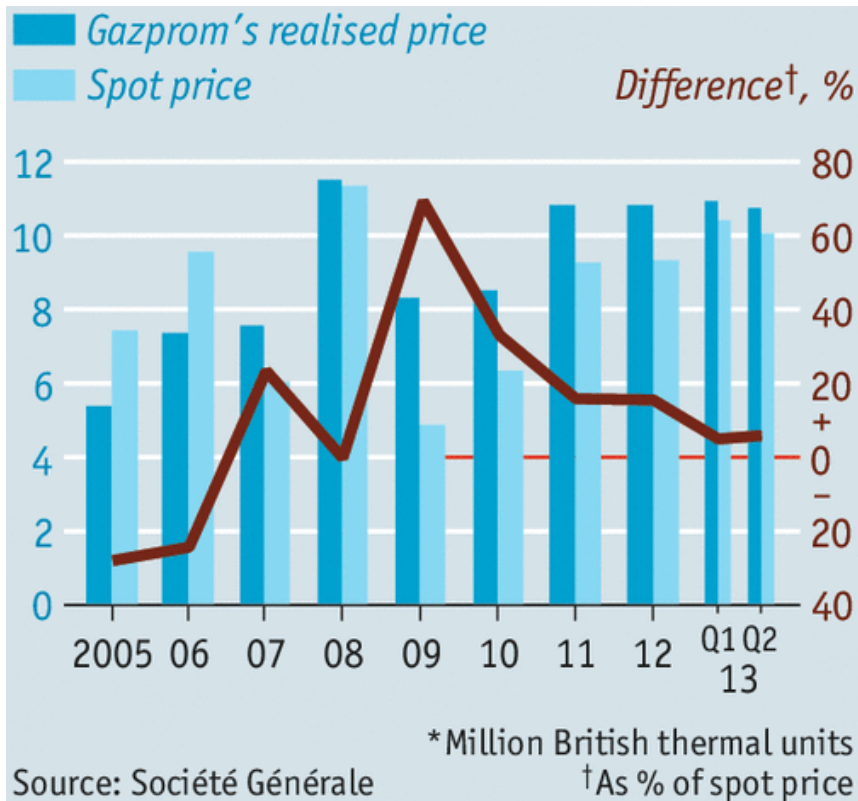
<sup>38</sup> <http://www.ft.com/intl/cms/s/0/f73e0e3c-bc05-11e4-a6d7-00144feab7de.html#axzz3YbP3ZzAJ>





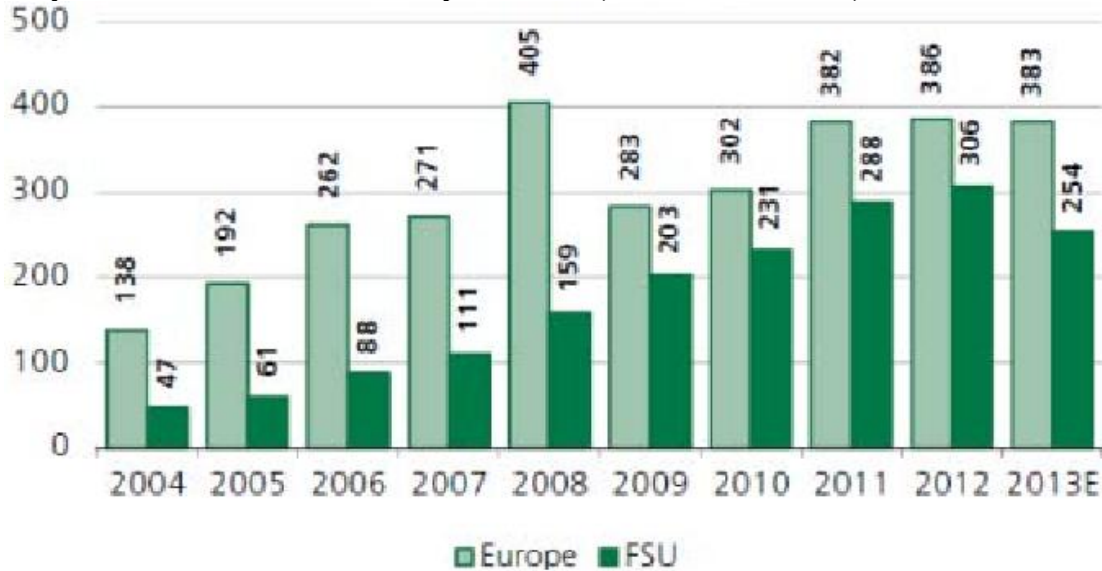
Source: "Gazprom Annual Report 2013 (Other Europe represents a combination of gas supply to all European countries that were each supplied with less than 5 bcm of gas by Gazprom in 2013, see note 3)" <http://blog.evaluateenergy.com/lithuanian-Ing-%E2%80%93-the-latest-european-move-away-from-gazprom-and-russia>

### European Gas Prices (\$/mbtu\*)



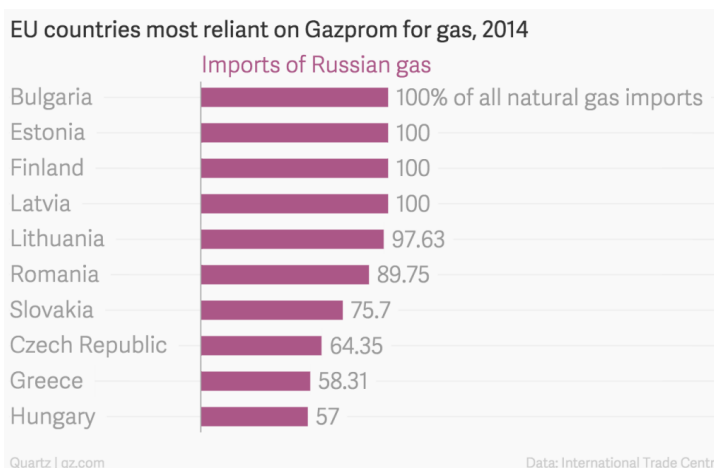
Source: Société Générale <http://www.economist.com/news/business/21592639-european-efforts-reduce-russian-state-owned-companys-sway-over-gas-prices-have-been>

### Gazprom's Realized Prices in Europe and FSU (\$/1000 cubic meters)



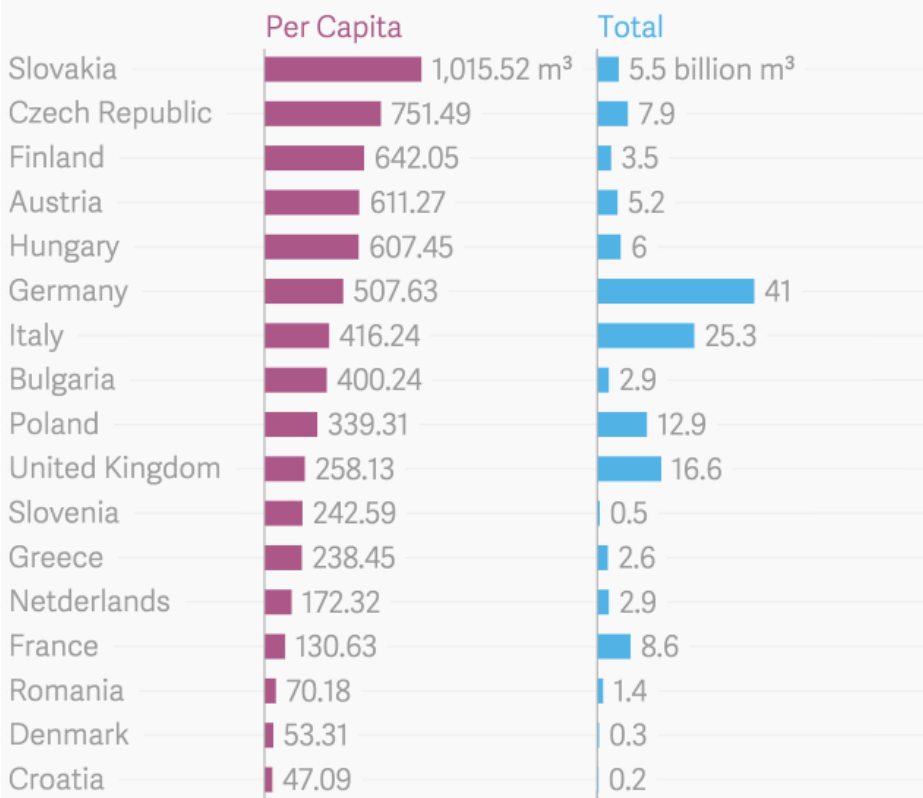
Sources: Gazprom, Sberbank Investment Research

In spite of coal, renewables, and use of uranium in the European energy mix; oil and gas, which accounts nearly 60%, would continue to be largely mainstay of energy balance in various European countries as well as the European Union on the whole. It is expected that the next two decades would experience a remarkable change in the European energy import dependence, especially for oil and gas. New estimated projections show that overall import dependency of energy resources has been rising from existing 55% which could go up to 65% by 2030. This estimate holds that demand of roughly 90% oil and gas would be covered by only imports. Though, these developments are related to the European energy mix, however, reflecting a global picture of energy consumption as well, as focused and found in the World Energy Outlook of the International Energy Agency (IEA 2005/06/07). On the whole, it is estimated that world energy demand would roughly increase by 55% by 2030.



[https://qzprod.files.wordpress.com/2015/04/eu-countries-most-reliant-on-gazprom-for-gas-2014-imports-of-russian-gas\\_chartbuilder.png?w=1024](https://qzprod.files.wordpress.com/2015/04/eu-countries-most-reliant-on-gazprom-for-gas-2014-imports-of-russian-gas_chartbuilder.png?w=1024)

### Gazprom's EU customers, 2013

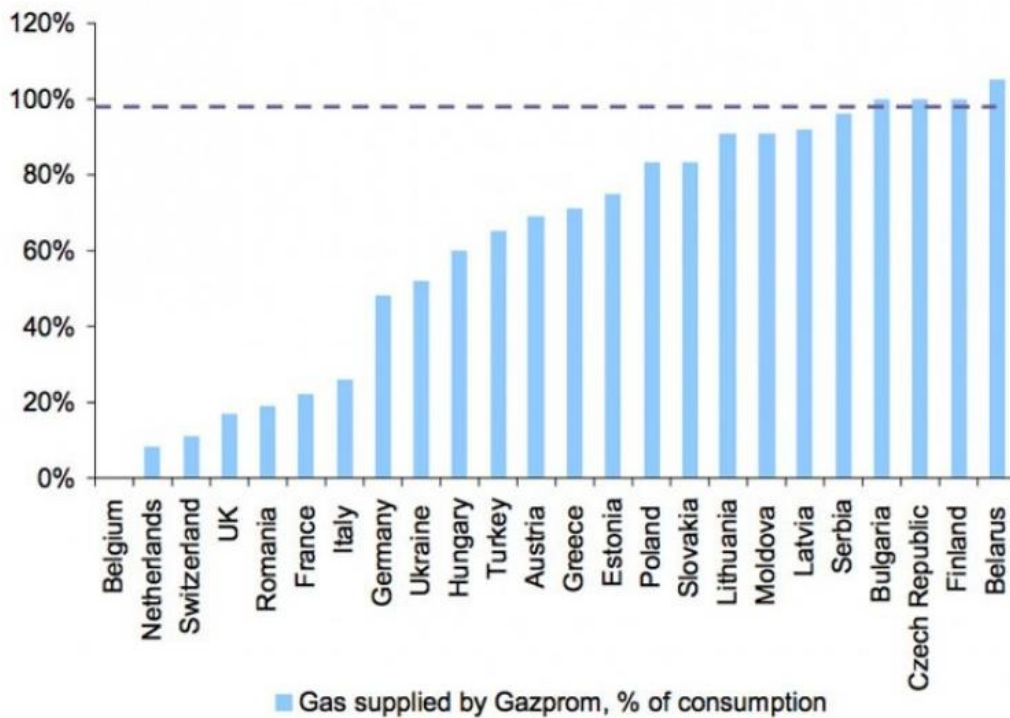


Quartz | qz.com

Data: Gazprom, Eurostat

<http://qz.com/388148/the-eu-countries-that-depend-the-most-on-gazproms-russian-gas/>

### Import Dependency on Gazprom



Source: Morgan Stanley, Gazprom

<http://www.telegraph.co.uk/finance/newsbysector/energy/11056880/Europe-will-be-Russias-hostage-over-gas-supplies-for-at-least-another-decade.html>

Today, around 80% of worldwide energy demand is covered by the fossil fuels. Though, having a decreasing trend from 35% of existing consumption, oil has remained the single largest source of energy and holds 30% of the total share. Coal consumption has been increased from 25% -28% and natural gas would increase from existing 21% - 22%. However, it is surprising that the gas has been estimated only as a slightly increased energy resource. On the other hand, roughly half of the increased demand appears in the power sector and on fifth is being held by the transport sector. Therefore, it seems that globally the role of electricity would increase. The share of electricity in the energy consumption could double and it could go from current 17% to 22%. If this trend persists, the global fuel consumption would certainly be driven by this sector where petroleum fuels would mostly be used in the transport sector. This kind of fossil fuel consumption would push further requirement of imports in various consuming regions.

The aforesaid trend of demand and supply would influence various regions of the world. The most focused regions could be the developing nations and the OECD region, while India and China would have major share of energy demand distribution. If on the one hand, the OECD countries would experience a decline in the share of its 'energy pie' which could be from its existing 50% to some 40% by 2030. The developing nations, where India and China are the main drivers, could have a growing share from existing 40% to more than 50% in 2030. This high demand of energy consumption would produce 75% of the global growth share and come from developing nations. Interestingly, India and China alone would produce around 45%. It was projected that 2010 onwards China would overtake the U.S. as the largest energy consumer. Even power sector boom in India and China would make these nations as one of the biggest coal importers. China could become a net importer of coal b 2030 having a 7% share of the international coal market; while Indian coal import dependency could move from current 12% to almost 30% by 2030. A similar pattern has been experienced and predicted in the field of oil and natural gas where India could become the third largest oil importing nation after China and the United States. Dramatically, Indian and Chinese oil import dependencies could go up to 80%-90% as compared to current scenarios. This hard and unfavorable situation has made political and public awareness regarding the availability of energy resources especially oil and natural gas.

Interestingly, it is a common knowledge and estimate that we have roughly 1,200 bb of oil reserves which could produce and satisfy our current requirements for the next forty years; while natural gas has a more strong prediction and estimated that these reserves are around 185 tcm and could feed for the next sixty years at the existing level of productions. However, new explorations have shown that more oil and natural gas would be discovered for which new technology has not only taken place but technology development and inventions should also be continued. As far as coal is concerned, it is abundant and estimated about 1 trillion tonnes, while its current consumption is only around 1,900mt/year. On the other hand, oil and natural gas resources are highly geographically concentrated and even in specific regions as well. Around 60% of world oil resources are located in the Middle East and North African (MENA) regions; however, 75% of world natural gas resources are in the MENA and Russia. Due to this high level of concentration of these resources, some national or state owned oil and natural gas companies hold around 90% of the total resource reserves.

Therefore, access to these resources has become a salient feature in the energy discussions and crucial in the global energy market. Access of consuming nations to these resources and access to develop them has become focused in every nook and corner of energy market. Global energy market requirements and inter-regional trade of energy resources have become a challenge before consuming nations, especially in the field of oil and natural gas. Only few handful nations are going to hold and be the net-exporting countries with rest as a net importer. However, the high concentration of energy resources is not the only problem; political instability in those regions and ongoing regional conflicts also obstruct the smooth supply to the market. This makes not only security threats to the nation states or regions; it creates problems of energy security as well. So, geopolitical questions are very important drivers vis-à-vis energy needs and interests of nation states. This is why consuming states have been making arrangements with the national energy companies to secure their supply security where India, China, Japan, and Korea are significant. In this background, it is possible that international world order may shift toward a regional or scattered system based only on national interests rather to a framework based on multilateralism or market orientations. Energy crunch or ill distribution of energy resources may push bilateralism or regionalism in a new energy market and Russia-EU relations are not

beyond this possible potential shift vis-à-vis energy security. Therefore, the largest group of states in the global economy; i.e. European Union, should develop a clear vision and strategy to deal not only with Russia but global energy market as well. As far as Russian political-economy is concerned, ‘bureaucratic capitalism’ and ‘managed democracy’ like phrases show some kind of noteworthy shifts in the whole structure of economy and the state (CIEP 2007). It has experienced a period of speedy growth during the first two terms of President Putin. Similarly, the state has got back the control of Russian resources and would use them to strengthen, recover, and restructure its economy further. On the other hand, various western IOCs found them to be sidelined from potential energy resources which they had either acquired or promised to get hold under lucrative terms.

This situation occurred simply due to the new market structure and increased market price of energy resources, which is the mainstay of Russian exports. It had not only pushed economic development in Russia but also brought humongous amount of hard currency. Under President Putin Russia acquired some significant strategic assets. State acquired control over domestic as well as external policies under the new leadership. Interestingly, most of the Russian population seems to support the idea of a strong state which could protect the national interests. People have supported the new regime and policies to further national interests of Russia at international platforms or in domestic situations as well. Though, western prism looks these developments in a different manner and always underlines the cost of democratic values sacrificed by the people. However, Russian recovery of economy and status in the new world order is not limited and constrained to this prism. Of course, oil and natural gas have been the core commodities or resources of economic recovery and major source of acquiring strength as well as regain its self confidence; it is also true that the leadership has asserted great amount of reliance on the energy sector; however, the use and utility of both have been exaggerated very often in the western academic literature. It would be too easy to say that Russia ‘generally’ uses its energy resources as an instrument in the foreign policy decision making. Every nation state bargains with others on the basis of its strength and weaknesses, and Russia is no exception from the rest. However, in this regard, some of its recent actions were given more than required focus and sometimes exaggerated as well, which in turn paved the way to intense debate in western lobbies.

Objective analysis of an open market provides a different point of view about Russian IOCs supported by the state. Energy prices, especially for natural gas, could be a part of Russian economic or political agenda in the CIS region; however, in Europe, it is different. Gazprom, in particular, is largely involved in trade practices like other IOCs and keeps business interests paramount. It is certainly reliant on the support of home government, but takes various responsibilities of the state and would be difficult to get away from getting influenced in its own decision making. It is also true that analysis of 'energy diplomacy' makes it clear that this kind of support from home government is normal in energy business especially when the size or significance of the company would be like Gazprom.

As far as Russian energy strategy and state giants are concerned, it used to be said that leadership-duo should formulate a long-term strategy to structure and diversify the energy sector. Now it is apparent that some of the strategic goals have certainly been placed. It could be authenticated through the Russian Economic Development Ministry's projections where natural gas production and export is being shown with the rising trends and expected to grow from the existing production level of 650bcm to 750 bcm till 2015 which could increase up to 880bcm by 2030 (European Gas Daily 2008). Moreover, share of exports would increase from 30% to more than 35% in between 2020-2030. Leaving the major chunk of exports to the West, around 15% of all exports would be developed to the East where Sakhalin region will play a leading role. All these plans and projections have a thrust to attract some foreign investment to expanding and modernizing the whole energy sector but the power sector in particular. Export strategies would somehow depend on the new oil and natural gas explorations and building new infrastructures. The whole structure and mechanism would depend on how the Russian national interests would be translated through the strategic positioning of state-owned energy giants. Even if some major policy changes are not expected for the short term gains, new policy and plans are required to envisage long term goals. At present, Russia and the European Union have a symbiotic relationship where demand security as well as supply security must be guaranteed and valued. In other words access to market and access to required resources should go hand-in-hand; however, needs, interests, perspectives, and approaches of both sides toward energy security must be acknowledged and understood properly.



<b>Export Revenues</b>	<b>\$ billion in 2013</b>	<b>% of GDP</b>	<b>% of Export Revenues</b>
Crude Oil Export	174	8%	33%
Oil Products Export	109	5%	21%
<b>Total Oil Export</b>	<b>283</b>	<b>14%</b>	<b>54%</b>
Natural Gas Pipeline Export	67	3%	13%
LNG Export	6	0%	1%
<b>Total Natural Gas Exports</b>	<b>73</b>	<b>3%</b>	<b>14%</b>
<b>Total Oil &amp; Natural Gas Export</b>	<b>356</b>	<b>17%</b>	<b>68%</b>

Source: BOFIT, Central Bank of Russia, metals & mining export revenues from Goldman Sachs.

A separate analysis of energy relations between European Union and Russia is helpful to understand the whole gamut of energy trade in the region. However, defining one-by-one relationship with Russia would explain the difference between existing reality and rhetoric on the one hand, and constructed perception in terms of supply security vis-à-vis crisis situations on the other hand.

## **Chap-5**

### **RUSSIA-EAST ASIA ENERGY RELATION**

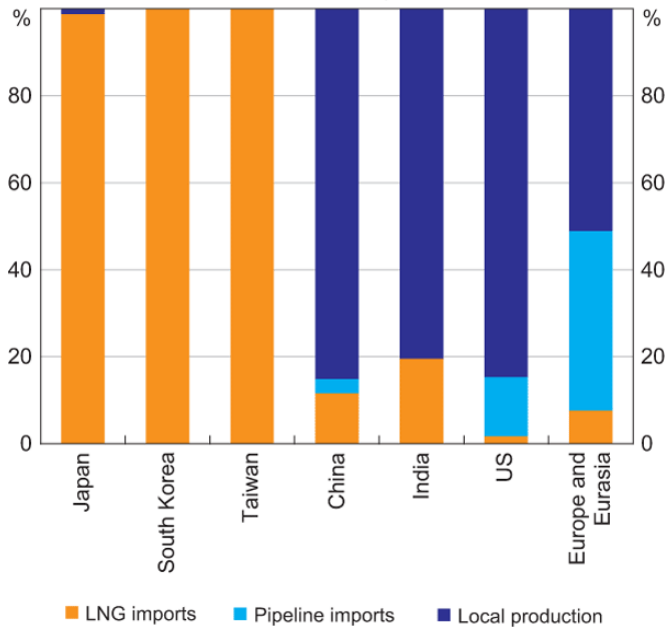
#### **The Russian and East Asian approach to Energy Security**

Energy security concerns of in the North-East Asian states are a bit different from other regions. Various new apprehensions have been emerged which are directly connected with its uses, sustainability, and security of supply. All these are connected with the issue of stable economic growth and development. Currently, significant states in the region like Japan, Korea, and China are desperately looking reliable supplies. Their concern is to get economical and diversified sources to satisfy their needs. They have to diversify their supplies not only in terms of their energy mix, but also geographically. In doing so, they would encourage competition and protect their environment. These states find Russian oil and gas, especially of the Far-East region, a potential source of reliable supply whereupon they bank on for their diversification plans (Ivanov & Hamada; Ahn 2007). Precisely, these states could get an alternative to their conventional fuel mix of oil and coal through Russian supply of natural gas. Comparatively, natural gas is a cleaner fuel mix than coal and oil. It produces lesser amount of carbon dioxide and free from sulphuric discharge (Ivanov & Hamada; Ahn 2007).

Therefore, various Russian oil and gas pipeline projects hold significant strategic value in the North-East Asia. It could provide new avenues and hope to Russian diversification strategy and its economic security. It would engage the North-East Asian region and South Korea as well. This could build a regional energy market on cooperation rather competition where Russian supply lines would have an advantageous position. It could facilitate restructuring of economic ties and political relations. However, the East-Asian vector not only provides strength to the energy security perspectives of Russia; it is helpful in the re-emergence of a great power in making. Energy power of the Russian state has made significant changes in the international energy market and security structure. Its strong energy diplomacy has made influence on the strategic stability of the world system (Yujun et al 2002).

### Source of Natural Gas Consumed

Per cent of total, 2010



Sources: BP (2011); RBA



<http://www.sras.org/img/5954d20b98b5e6bb350b5834a1333b9f.png>

For Russia energy is an unstoppable instrument to develop foreign strategies and construct an agenda to materialize its foreign policy objectives. More precisely, oil and natural gas altogether provide strong force to current foreign policy of the Russian state. It is significant due to economic relevancy and capacity to earn hard currency which is badly required to the policy makers. Energy sector of Russia is not a secluded sphere of economic activity. It is well connected with the international energy market and system. It means Russian government is tied with the market forces because of its nationalized character in the energy sector. This connect helps Russia to achieve its certain foreign policy objectives by using energy as an instrument. Though, it is more applicable to the “Commonwealth of Independent States” (SIS); other regions such as Middle East and Northeast Asia do have some influence as well. However, the instrumentality of energy resources has mostly been discussed in terms of European energy security. On the other hand “Russian foreign policy goals in the energy sector Russian foreign policy goals in the energy sector include attracting foreign investment to help stabilize and develop Russian energy resources, increasing Russian investment in foreign exploration and development projects, and providing various services for Russia’s foreign energy sectors” (Ahn 2007). Ivanov argues that energy diplomacy of Russia in general tends to conceive “three broad areas of activity; first, its bilateral as well as multilateral relations, second, how to participate in and deal with various international organizations, and the third is to cooperate with selected trans-national corporations (Ivanov 2000). This argument gets support with the fact that President Putin acknowledges energy diplomacy as one of the significant means to further Russian national interests and “promote economic recovery, to participate in the world economic system, to maintain Russia’s geo-strategic influence and to improve the international environment” (Yujun et al 2002; Ahn 2007).

It is also stated that according to Russian perspective, energy resources have the strength to achieve foreign policy objectives and “energy diplomacy represents a tool to restore Russia’s international status”. However, other than domestic consumption, the development of huge energy resources depends on market and required finances. In case of Russia, “justifying the development of vast sources of energy is difficult without linking feasibility assessments to large neighboring markets and investment funds from external sources”. Previously, Russia has made great efforts to acquire major shares in the European energy market. It laid down foundation for the future

energy relations by putting a large and complex oil and gas pipeline network in place. It has always “been meticulous about maintaining Russia’s image as a reliable partner of the West”. Due to this careful approach and image, now it has some fruitful opportunities to export crude oil and gas resources to diversify its market. Its neighboring North-east Asian states could become a thriving force for the development of Russian economy as well as foreign policy objectives. It is important to improve relations in terms of “energy resource development” with the North-east Asian states. It could be a pragmatic move to secure credits and capital investments from not only interested governments but also from private sectors. This practical and sensible approach to gain access to new energy markets could lead to win the confidence of many international financial institutions and derive financial capital in future to develop the eastern resources and Arctic region as well (Yujun et al 2002).

Undoubtedly, Russian export of oil and gas could cultivate mutual beneficial relations in East Asia. Growing demand of South Korea and Japan could easily and reliably be facilitated by the Russians while energy sector of Russia needs South Korean and Japanese capital investment and technology (Jaffe 2001). As far as Korea is concerned, it is concerned about supply security. It is interested in energy diversification in terms of supply (re)sources. Its geographical “proximity to the Russian Far East” could help down the transportation cost of energy supply. Korea consumes huge amount of oil and comes “as the world’s fourth largest oil importing country after the USA, Japan, and Germany” (CIA World Fact Book). Given that the requirement of crude oil is increasing fast, South Korean access to Eastern energy resources could enhance its economic security especially using oil and natural gas from Sakhalin and Kovykta.

### **Increased Interdependence and Security Strategy in East-Asia**

Energy issues are getting increasing importance in the security strategy in international relations. “Regional economic security” is much more dependent of energy security as compared to previous century. It occupies a significant place in the bilateral economic security. Energy has become a strategic and sometimes political commodity. It characterized as a factor to ensure stability and economic growth. Furthermore, it is due to “increasing importance of traded energy, increasing dependence on Middle East Oil, no sign of slackening demand rise, continuing volatility of oil prices, and environmental and sustainability concerns” (Andrews-Speed 2003).

On the other hand, now energy issues are not simply trade issues. The commodity per se has been securitized in the international relations. It has increasingly become a part of “security agenda” in general. Yergin and others have defined energy security as to “secure reliable and affordable” which should be sufficient to support socio-economic as well as military requirements of a state. However, it should be environmentally sustainable as well (Doh 2003). Willrich explains that

*“energy security as, first, the guarantee of sufficient energy supplies to permit a country to function during a war; and second, and more broadly, the assurance of adequate energy supplies to maintain the national economy at normal levels. He argues that the first definition is too restrictive, and the second too permissive and expansive. Therefore, he proposes that for most purposes, the definition of energy security as the securing of reliable and affordable energy supplies that are sufficient to support social, economic, and military needs, while at the same time being environmentally sustainable is the most plausible approach” (Willrich 1975; Yergin 1988).*

In short, if the energy security of a state is strong, it means that governments as well as the citizenry (consumers) believe in the supply adequacy of energy sources. It depends on stocks at home and delivery from overseas supply chains. In this way production and distribution mechanism must be in place to make resources available and facilitate all the energy requirements in coming future. As far as cost of energy is concerned, any supply should not put consumers at a “competitive disadvantage or otherwise threaten their well-being” (Belgrave et al 1987). Yergin’s understanding about energy security reflects time and again in the views of various scholars; for example, Lieber and Dees finds that it requires “the ability to obtain reliable supplies of essential natural resources at affordable prices” (Lieber 1980; Deese 1979/80). Some scholars argue that physical failure, i.e. interruption of supplies or major and sudden price changes may crop up energy insecurity. It impacts negatively on “the welfare of citizens or the ability of governments to pursue their other normal objectives” (Belgrave et al 1987). These threats are important factors in deciding energy security of a state. In this perspective, it could be understood that this concept “constitute and important part of economic security because it is the core prerequisite for sustainable development” (Doh 2003).

The question of measuring energy security is a difficult task before any policy maker or tactician. Various risk factors in the international system could disturb the whole

established and existing mechanism of supply. Causes could be of domestic or alien. However, one procedure to “estimate the level of energy security is to measure the extent to which a country is dependent on particular types of energy and whether these can be obtained within its territory or must be imported”. Various factors have to be considered before concluding any rationale of the energy security. For example, if a state is more dependent on the foreign supply of energy resources, it has to calculate “the level of the dependency, the diversity of foreign sources, the relative vulnerability of the source areas to political turmoil, and hostile control”. Additionally, issues related to carrying system of energy resources such as transportation routes are also significant variables to evaluate the level of supply sufficiency. In nutshell, “the energy security of a state is evaluated by its level of self sufficiency and its ability to adapt to temporary and prolonged supply interruptions without serious economic and military consequences” (Stares 2000).

Purposely, according to energy importing or exporting nations, they could be divided into two categories. The first mainly thinks of security of energy supplies; however, every importing nation views energy supply as vulnerable to abrupt interruptions (Willrich 1975). Though, all kinds of disruptions, interruptions, or manipulations of regular supply could be due to natural disasters or sometimes by accidents as well, these nations are more worried about potential political vulnerability of instability. Sometimes military conflicts, economic coercion, or terrorists’ activities are also significant causes of disruptions (Stares2000; Yergin 1988). All these concerns are deeply associated with the sources of the energy supplies. Moreover, these concerns are also attached with the routes or means of transports, which make those apprehensions more serious on their part (Stares 2000).

On the other hand, exporting nations have a different perspective regarding energy security. They are concerned about demand security and access to the energy markets. These nations by all means have the sovereign rights over their energy resources. Therefore, their perspective of energy security is linked with the national sovereignty. However, supplier states require regular market to sell their products. They even need new markets to diversify or to be competitive. It means “guaranteed access to foreign markets” (Willrich 1975) is a significant concern for any large producing or supplier state. This dichotomic situation formulate a new oxymoron *sovereign market* where



some states want an open but guaranteed market and at the same time right to be sovereign vis-à-vis natural resources lying in their territory. Producer states also want “financial security for the assets it receives in exchange for energy raw materials”. Therefore, the concept of energy security to an exporting nation “includes guaranteed access to foreign markets (but) sovereignty over its basic raw materials”. In general, it appears that ‘demand security’ to exporting nations is equal to ‘supply security’ to consuming or importing states. However, producer and exporting nations have an extra variable of sovereignty over their natural resources in their concept of energy security. It certainly goes beyond the (energy) markets self regulatory mechanism and generates suspicion, caution, and concerns up to some extent among consumer states. Willrich adds a heritage-quotient to understand the variable of sovereignty and argues that:

*“it raises possibilities for mutually beneficial negotiations between exporters and importers, based on overlapping areas of interest in stability and equilibrium. In addition to sovereignty and market access, an exporter may extend the concept of energy security to cover financial security for the investments made with its export earnings. This scenario may seem exaggerated but energy resources below ground are a precious national heritage. Once extracted, that heritage can easily be lost by an improvident government or eroded by inflation” (Willrich 1975).*

In this context, one thing is clear that interdependence is a deciding factor between all producing and consumer states. As interdependence increases, national economies undertake new initiatives and raise “the stakes in obtaining secure and stable energy supplies and to ensure sufficient resources for growth”. However, obtaining a secured supply of energy resource depends on many components wherein diversification is one of them. Producing states primarily would like to increase energy production as well as encourage new expansion of oil and natural gas exploration. They wish to promote domestic “efficiency and conservation in the use of all energy” resources and means as well. It has simple logic that every drop of “new supply in one place naturally frees up supply to others”. In addition, it helps producer state to find out new routes and markets for energy resources. Increased production and new addition of export routes make them competitive and “improve energy security for themselves along with consumers by selling into broader markets” and new destinations.

As far as economy of a nation-state is concerned, its growth and development is essentially depending on the energy security. Constant supply of energy resources is an

important concern for growing economies. Ensuring this supply does not depend only on market forces. It is influenced by some geopolitical and geoeconomic factors. However, short term profit making or long terms economic gains altogether should be considered in this process. All the producing states, “whether developed or continuing to develop, benefit economically from this trade”. Therefore, competitive, open, and transparent market mechanism is required to minimize the exploitation of helplessness of consuming states by major producers. This could be achieved by both producers and consumers through diversifications. It also enables both parties to manage risks in a cruel and open energy market. It ensures them to get an uninterrupted supply. It creates income and ensures economic growth. It is also significant that as soon as energy portfolio changes, regional cooperation also gets some new structure vis-à-vis energy security<sup>39</sup>.

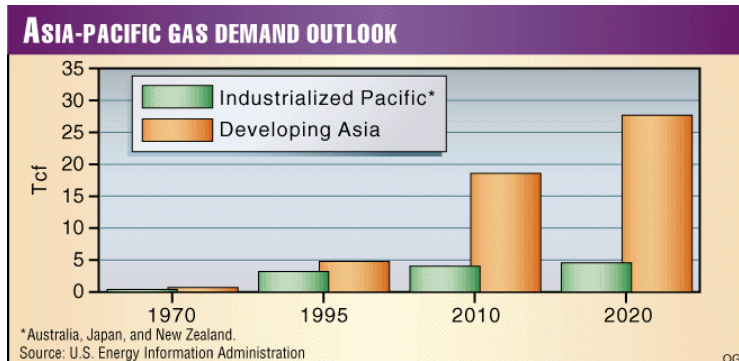
### **East Asian Energy Scenario**

Asia is the future of energy consumption while the North-east Asian states have been showing an upward trend for the past three decades. There are many factors responsible for change in political and economic life of the region. Russia and China traditionally had a different politico-economy mechanism. They opened their market up to various degrees in different sectors. Opening of economies pushed a new and improved “multilateral economic cooperation”. The whole region experienced “positive political changes” after the end of Cold War. For trading perspective, it has become “one of the fastest growing energy markets” in the world. Energy security has become a growing concern for the whole region. In recent years, due to increased population and economic well being ‘demand for energy’ has risen quickly and consistently. However, it does not mean that the region on the whole gives the confidence of ‘demand security’ to the producing nations. Of course, few nations could certainly ensure demand security due to their unavoidable needs of consumption. China is one of them. Growing population and rate of (income) growth seems to remain higher “in the foreseeable future” as compare to other regions of the world. This situation is compelling enough to change the energy sector rapidly. This change has to focus “issues such as increasing demand, resource availability, environmental

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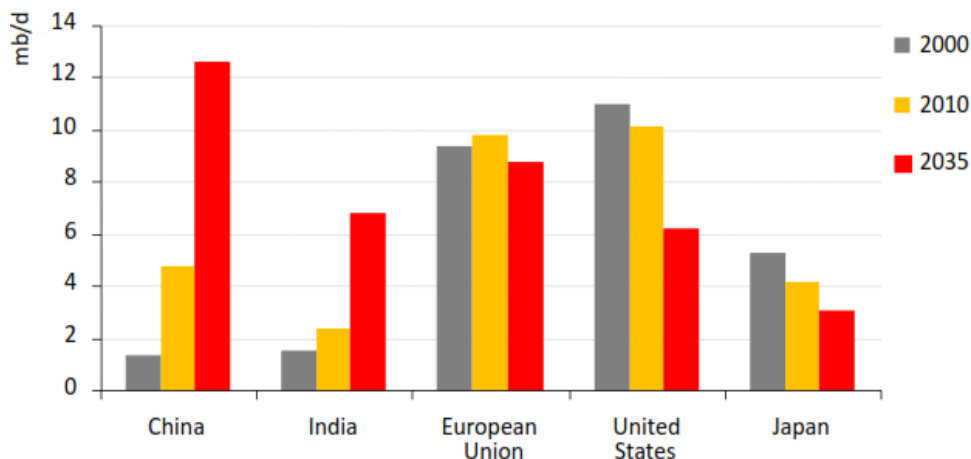
<sup>39</sup> *Ambassador Richard L. Morningstar, Special Envoy for Eurasian Energy, U.S. Department of State, speaking at the [2010 Energy Security Conference](#), May 4, 2010 Pipeline Development in Eurasia The National Bureau of Asian Research <http://www.nbr.org/research/activity.aspx?id=81>*

concerns, changing technology and the need for regulatory reform, and sector restructuring that will attract investment capital to fund supply infrastructure” (APEC Energy Demand and Supply Outlook 2002).



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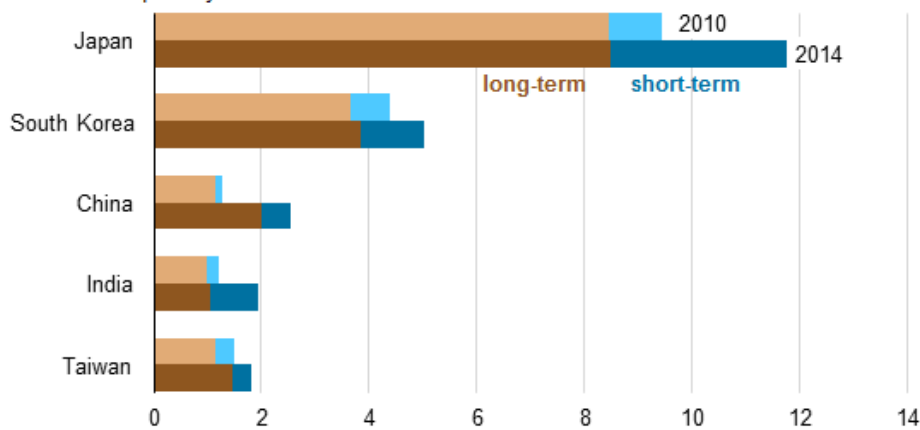
### Net imports of oil



©OECD/IEA2011: Even as Russian oil exports decline from 7.5mb/d in 2010 to 6.4mb/d in 2035, new routes create a more diverse and flexible oil export system with direct access to Asian markets

At present, Middle-east region exports majority of oil to the North-east Asia. It is expected that North-east Asian states would be more dependent on Middle East imports. Political risks involved in the region compelled the importing states to restructure their supply security. There are some other pressing factors such as long term growth projection regarding Chinese economy and increasing energy consumption in the region led the North-east Asian states to ponder over their energy security. Now diversification of supply chain seems to be unavoidable where Russia’s Far Eastern region and Central Asia provide options to import and make new mechanism to strengthen their energy security. Various ongoing energy projects in Russia’s Far East and Central Asian region have given confidence to East Asian states formulating their energy strategy having an East Asia supply factor.

**Asia Pacific natural gas trade by contract type (2010 and 2014)**  
billion cubic feet per day



<http://www.eia.gov/todayinenergy/images/2015.09.29/chart2.png>

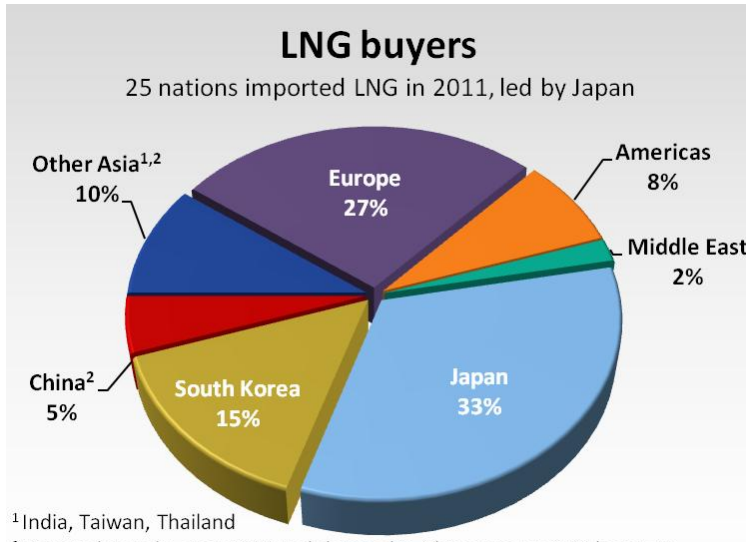
Conventional fuel mix in China has created a problem of environmental degradation. Though, it is difficult to replace the consumption patterns over night and switch over from this conventional fuel mix to a new and cleaner one. Russia’s Far Eastern energy resources seem to be the best option to China. It could “promote the incentive to look at nearer and more competitive sources of natural gas in” the region. Compared to at least one decade back, “the potential for extensive environmental deterioration caused by coal burning in China” has left no other option but to go for cleaner fuel mix.

The abundant availability of efficient and cleaner (burning) fuel has substantially pushed “the momentum to produce, trade, and utilize natural gas”. A cross-border market demand is taking a reliable shape. Sale-purchase of Liquefied Natural Gas and pipeline supply of natural gas is becoming a dominant mode of energy trade in the region (Ross 2003). According to an estimate the “demand for natural gas has been rising at 9.3% per year since 1970 in this region” (Cleary 2003; Ahn 2007).

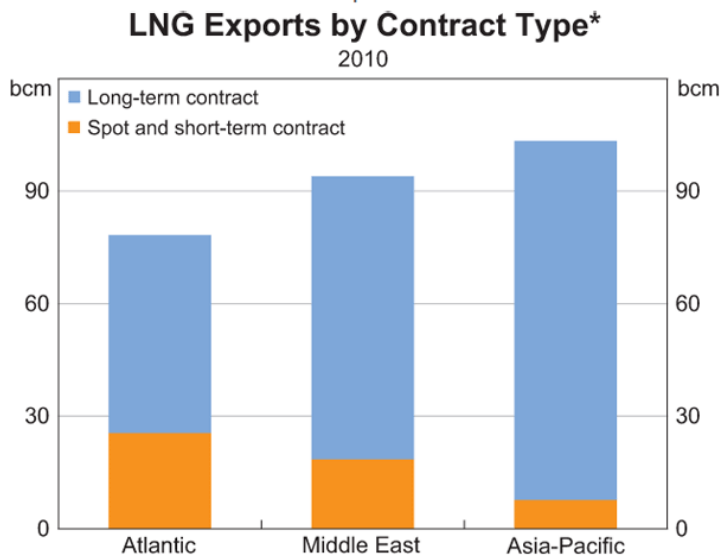
### Composition of LNG Trade (% of world trade, 2010)

<b>To:</b>			
<b>From:</b>	Asia-Pacific	Atlantic	Total
Asia-Pacific	36	1	37
Middle East	19	14	34
Atlantic	4	25	29
<b>Total</b>	<b>60</b>	<b>40</b>	<b>100</b>

Asia-Pacific includes Asia, Australasia, Pacific and Russia; Atlantic includes North and South America, Africa, Europe (excluding Russia); Atlantic imports also include the Middle East. Source: BP (2011)

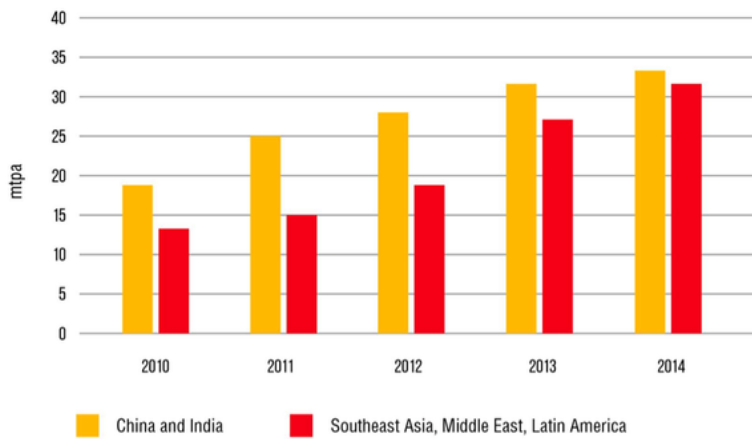


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\* Short-term contracts defined as term of four years or less  
 Sources: International Group of Liquefied Natural Gas Importers; RBA

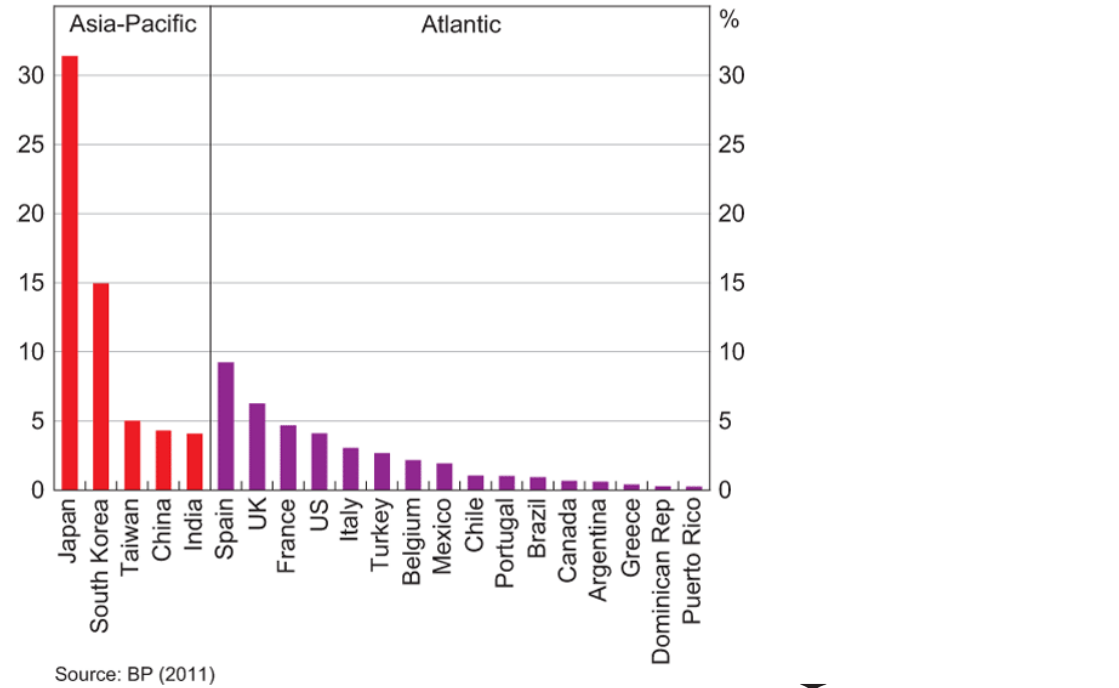
**Russian LNG in Asia Pacific : Growth of LNG import at emerging markets**  
 Source: Sung, J. (2015). What to expect for Russian LNG? Neft Rossii, July-August.



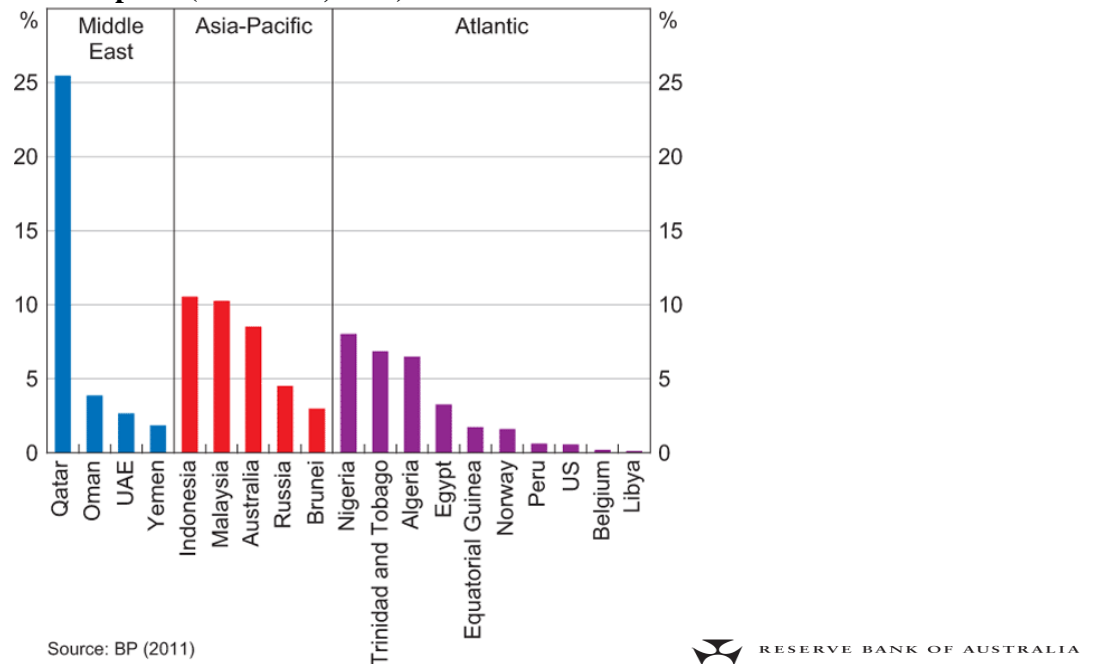
<https://enerpojournalttest.files.wordpress.com/2016/06/jsung-graph2.png?w=640>

Furthermore, East Asian region is a net-importer of natural gas which could increase further and even at a faster rate over a period of 2010-2020 (APEC Energy Demand and Supply Outlook 2002). It is important for Russia as a potential exporter that three significant destinations “in the Pacific Basin- Japan, South Korea, and Taiwan- accounted for 68 percent of global LNG imports in 2002” (EIA 2003) which is growing day by day as compared to other regions of the world.

### LNG Imports (% of total, 2010)



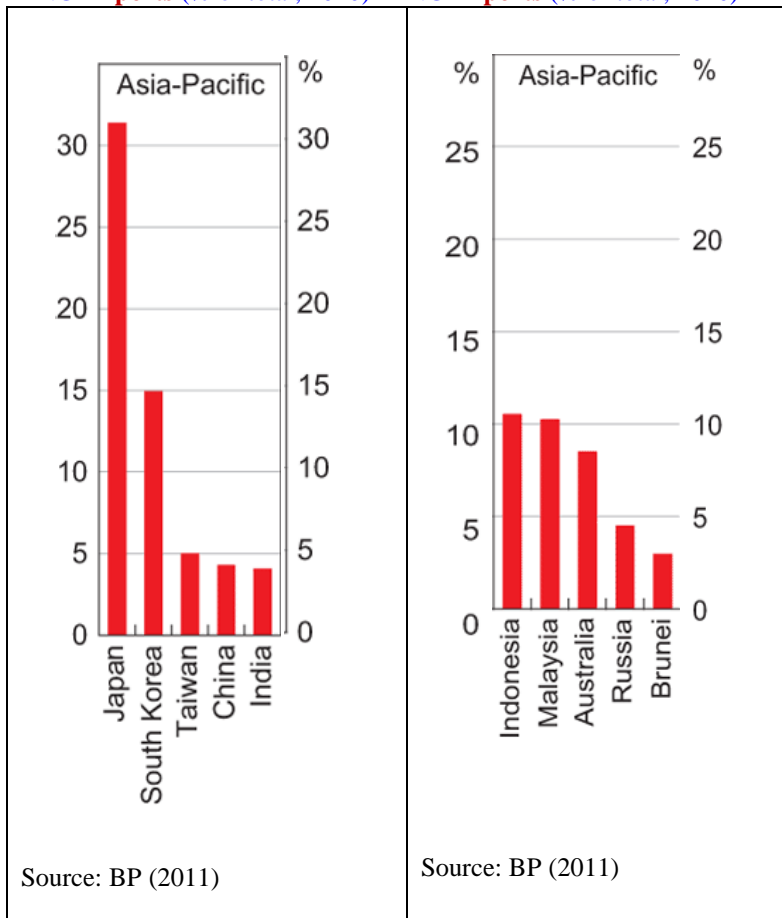
### LNG Exports (% of total, 2010)



It is already predicted that growth of demand for natural gas would increase in Korean and Chinese markets in particular (Cleary 2003). Korean demand is expected to be doubled while Chinese demand is forecasted to grow up to unprecedented fivefold. In terms of volume Korean increase could go “from 25bm<sup>3</sup>/in 2003 to almost 50bm<sup>3</sup>/by 2020”, while Chinese may rise “from 30bm<sup>3</sup>/ in 2003 to more than 160bm<sup>3</sup>/by 2020” (Cleary 2003). Moreover, Korean “natural gas and heat consumption is expected to increase almost 2.5 fold over the forecast period, while oil which is at present the main fuel used in Korea, is expected to decline to 20 percent in 2020 from 47 percent in 1999” (APEC Energy Demand And Supply Outlook 2002).

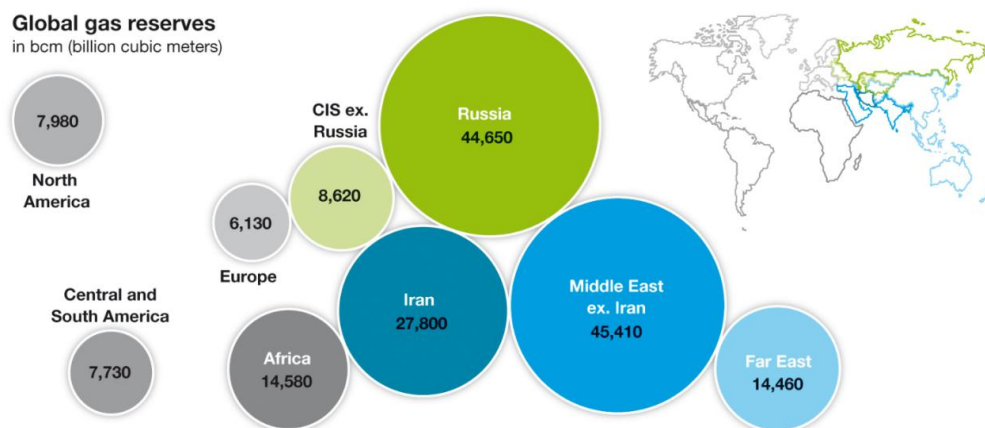
However, it is important to ask that “whether and how” the increased demand would be met. As per estimates natural producer states have sufficient natural gas reserves. Moreover, undiscovered energy resources are also encouraging enough to supply in future and fulfill all kinds of potential consumption needs of the region (APEC Energy Demand and Supply Outlook 2002; BP 2001).

LNG Imports (% of total, 2010) LNG Exports (% of total, 2010)





As per estimates of “the International Center for Information on Natural Gas (ICING Survey & CEDIGAZ 2001)”, it is indicated “that natural gas reserves and resources are approximately four times the cumulative world consumption forecast until 2020” (ICING Survey & CEDIGAZ 2001)<sup>40</sup>. It shows that “a huge volume of natural gas has yet to be discovered (IEA2000). Regarding these estimates, Russian Federation is the largest natural gas exporting nation along with holding the second largest exporting status in oil as well. This strength of its natural resources provides one of the best possible energy solutions to the Northeast Asian states.



<https://therearenosunglasses.wordpress.com/2009/07/16/global-gas-reserves/>

It is said that majority of energy reserves “are located in the former Soviet Union and the Middle East, which have 72 percent of total remaining reserves. There are also reports that of undiscovered resources, 50 percent are expected to be in those same regions (APEC Energy Demand and Supply Outlook 2002). However, as compared to the crude oil, “natural gas reserves are distributed more evenly across regions... (but) due to lack of hydrocarbons transportation infrastructure in Northeast Asia... Russia currently exports almost all of its gas to non-Asian economies along with oil mainly to Europe” (Simonov 2003). If Russia goes for diversification of its market; it simply requires huge investment in the infrastructural development plans such as building transportation system. It could be either some pipeline networks or LNG distribution system or both. Since the growing demand is not focused only on one sector, Russia has to consider supplying natural gas to meet all kinds of growing demand where residential and industrial uses has become crucial to the policy makers in Kremlin (APEC Energy Demand and Supply Outlook 2002).

<sup>40</sup> The mean estimate of worldwide undiscovered natural gas is 147.1 trillion m<sup>3</sup>. An even larger quantity of natural gas resources, ultimate remaining gas, is estimated at 450 – 530 trillion m<sup>3</sup> by CEDIGAZ.

## Natural gas and facilities in the region



## Natural gas and facilities in the region

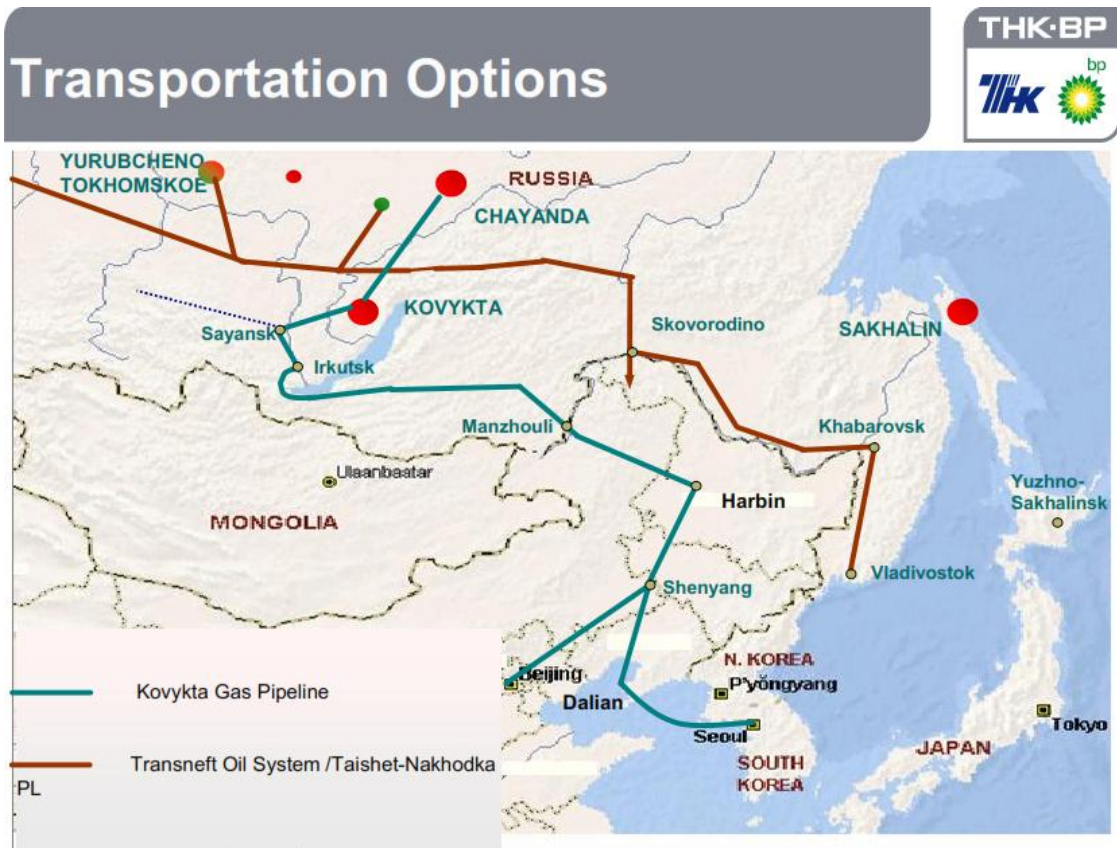
There are fairly improved and better network facilities for LNG marketing in Northeast Asia. A well developed set-up for reception and points for re-gasification are well established. It creates a good network vis-à-vis regional Liquefied Natural Gas distribution system. Japan and Korea have developed this infrastructure in particular. Both are greatly dependent on LNG import and to a great extent concerned about supply security. Since all projections show a positive growth in consumption, LNG network facilities are bound to expand. “As demand for natural gas will continue to grow” policy makers are planning their import strategy accordingly. If on the one hand, they are focusing on new suppliers, efficiency of existing facilities has also to be improved. Reports show that Japanese are planning to enhance the storage facilities. They have designed a new storage tank which is “capable of holding 3.8 million m<sup>3</sup> of” Liquefied Natural Gas and was planned to be operational by 2006. Koreans are also intended to increase their capacity. They had a plan “to build additional capacity for 3.7 million m<sup>3</sup> by 2010” (APEC Energy Demand and Supply Outlook 2002).

## Main Russian LNG Projects

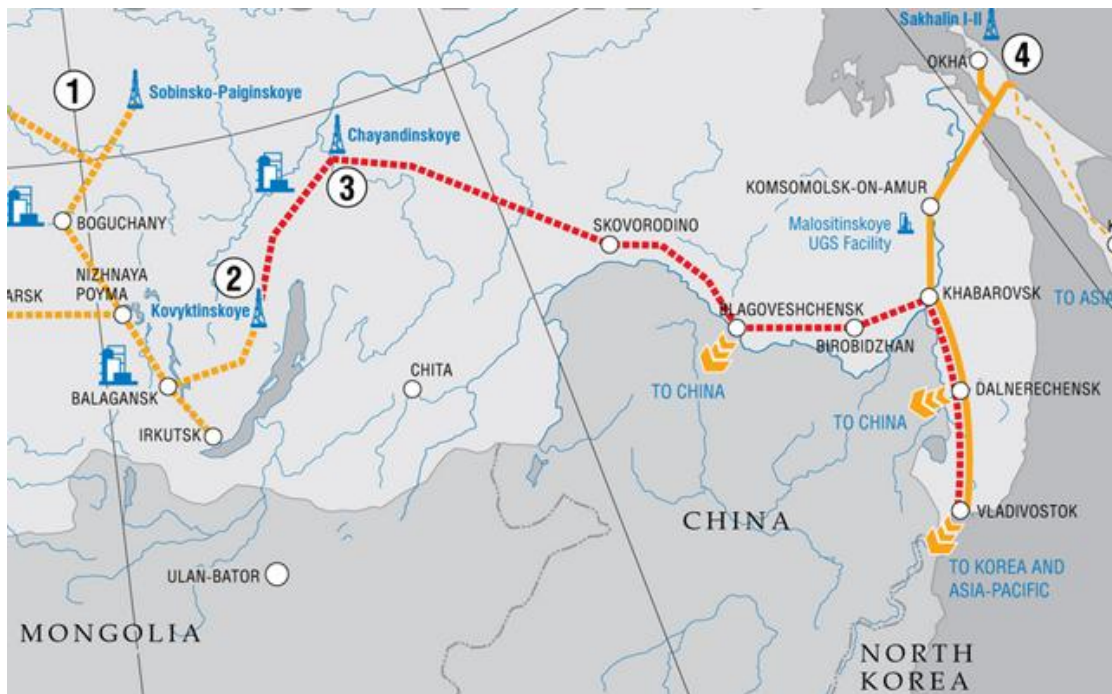
Project	Companies	Started in	Output, mln. tons per year	Investments, bln. \$	Target markets
Sakhalin-2 expansion (3 <sup>rd</sup> train)	Gazprom, Shell, Mitsui, Mitsubishi	2017	5	5-7	Asia Pacific
Vladivostok LNG	Gazprom	First phase 2018; Second phase 2020 Third phase 2022	15	12,4	Asia Pacific
Sakhalin-1 LNG	Rosneft, ExxonMobil	First phase 2018; Second phase 2021	10	15	Asia Pacific
Yamal LNG	Novatek, Total, CNPC	First phase 2016; Second and third phase 2018	16,5	20	Europe and Asia Pacific
Shtokman LNG	Gazprom	Postponed	15	30	Europe
Baltic LNG	Gazprom	2018	10	5-7	Europe

Source: Company data (Tatiana Mitrova)

It is true that consuming states are greatly concerned about secured supply; however, sometimes they face a challenge of oversupply as well. In this regard, they have to have enhanced “LNG terminal capacity” and secured shipping assurances. These are important issues in an oversupplied energy market. These factors may not look significant in the long term energy trade but have an important role in “the short-term and spot trades” especially when consuming states face the challenges of oversupply, as mentioned earlier for the same (APEC ...2002). During the analysis of spot trading it was found that as compared to others LNG market is not that much structured and has only begun to develop itself according to requirement of the “spot delivery market”. The spot LNG trade was “expected to grow rapidly in the Asia-Pacific market” but appeared to be slower as compared to the Atlantic. There could be many reasons for this sluggish growth of spot-market mechanism. However, long term contracts build one certain ground for this slow-moving phenomenon. Asia Pacific LNG market still anchors majority of trade on the long term (contract) basis. Simultaneously, “as major LNG importing economies such as Japan and Korea move forward to competitive national markets for power and gas, LNG trading patterns will respond to buyers’ changing needs in risk management by allowing more flexibility in gas purchases” (APEC Energy Demand And Supply Outlook 2002).



Source: TNK-BP 'Kovykta Project 2005



[http://www.capabletranslations.com/wp-content/uploads/2013/07/Gazprom\\_Chayandinskoye\\_Vladivostok\\_Pipeline\\_Project.png](http://www.capabletranslations.com/wp-content/uploads/2013/07/Gazprom_Chayandinskoye_Vladivostok_Pipeline_Project.png)





<http://www.solobackpacker.com/wp-content/uploads/2015/07/Trans-Siberian-Map.jpg>

“A pipeline from Russia to South Korea through North Korea have been given a nod of approval; grid-lines and railways on the Korean Peninsula (connecting to the trans-Siberian railway) to come forward as well” (Feb. 9, 2012)



<http://geofinancial.blogspot.in/2012/02/pipeline-from-russia-to-south-korea.html>

RUSSIA OIL EXPORTS DESTINATIONS						
Region	2001	2003	2005	2007	2009	2010
CIS	8%	11%	8%	7%	7%	4%
Europe	71%	71%	79%	77%	75%	75%
East Asia	3%	3%	4%	10%	11%	15%
Baltics*	6%	5%	4%	2%	2%	1%
Other	13%	10%	5%	4%	6%	5%

\*Baltic States are separated as they are both former Soviet and EU states

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[https://www.stratfor.com/sites/default/files/styles/stratfor\\_full/public/main/images/Russia\\_oil\\_destinations.jpg?itok=L1ZWnyX9](https://www.stratfor.com/sites/default/files/styles/stratfor_full/public/main/images/Russia_oil_destinations.jpg?itok=L1ZWnyX9)

### **Pipeline natural gas**

As compared to fully developed local distribution networks and trans border transmission mechanism in Europe and North America, East Asian market is lagging far behind as far as pipeline infrastructure and other reception or distribution facilities are concerned. It also appears that Asian natural gas market is dominated by the Liquefied Natural Gas trade. Various states are planning to strengthen their structure to meet their potential demand. As the process starts since the disintegration of the Soviet Union, from 2000s onward in particular, the “international relations in Northeast Asia have changed dramatically and a serious plan is in the process of development for a natural gas pipeline connecting Japan, China, Korea, and possibly Mongolia and North Korea with Sakhalin and eastern Siberia” (Toichi 2003).

All over the world, private oil and gas companies have been spending on new infrastructure and technology. State monopolies are battling hard to compete with them. Major oil and gas companies are also competing with each other to get contracts in major potential oil and gas fields. In this regard, Russia is a big battle ground where huge reserves are yet to be discovered and exploited. Its Far East region is a bone of contention and luring point for oil and gas majors of the world as well as Russian national champions. In this context, “a great deal of investments have already been established or are being considered by major global oil companies including Exxon

Mobil, Royal Dutch Shell, and BP, with the additional participation of Japanese, Korean, Chinese, and Russian private sectors”. If BP, Royal Dutch Shell, Exxon Mobil, Gazprom and many others are interested around the world energy markets; Chinese, Korean, and Japanese companies are primarily interested in regional markets. Though, China comes up with some exceptions, and investing humongous amount to secure its supply security from all over the world. Thus, regarding the quest for energy resources, there are gigantic energy projects such as Kovykta and Sakhalin. Kovykta is the single “largest project in the world with an estimated development cost of US\$ 23 billion on the Russian side” which could be escalated during the course of full action. To clarify the sense of expenditure, the following table shows the initial subsoil costs in Russia regarding the project:

### Payment tariff scale

	RUR <sup>3</sup> for 1 square meter of the subsoil section being used	
	Scale	
	Minimum	Maximum
<b>1. Regular payments scale for usage of subsoil for the aims of survey and assessment of the natural resources fields</b>		
Hydrocarbon resources	120	360
Hydrocarbon resources on the shelf and other economic areas in jurisdiction of RF	50	150
<b>2. Regular payments scale for usage of subsoil for the aims of searching for natural resources</b>		
Hydrocarbon resources	5000	20000
Hydrocarbon resources on the shelf and other economic areas in jurisdiction of RF	4000	16000
<b>3. Regular payment scale for usage of subsoil for building and using undersoil objects, not related to the extraction of natural resources</b>		
Storage of oil or gas condensate (RUR/1 ton)	3.5	5
Storage of natural gas or helium (RUR / 1000 cubic meters)	0.2	0.25

Source: Law on Subsoil, 2004 (RUR: Russian Rouble)

However, “The Energy Strategy of Russia for the period up to 2030” has made a new plan for the “subsoil use and management of the state subsoil fund” in the following manner:

## Subsoil use and management of the state subsoil fund

<b>1. Enhancement of geological exploration works on new territories and waters</b>		
<p>Increase in the influence of state institutions on formation and implementation of the programs for geological exploration of perspective territories and waters (continental shelf). Elaboration and introduction of special tax regulations for developing the reserves of the continental shelf of Russia</p>	<p>State support of geological exploration works on perspective territories on the basis of direct state participation; provision of state guarantees to subsoil users; provision of tax holiday for the investments projected payback period and the investment tax credit</p>	<p>Acceleration of the reserves increment on new territories and waters in the structure of mineral resource base reproduction. Increase in the share of the continental shelf in the reserves reproduction: for oil to the level of at least 10–15% for gas to the level of at least 20–25%</p>
<b>2. Stimulation of private investment attraction into geological exploration works and subsoil use</b>		
<p>Elimination of superfluous administrative barriers for geological exploration works realization through introduction of standard subsoil use projects and reduction in the number of state expertise</p>	<p>Introduction of rent taxation of the subsoil users performing geological exploration works</p>	<p>Development of the state-private partnership in subsoil use</p>
<p>Stabilization of tax policy in the sphere of subsoil use and creation of conditions for transition to rent taxation of the subsoil users. Ensuring of the rights of both subsoil owner, and subsoil user, including introduction of transparent system of sanctions for license agreements infringement</p>	<p>Ensuring the ratio of annual increment of discovered fuel and energy resources as a result of geological exploration works and the annual production volume of major fuel and energy resources (oil, gas, coal, uranium) &gt;1</p>	<p>Stable (at least twofold for the period) growth of private investment volumes in subsoil use and geological exploration works (the share of private investments in geological exploration works-at least 80%)</p>
<b>3. Stimulation of efficient subsoil use on the basis of full and comprehensive extraction of hydrocarbons from subsoil</b>		
<p>Creation of the national register of fuel and energy resources on the basis of harmonization of the Russian and international classification of fuel and energy resources. Improvement of the mechanisms of the state control over fulfillment of license agreements, ensuring of accounting of probabilistic nature of reserves estimation and possibility of its adjustment</p>	<p>State support for introduction of innovative hydrocarbon extraction technologies raising the oil recovery rate</p>	<p>Tax stimulation of the expanded production of super viscous oil, natural bitumen, low pressure gas in old deposits and complex use of the resources of coal deposits, including the projects for degassing methane utilization</p>



for the purpose of most rational field exploitation. Improvement of the tax legislation stimulating full and comprehensive extraction of hydrocarbons. Development and introduction of uniform principles for fuel and energy resource deposits management at all phases: from prospecting to beginning of conservation or liquidation of a deposit due to achievement of the maximum possible recovery rate of hydrocarbons at the existing technological level of development methods		
State support for introduction of innovative hydrocarbon extraction technologies raising the oil recovery rate. Tax stimulation of the production of super viscous oil, natural bitumen, low pressure gas in old deposits		
Maintenance of the oil recovery rate at the level of 30–32%		Increase in the oil recovery rate to 35-37%
Increase in the share of non-conventional gas in total gas production volume to 10%		Increase in the share of non-conventional gas in total gas production volume to 15%
Maintenance of the associated petroleum gas utilization rate at the level of at least 95%	Maintenance of the associated petroleum gas utilization rate at the level of at least 95%	Maintenance of the associated petroleum gas utilization rate at the level of at least 95%
<b>4. Development of the market of independent services and engineering in the sphere of subsoil use</b>		
Stimulation of Russian independent engineering companies creation. State support for the import of key complex technologies with obligations for their localization	Development of services and engineering market in the sphere of subsoil use	
Increase in the share of an independent segment in the sphere of services and engineering to 20%		Increase in the share of an independent segment in the sphere of services and engineering to 50%

Its initial start and fundamental investment cost gives only a glimpse of that huge investment for the TNK\_BP Kovykta Project<sup>41</sup>. Secondly, as Osipov explains a little about the complications regarding Federal laws of subsoil rights and licenses. It is certainly a factor of concern in respect speedy work and development of project:

*“Each case for subsoil use is licensed by the Russian Government and its respective Ministries and Agencies responsible for licensing activities within its operation – e.g. licensing for a particular type of activity (geological, oil and gas survey, drilling, shell development, pipeline building and operations), rights to usage of segments of subsoil for particular activity (survey, oil/gas development), et cetera. Additional to the license are the payments, which are determined by the Federal Tariff Service of the Russian Government. For an example, below is the table from the law revision of the year 2004, showing the level of expense for payments for the hydrocarbon resources” (Osipov 2006).*

It is said that “Customer base and market demand is guaranteed by the rising necessity of China, South Korea and Japan, with further outlook into entire Asia Pacific energy hub. RUSIA Petroleum and TNK-BP projects the following demand prospects for Kovykta (planned annual output of Kovykta is planned at 30 billion m3)”:

“Regional demand for natural gas”

Customers	Years / bln m3 natural gas		
	2005	2010	2015
Irkutsk Region (Russia)	2.8	5.4	6.4
Buryatiya Region (Russia)	-	0.5	0.8
Chita Region (Russia)	-	0.3	0.5
China	-	15	25
Korea	-	8	15

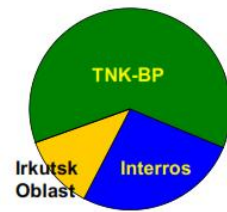
Source: RUSIA Petroleum Web site

<sup>41</sup>“TNK-BP is a vertically integrated oil company with a diversified upstream and downstream portfolio in Russia and Ukraine. The company’s upstream operations are located primarily in West Siberia (Khanty-Mansiysk and YamaloNenets Districts, Tyumen Region), East Siberia (Irkutsk Region), and Volga-Urals (Orenburg Region). TNK-BP's principal refining assets are located in Ryazan(near Moscow), Saratov (Volga-Urals),Nizhnevartovsk (West Siberia) and Lisichansk in Ukraine and have a total throughput in 2005 of 632 kbd or 30.89 mmtpa. TNK-BP operates a retail network of approximately 1600 filling stations Russia and Ukraine working under the BP and TNK brands. The company employs approximately 93,000 people, mostly located in eight major areas of Russia and Ukraine. (quote from the TNK-BP corporate web site)”.

**History**

- 1987 – Discovery by the state enterprise «VostSibneftegas»;
- 1991 – First reserves approval by the State Reserves Committee of the USSR;
- 1992 – «RUSIA Petroleum» formed to carry out exploration and development;
- 1999 – Start of the International Feasibility Study (IFS);
- 2001 – Inclusion of the Kovykta into the List of Subsoil blocks for PSA terms;
- 2003 – IFS completion with report submitted to the government
- 2004 – Announcement of Irkutsk Regional Gasification Project

**RUSIA shareholders**

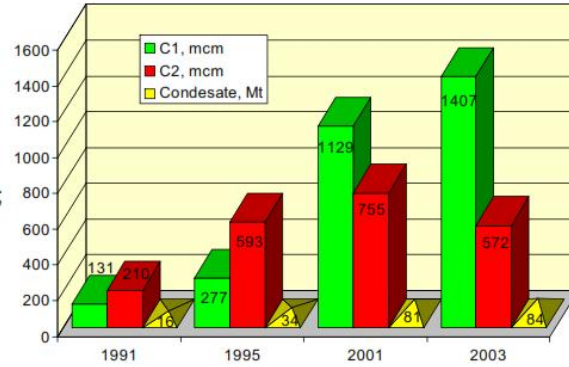


**Field**

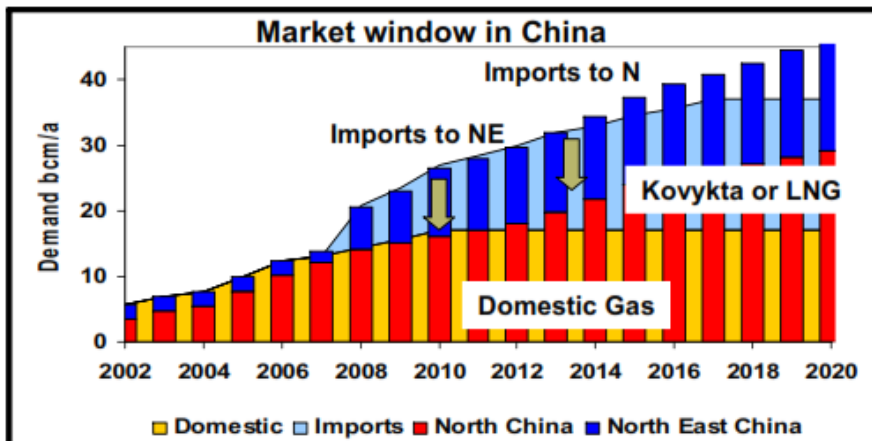
- Extremely continental climate, average annual temperature below zero, sporadic permafrost;
- Elevation: Ranging from 380 m to 1503 m above mean sea level.
- 80 km to the nearest settlement, 350 km to Irkutsk city, 180 km to the station at Baikal-Amur Railroad;
- License area: 10.3 thousand km<sup>2</sup>;

**Reserves**

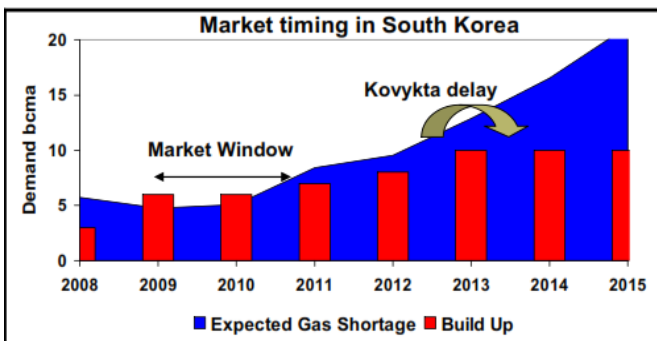
- Reserves associated with Precambrian Parfenovsky;
- Average effective thickness: 14-15 m.
- Occurrence at 2650 – 3300 subsurface
- Gas reserves:
  - 1.9 tcm gas
  - 84 mmt condensate
- Average flow-rate per well: 350 to 500 10<sup>3</sup>m<sup>3</sup>/dav;



Source: TNK-BP ‘Kovykta Project 2005 <https://bakerinstitute.org/files/2431/>



Source: TNK-BP ‘Kovykta Project 2005 <https://bakerinstitute.org/files/2431/>



Source: TNK-BP ‘Kovykta Project 2005 <https://bakerinstitute.org/files/2431/>

## Key Issues for Kovykta

### Pipeline Routing

- Kovykta gas is exported to China & Korea or west to UGSS
- Southern or Northern route for Export

### Market Demand Assurance

- Volumes & Pricing
- Timing of the Market Window
- Deadlines for decision-making

### Stakeholder Alignment

#### Governments:

- RF
- China
- Korea

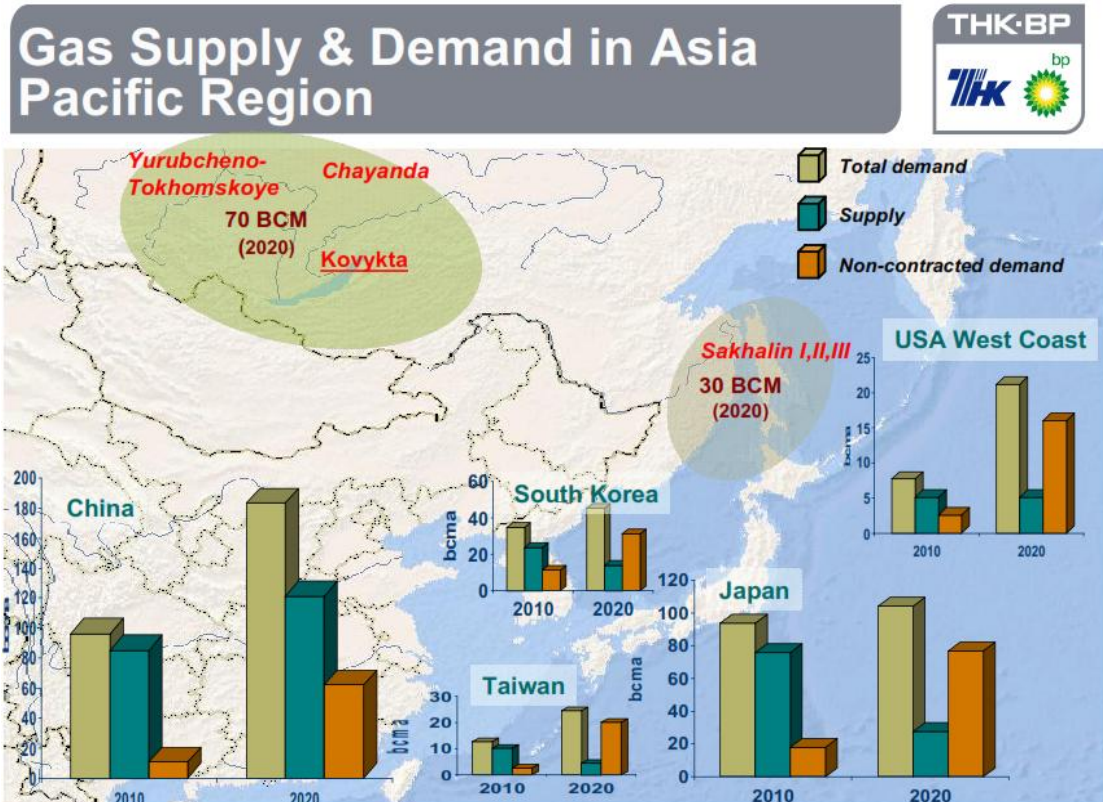
#### Partner Companies:

- Gasprom
- TNK-BP
- CNPC
- Kogas

### Project Development

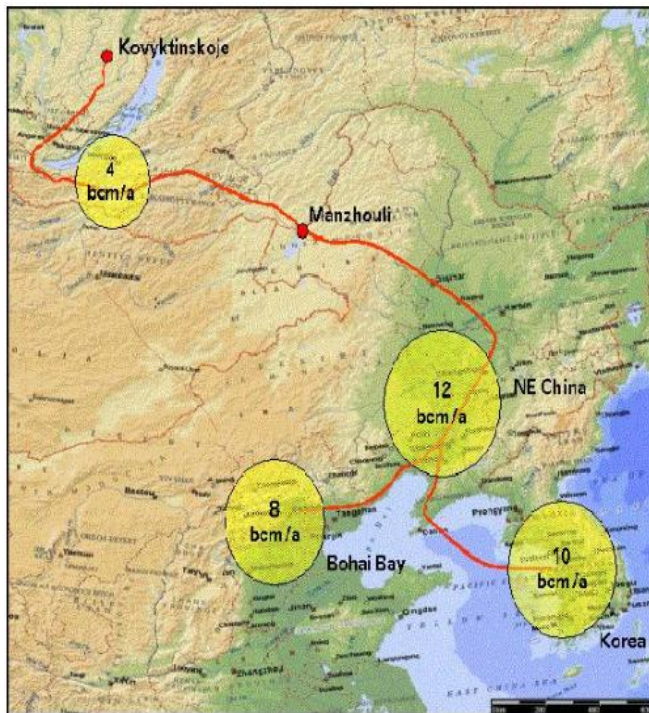
- Intergovernmental Agreements
- Signing Long-Term Contracts for Gas Supply
- Conducting Technical Assurance
- Establishing Partnership Configuration
- Secure Financing

Source: TNK-BP 'Kovykta Project 2005 <https://bakerinstitute.org/files/2431/>



Source: TNK-BP 'Kovykta Project 2005 <https://bakerinstitute.org/files/2431/>





### Development Capex

Component	IFS Estimate
Field & Facilities	\$6,5 bln
Russia Pipeline	\$5,6 bln
China Pipeline	\$5,2 bln
Korea Pipeline	\$0,7 bln
<b>Total</b>	<b>\$18 billion</b>

### Sales Gas (bcm/a)

Market	First Gas	Plateau Sales Gas
Irkutsk	2008	4 bcm/a
North East China	2011	12 bcm/a
North China	2014	8 bcm/a
Korea	2011	10 bcm/a

### Kovykta Reserves

Indicator	Value
Reserves bcm	1472
Build Up Period	9 years
Plateau Period	23 years

Source: TNK-BP 'Kovykta Project 2005. It is essential to secure shipping and LNG <https://bakerinstitute.org/files/2431/>

The second major production center is going to be the Sakhalin project. It would supply oil and natural gas to Asia Pacific market. Korea and Japan in particular would receive energy resources from the Far Eastern Russia. Sakhalin project has the potential to strengthen the supply security of Northeast Asian states (APEC Energy Demand and Supply Outlook 2002). It has six projects wherein Sakhalin I and II are in progress and made substantial development.

### Putin's role

When Putin came to power, the share of oil and natural gas in Federal budget revenues was not very high. It was simply 9% in 2000 which shoot up more than 50% in 2012 and remained roughly the same afterwards as well. The abundance of energy natural resources made possible to collect huge amount of foreign exchange through energy trade. Russia holds one of "the largest of the world's proven reserves of natural gas (33 percent of the world total), 4.7 percent of the world's proven oil reserves and 16 percent of the world's coal reserves" (APEC Energy Demand and Supply Outlook 2002; Ahn 2007). So, the energy industry is crucial in the growth and development of Russia which accounts roughly 30% of its GDP (EXIM Bank Russian Report 2005).

Since Russia is self sufficient and solvent in all hydrocarbons, it exports large volume of liquid hydrocarbons and natural gas to various destinations even outside of the Commonwealth of Independent States (Khartukov 2000). In 2005 oil and natural gas exports accounted around 55% of the total exporting merchandise. The significance of these products could be acknowledged by just one example where “oil exports held up better than output throughout the 1990s and in 2001 Russia became the world's second-largest oil exporter after Saudi Arabia. According to Rosstat figures, in 2004 Russia exported 56% (257m tonnes, or 5.2m b/d) of its crude oil exports” (EIU 2005). Moreover, it is expected that energy sector would hold relatively significant weight in the Russian national economy. This scenario is not going to change at least up to 2020. On the other hand, the fast growth of Far Eastern resources could make dominance and reliance of energy sector in the Federal budget far greater than expected in decades to come. In this regard, decision makers have already set three elements to follow in the new Russian energy policy; i.e. “1) to strengthen the positions of Russia in the international energy markets, 2) non discriminatory access to the international markets and advanced technologies, and 3) to stimulate foreign investment” (Mastepanov 2003).

These objectives require some conditions to achieve the goal. Russia has to create an investment friendly environment. It should not be only for domestic investors. Foreign entrepreneurs should also be given a “favorable investment climate”. It means, Russia has to set an environment of fair rules and regulations. It should not only exist in rule books but they must build a mechanism wherein its follow up must be guaranteed. This kind of hassle free trading atmosphere is the prerequisite for achieving those high targets. In order to accomplish these objectives, Russia’s new energy strategy is intended to bring “US\$40-\$70billion over the period from 2001 to 2020” (IEA -Russian Energy Survey- 2002). The whole strategy is focused on the export enhancement of energy resources. They are making good efforts to maintain a considerable and high level of growth. Exports of liquid fuels and natural gas have been given priority but with a remarkable focus on petroleum products as well. If on the one hand, Russian crude oil and other petroleum products have the capacity to increase direct supply to the American markets; oil and natural gas supply to the East Asian markets could make energy exports more diversified as well.

Russian diversification and “penetration of the energy markets of East Asia” in particular are important vis-à-vis developing the Far East regions. Gazprom has opened a policy to develop East Siberia as well as vast natural gas fields of Sakhalin and the Far East. Whereas, since early 1990s to the beginning of 2000, when economy starts consolidating itself after a decade of turmoil and zigzag policies, oil sector in Russia has become ever more competitive due to privatization. However, Gazprom “a state-controlled gas giant” continued to dominate the natural gas industry. It controls 1/3<sup>rd</sup> of gas reserves in the world. However, market mechanism of Gazprom is not solely focused on open market competition. It has some state responsibilities and follows the rules set by the state. Though, sometimes following those norms becomes uncompetitive and against the rule of an open market, but it is beneficial for the company in many ways as well. For example, company has not faced “market pressures that have been behind the recovery in oil output”. It is also argued that:

*“Gas output peaked at 643bn cu meters in 1991 and fell gradually to stand at 561 cu meters in 2002. Gas output has been rising since then, reaching 591bn cu meters in 2004, and the government plans to increase gas output to 950bn cu meters in 2005, backed by US\$4.5bn investment spending on prospecting and expansion. Gazprom sold 181bn cu meters (or 11.8% more) abroad in 2004, with a year-on-year rise of around 15% in exports to Europe, its largest and most lucrative export market. Gazprom uses its export earnings to subsidize loss-incurring domestic sales, which earn around 20% of world market prices. Since cheap gas powers much of Russia's industrial sector and keeps household energy bills low, the government has been reluctant to liberalize domestic gas prices. This has starved Gazprom of the investment capital needed to replace its declining west Siberian fields with new ones in the far north and east, and to build new storage and transportation facilities” (EIU 2005; Ahn 2007)<sup>42</sup>.*

At the very outset of this century, Russia was intended to boost its “oil export volume from 3% - 30%”, targeting Asia Pacific markets in the future (Mastepanov 2003). However, Russia’s conventional oil consumption market in Europe remains a priority of even its new oil export strategy (APEC Energy Demand and Supply Outlook 2002). Various policy intentions to enhancing the export volume of crude oil were well

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<sup>42</sup> Though, company has access to foreign borrowing to fund its capital expenditure, its investment plans are held back by high levels of debt and continued uncertainty about gas market reform. The government hopes that the removal of the ‘ring-fence’ which limits foreign share ownership in the company will finally allow Gazprom to raise much needed investment capital (Ahn 2007).



grounded in the new energy strategy focused on diversification of markets. Yet, given the existing infrastructure, carrying energy resources to a new destination and geopolitical positioning of Russia are worth noticing. Russia still hugely depends on the Soviet era transport network which was mostly designed to cater European needs. Therefore, Northeast Asia's energy markets could get influenced only indirectly (Khartukov 2000) or by some geopolitical moves in various oil and gas dominated regions. Since currently, Russia is focusing on developing wide range of energy infrastructure in its Far East region; it could provide its vast energy resources to the Northeast Asian energy market requirements in the long run. It could "play a very important role in shaping cooperative energy schemes in Northeast Asia". Various "ongoing and planned energy projects in the Russian Far East and eastern Siberia enable Russia to increase supplies of its fuel and electricity to" (Khartukov 2000; Ahn 2007) the Northeast Asian states.

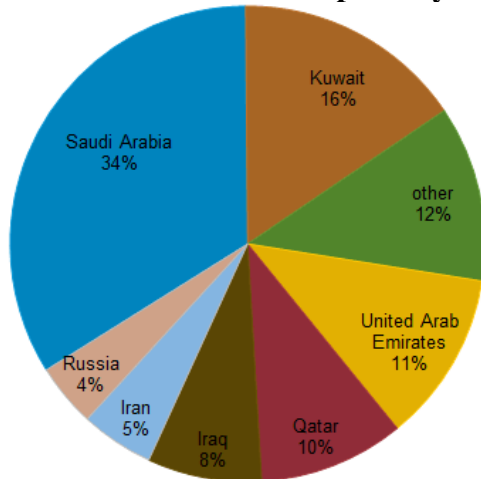
In this backdrop, Eastern Siberia and Russian Far East on the whole are potential source of supply to the fuel markets in East Asia. It has not only emerged as a simple energy supplier to the open market, but also looks as a promising guarantor of supply security in the region. Russian Far East region holds rich oil and natural gas sites along with massive hydropower resources. The region "has about 30 percent of Russia's coal deposits, half of which can be mined in open pits". Though, fields are located far and wide, "capable of both producing annual exports of crude oil to 15million to 25 million tons (Mt)" (White 2003) while producing "30billion-50billion cubic meters (bm<sup>3</sup>) of natural gas a year to neighboring Asia Pacific" nations (Khartukov 2000).

On the other hand, East Siberian region holds "20% of proven natural gas reserves in the world". It has enormous potential of natural gas production and could supply around 130 bcm (bm<sup>3</sup>) in 2020. This estimate "is equivalent to the level of Russian exports to Europe today" (Cleary 2003). Sakhalin is one more significant region of this basin where "over 3million tons of oil was produced" in 2002; while, it is projected that it could produce around 45 million tons annually after three decades. During the same period, "oil production development in East Siberia and the Russian Far East would increase the production level up to 95 million tons of oil annually" (Simonov 2003).

Sakhalin-I and Sakhalin-II are doing exceptionally well. These are most outstanding upstream projects of the Russian Far East up to now. They could be as game changers in the strategic paradigm shifts in terms of energy market and diversification plans of Russia. The estimated production level of crude oil for Sakhalin is around 0.7Mb/d in 2020, “with corresponding export volumes of about 0.5Mb/d”. However, overall crude oil production figures could be expected around 0.8Mb/d up to 2020 “with probable export figures of 0.4Mb/d” for East Siberia in particular. overall, it is expected that Russian Far East and Eastern Siberia as a whole would produce around 0.9Mb/d up to 2020 and could supply easily to the Asia Pacific markets “under favourable pricing conditions”. In spite of these developments, transport is a major problem to overcome while production of natural gas was to start around the last leg of the first decade or during the initial years of the second decade of this century (APEC Energy Demand and Supply Outlook 2002). Regarding the enhancement of carrying capacity of crude oil, Transneft (“the state oil transport company”) planned to build a 3,765 kilometer pipeline “on an Angarsk-Khabarovsk-Nakhodka route with a capacity of one Mb/d. It should be filled with a great amount of oil from the West Siberian fields and new prospective deposits in East Siberia” (APEC ...2002).

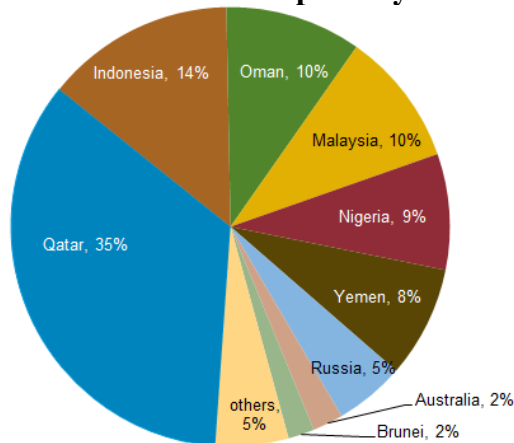
Interestingly, Russia has quite often been portrayed as a declining geopolitical and economic power. It was equally shown in terms of world politics as well as in the Asia Pacific region. However, in real terms, it is not possible to simply ignore a nation which is one of the world’s largest producers of oil and natural gas. Russia is a major player in the “new geopolitics of energy” whose enormous export potential and current production is unavoidable to restructure the world energy market. To be brief, “the potential of the Russian Far East is not only likely to reshape energy flows in Northeast Asia but may also redefine the region’s geopolitical relationships” (Mitchell 1996). In this context, geographical proximity of Russia’s Far East with the Northeast Asian oil and natural gas importing nations provides “a regional geopolitical position as a desirable alternative to the now dominant Middle East energy suppliers. From the Korean perspective, as long as Russia’s natural gas projects in the region provide competitive terms and guarantee the stability of supply, Russia clearly emerges as a potential competitive energy supplier” (Jeon 2003; Ahn 2007).

### South Korea crude oil imports by source (2014)



Source Global Trade Atlas, Korea Customs and Trade Development Institutions  
[http://i2.wp.com/www.eurasiareview.com/wp-content/uploads/2015/10/oil\\_imports.png?resize=525%2C389](http://i2.wp.com/www.eurasiareview.com/wp-content/uploads/2015/10/oil_imports.png?resize=525%2C389)

### South Korea LNG imports by source (2014)



Source: BP Statistical Review of World Energy 2015  
Note: Others include Algeria, Angola, Egypt, Equatorial Guinea, Norway, Trinidad and Tobago, United Arab Emirates, and re-exports.  
[http://www.hellenicshippingnews.com/wp-content/uploads/2015/10/lng\\_imports.png](http://www.hellenicshippingnews.com/wp-content/uploads/2015/10/lng_imports.png)

### Obstacles

In spite of rich supply potential of energy resources in Northeast Asia, the region is facing many challenges and hurdles still work as constraints. A supportive regional energy market is still far away in terms of “energy security cooperation. It is argued that among many other requirements, regional energy security cooperation necessarily involves some following elements to build the same: “1) political will for regional cooperation, 2) the right partnership to deliver major projects, 3) enormous investment in infrastructure and supply, and 4) simulation of market development” (Cleary<sup>43</sup> 2003).

<sup>43</sup> Peter Cleary, President of BP Gas Power & Renewables Korea.



[http://russiancouncil.ru/en/blogs/casingpoint/?id\\_4=437](http://russiancouncil.ru/en/blogs/casingpoint/?id_4=437)

[http://russiancouncil.ru/common/upload/blog/images/image/russian\\_gas\\_in\\_china.png](http://russiancouncil.ru/common/upload/blog/images/image/russian_gas_in_china.png)

However, it appears that achieving bilateral or multi-lateral energy security cooperation among Russia and other Northeast Asian states depends on some additional factors as well. The region is relatively underdeveloped and Russia's Far East has some enduring local problems in addition. The energy pattern in Northeast Asia is also different and yet to be understood entirely. Apart from these regional challenges, various states including Russia have trust deficit among them. Even sometimes many stakeholders had serious concerns over "the potential vulnerability of the extensive network of oil and gas pipelines that are either under development or still in the planning stage" (Paik et al 1998; Valencia & Dorian 1998). This lack of confidence leads to linger on any dialogue to cementing "energy security cooperation in the" region. This delayed process of infrastructural development could well be understood by just one example of Kovykta. This proposed gas pipeline project was remained uncertain due to indecisive approach about the choice of route and its final utility or consumption destination. Initially, Russian government did not decide the final infrastructural direction of gas pipeline. Even its final destination had become a point of discussion. Policy makers found it hard to finalize that whether the project should go for export purposes or build only for domestic market supply. This kind of

delay and discussions makes it difficult to boost the confidence of investors in the region (Vinokurov 2004). In such a situation the whole process becomes very lengthy and does not encourage investors in Russian projects at least in many Northeast Asian states. Ultimately, Russian government does face trust deficit not only in trade relations but also in political relations, and geopolitics in particular.

It is also argued that some pipelines would likely to move from areas which are now being considered politically volatile or risky routes. Other than short term risks of dislocations due to terrorist's attacks and challenges of maintenance security threats, the pipeline provides hosting countries en route a potential "vital leverage to disrupt or cut them entirely in crisis and war; e.g. ... the unresolved North Korean nuclear issue as well as territorial disputes among Northeast Asian countries, such as the dispute over the Kuril Island, may interrupt supplies" (Calder 1998; Ahn 2007). Such a potential situation makes it necessary to build "an institutionalized multilateral energy cooperative structure" in the Northeast Asian region. Furthermore, any delay in "Kovykta gas pipeline project" or "oil pipeline route decision" to Japan and China would contribute and swell energy insecurity perception in the Northeast Asian market.

In fact, problem of deciding a final route for any oil and gas pipeline is a big challenge for state policy makers. If on the one hand major private oil and gas companies look for trading aspects along with potential risk factors in their projects, but state companies are well associated and linked with the geopolitical developments as well. It could be seen in case of deciding the Kovykta pipeline routes as well. There was "one of the possible Kovykta pipeline routes to pass through North Korean territory, suggested by the South Korean government in 2003 was ruled out primarily because of the unresolved North Korean nuclear crisis... (while) the development of the Kovykta and Sakhalin gas projects has been affected by general Russian-South Korean bilateral diplomatic relations and trilateral relations among Russia, North Korea, and South Korea, due to the complementary nature of economic structures" (Ahn 2007). Therefore, trade and industrial policies of any government establishment and role of the state in various international issues are significant subjects in the supply of oil and gas to the market. It is more apparent in the Northeast Asian energy markets where regional energy security is directly linked with the geopolitics and security concerns of foreign energy investments. There are

some “trans-border gas projects in the Russian Far-East (which) will never materialize unless they receive the active political support of all the nations involved” (Khartukov 2000).

Hence, it appears in conformity that if on the one hand, consumer states have deep quest for natural resources especially fuel, producer states like Russia desires greater political influence. Producing states may take a decision having imperatives of its power and influence. In this way it could be interested in expanding influence of power in the market and region. So, consumer’s quest for fuel could link producer’s quest for power and influence. However, both the parties “set the rules and partly determine the costs and benefits of economic activities... state authorized third-party access or open access to essential facilities such as LNG terminals, pipelines, and storage allows both suppliers and consumers easier access to” (APEC Energy Demand and Supply Outlook 2002) energy markets. This easy mechanism provides a “substitution of natural gas for other fuels”. It could also help to reduce costs of gas supply and increase as well as promote efficiency in the existing infrastructural facilities by pushing gas to gas competition (APEC...2002). This mechanism would encourage more and more participants to compete in the market while yield ratio for facility owners could turn into higher profits.

High level political intensions are certainly required to take this move forward. In 2003 Putin and Roh Moo Hyun were intended to do something and took some initiatives. However, without any focused program at the government level it would become a farce. As Russia and Korea still have cold and normal relations rather the enthusiastic one. Both still do not have any special schema. To focus and understand only minimal economic activities, a comprehensive analysis of various factors is required. In this context, some factors like cultural distinctions, various misconceptions along with lack of information between two nations are some of the significant issues to deal with. It is also believed that South Korea has only limited number of “experts on the Russian economy” which has made it difficult to comprehend policies and implications of Russian projects and in turn “slowed down the pace of energy cooperation between” these two nations. It was also believed that energy experts vis-à-vis “resolving complex government-related issues and administrative litigation, with special emphasis on energy regulatory rule” are

also limited in numbers. Therefore, any existing or potential legal or policy issue is not only difficult to understand but also hard to find out appropriate solution. This lack of expertise was fully exposed in the case of Sakhalin oil scandal.

In this case, Korean prosecutors released the arrest warrant to a senior rail official on 30<sup>th</sup> April 2005. It was in connection with a case of failed oil deal with Russia. It was supposed that due to erroneous cost analysis the state-run Korean railroad agency would have to bear millions of dollars. The director of this agency Wang Young-yong was taken under suspicion and accused of pursuing the project without proper investigations and especially profitability of the project. It was disclosed that:

*“In 2004, Korea Railroad had agreed to invest in an oil project on Russia’s Sakhalin Island, and paid a deposit of US \$ 6.2 million to Russian investment group Alfa-Eco. Yet, the Russian government later denied approval for the project, and the Korea Railroad withdrew from the contract. In April 2005, Alfa-Eco announced that it would return only US \$ 2.7 million to the Korea Railroad according to the terms of the agreed contract. The Board of Audit and Inspections of Korea stated that the railroad agency incurred damage to the nation by jumping into the project without legal basis or survey of profitability, not to mention any appropriate internal decision making process” (AP 2005).*

This is an exemplar and interesting case because of its nature and power to construct a misperception. The overall development in this case fueled a “general skepticisms toward the Russian energy infrastructure in the Russian Far East, among the Korean public and the private energy sectors”. However, it is noteworthy that “this incident did not happen because of government-to-government miscommunication” (Park & Lee 2002). Furthermore, both nations suffered heavily from the financial crisis of late nineties. It hampered the initial progress of mutual energy cooperation. Thus, if the cited case is an exemplar lawsuit regarding various complications; economic status and lack of depth to fight with financial crisis or situation like this explains overall lack of strategy in terms of energy cooperation between the same. In fact, cost analysis of Russia’s Far Eastern energy projects is not only risky but also require great amount of swing factors. Addition or deletion of huge amounts other than initial estimate is a normal phenomenon in all the programs. The environmental challenges often pose complications and investors face unexpected “wide gap between the initial feasibility study and the later actual process, in terms of project cost” (Ahn 2007) in the region.



However, another example could be taken to highlight the problem of delay from Sakhalin II project where initial cost was estimated around \$10billion, but in July 2005 Executives of Yuzhno-Sakhalinsk stated that cost of project could increase up to twice (\$20billion) what in so far as expected earlier. Though it was “partly because of the overruns and delays to going ahead caused by insufficient information... (and) the company did not properly model the geology of the area and was unprepared for the effect of ice on the pipeline and environmental concerns” (Faucon 2005). Ian Craig, the Chief Executive of Sakhalin Energy further stated that involved company “underestimated ice-related working limitations during the operational setup of the platforms...(additionally) speed is greatly reduced by sea freeze in winter...and time is cost without detailing the overruns” (Faucon 2005).

Another obstacle has been stated in Russia as protectionism. Russia as many other countries in various continents is known for resource nationalism. Its new approaches in terms of natural resources are not very different from many other natural resource rich nations. The concept is taken as a barrier in building energy security cooperation in the region. Since foreign investment and new technology is important for developing new projects in the host nation, resource nationalism could impair these investments and slow the pace of any energy project. Involvement of other countries in the development of Russia’s Far East can strengthen the export component of fuel industry. It may balance the power equation energy resource development in the region as well. In fact, involvement of Asian states in various energy projects and export component of these projects are sensitive issues and must be dealt carefully (Khartukov 2000).

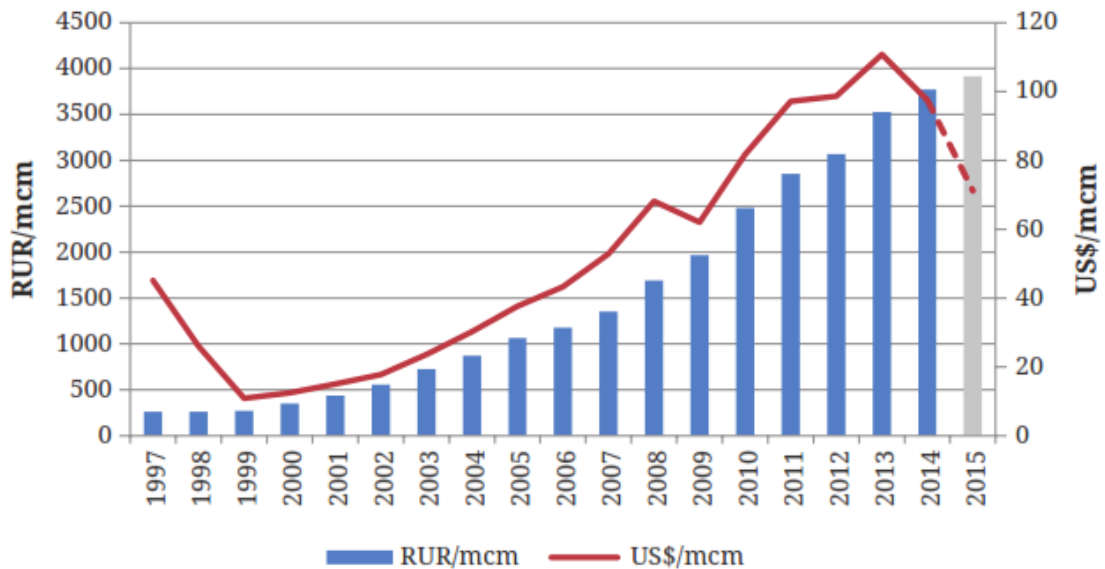
Therefore, the whole business and investment environment is an essential imperative to attract the investors. Various laws, rules and regulations, taxes and tariffs, altogether build a climate to invest in a resource rich host nation. The overall investment environment is one of the dominant factors to decide speed, growth, and extent of such investment and its potential flows. An open and transparent regulatory system supported by strong legislative base could promote standardization, an improved licensing structure and certification in the energy market and industrial sector on the whole. Potential investors and existing stakeholders both altogether desire and demand this climate to get involved develop the energy sector in a host country (APEC Energy

Demand and Supply Outlook 2002). In case of unstable excise duty, levy, and other tax regimes investors get confused and indecisive to invest. Frequently changed legislations may only add skepticism in the minds of investors. On the whole, such a dicky wobbly and flickering environment cause only some added barriers to the healthy development and effective energy trade (APEC... 2002). Though, many energy giants are working in Russia's Far East and Arctic region; it appears that new government apparatus led by Putin could not build required confidence among investors "to provide the legal and institutional infrastructure for external energy transactions for foreign energy companies... (while) non-transparent procedure in the Russian bureaucracy created additional difficulties for economic cooperation with Russia" (Ahn 2007). Various Institutional barriers are also big troubles. For example, Production Sharing Contract in the energy sector is a big concern for any foreign or domestic investor (APEC... 2002). Legislation procedure in this regard is a lengthy and tiresome process. In spite of having a priority industry status, laws related to production sharing contracts "in the upstream operations of oil and natural gas" could take record time to get passed in the Parliament. It is not very transparent and known to the investors that why an important law such as production sharing agreement takes unwarranted long duration in the process of "under consideration" or when a law is being referred as "subject to revisions" in the Russian Parliament. Naturally, the whole decision making process is political and such a political linkage with the "long-term investment decisions" (APEC... 2002) goes against the favourable climate to invest or attract foreigner investors in the large energy sector. Various rating agencies and potential investor states believe that political risk is a highly negative factor and creates skepticism in the minds of investors especially in the energy sector.

Price reform is another issue taken as an obstacle in the development of energy industry in Russia. It has been struggling with the subject for a long time. It is certainly not a champion in the pricing mechanism. Energy price reforms have been linked with the geopolitics as well. This linkage has put a question mark on the successful reforms of price mechanism in Russia as well as in the world energy market. In addition, Russian corporate management is facing lack of transparency, and needs dramatic improvements. However, question of energy efficiency is also important in the Russian energy sector and decision making process. If Russia has yet not achieved a big success to solve the issue of pricing on the one hand, it is struggling to ensure

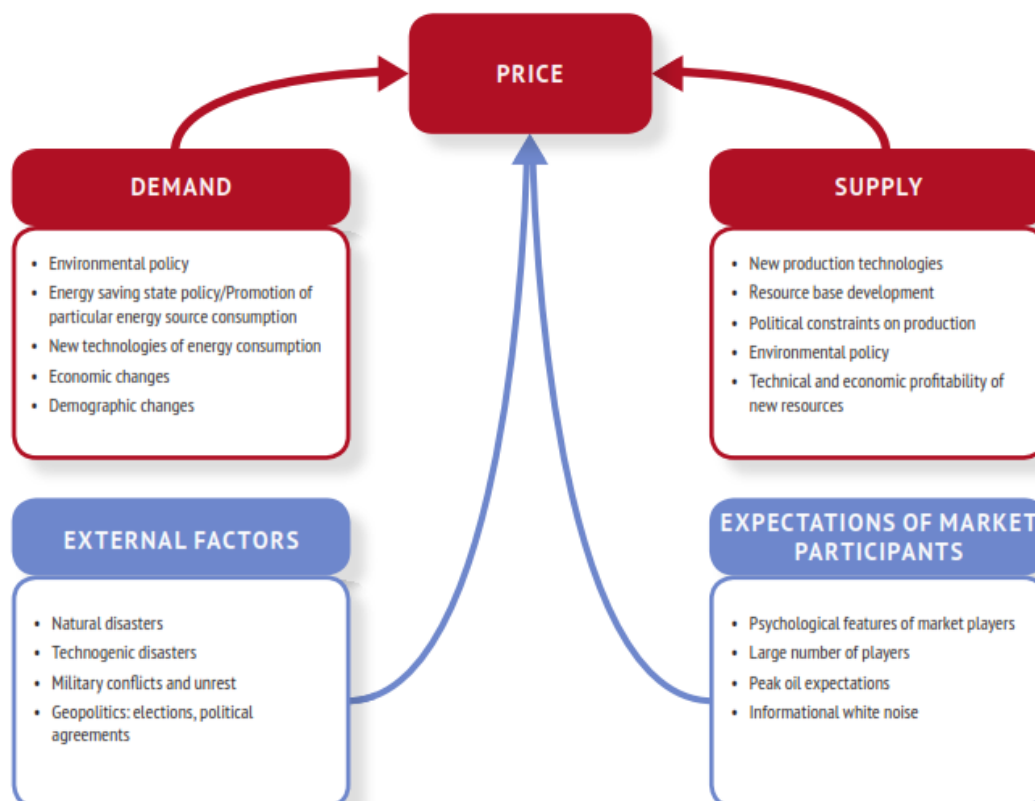
appropriate safeguards vis-à-vis “the diverse environmental effects of increased energy production and use... (while its) regulatory reform has also been so slow that it has had disturbing impacts on energy supply” (IEA 2002; APEC... 2002).

### Russian domestic gas price dynamics in rubles and dollars since 1997



Source: Tatiana Mitrova and James Henderson, “The Political and Commercial Dynamics of Russia’s Gas Export Strategy,” Oxford Institute for Energy Studies, September 14, 2015, <http://www.oxfordenergy.org/2015/09/the-political-and-commercial-dynamics-of-russias-gas-export-strategy/>.

**Factors affecting the price of oil (the most significant factors market in red, least important in blue)**



Source: ERI RAS

Some analysts believe that Moscow is not very enthusiastic about encouraging massive foreign participation in its energy sector, and especially in those projects which necessarily do not require foreign capital investments and technology to be commercially viable. However, it has pursued a policy where Gazprom's aggressive involvement is apparent in almost every gas project. It is working with many foreign subsidiaries and affiliates:

### Foreign Subsidiaries & Affiliates of Gazprom

Country	Company name	Types of operations	Share: Gazprom (%)
Armenia	Armrosgazprom	Gas distribution	40
Austria	Gas und Warenhandelsgesells chaft	Sale of gas	50
Belarus	Beltransgaz	Gas distribution	50
Bulgaria	Overgaz	Gas distribution	23
	Overgaz Incorporated	Investing	50
	Topenergo	Gas distribution	100
Cyprus	Leadville Investments Ltd.	Investing	100
Czech	Gas Invest	Investing	n.d.
Estonia	Eesti Gaas	Gas distribution	37
Finland	Gasum	Gas distribution	25
	North Transgas OY	Gas transportation	50
France	Fragaz	Gas trading	50
Germany	Wingas	Gas distribution	35
	WIEH	Gas distribution	50
	ZMB	Gas distribution	100
	GWH	Gas distribution	100
	ZGG	Gas distribution	100

Source: Bilgin, Mert (2011).

The same approach was made out in the Kovykta project where, "China and South Korea was highly concerned that the Kremlin had appointed Gazprom as coordinator of all gas projects in the country, making it unclear whether business negotiations should be held with RP or Gazprom. And the situation was aggravated by the fact that the working groups had not met for almost six months." (Simonov 2003). However, the story does not end here, Gazprom made further objections in developing the project. Management made every attempt to divert the

attention of foreign investors toward the Sakhalin projects. It was no less “than a protective nationalistic energy policy and simply seeks financial benefits”. Kremlin leaders and Gazprom management opted to initiate their own priority first rather to take note of investors especially foreigners. The strategy revealed an impression of looming new resource nationalism in Russia’s energy sector. The impending tendency of resource nationalism was scary for existing and potential foreign investors.

Along with these policy and approaches, Russia’s Far East has some inherent problems. In spite of considerable amount of energy resources, it has been suffering from ineffective economic and investment policies as well as insufficient infrastructure. Its severe energy crisis is a result of domestic policies. It does lack “a land based transportation infrastructure connecting this region with the country’s major fuel sources in neighboring Siberia and distant European Russia”. It has resulted “only summer seaborne transportation” to connect the region properly (Khartukov 2000; Ahn 2007). Ultimately, it has contributed in delaying many projects and energy cooperation with a resource rich region.

In addition, “high railroad tariffs and sea freight costs” make distant liquid and solid fuel deliveries very costly. In fact, even since economic reforms in Russia, this region has been known for its difficult conditions and considered as “Russia’s most vulnerable and least protected region in terms of energy supplies”. Its southern region “often still experience cutoffs of electricity and hot water during winter” and region as a whole suffered from depopulation considerably (Khartukov 2000). It has been calculated that its estimated eight million inhabitants lost almost one million since 1991(FBIS 1999). It is also surprising for many that people of an energy rich area pay an “exceptionally high price of energy bills... (and even) pit managers could not afford to pay their workers”. It is noteworthy that “in August 1996, coal miners protesting wage arrears staged hunger strikes that shut down the Primorskugol mines” (Rozman 1997; Ahn 2007).

Hostile environmental condition is a major drawback in the development of region’s energy resources. Optimum utilization of resources has become a tough job. Operating conditions are awfully difficult as compared to many other regions even in Russia which make working less conducive for resource utilization. From October to June, these conditions are greatly abnormal. It is “characterized by an ice cover exceeding

2 meters (m), icebergs up to 20-m thick, frequent typhoons, currents with widely varying directions, and low air temperatures”. Therefore, such a condition necessarily requires an advanced technology which should be capable of protecting against icebergs. Without “capital intensive ice resistant fixed platforms for drilling and production and underwater pipelines” no field development could be imagined (Khartukov 2000).

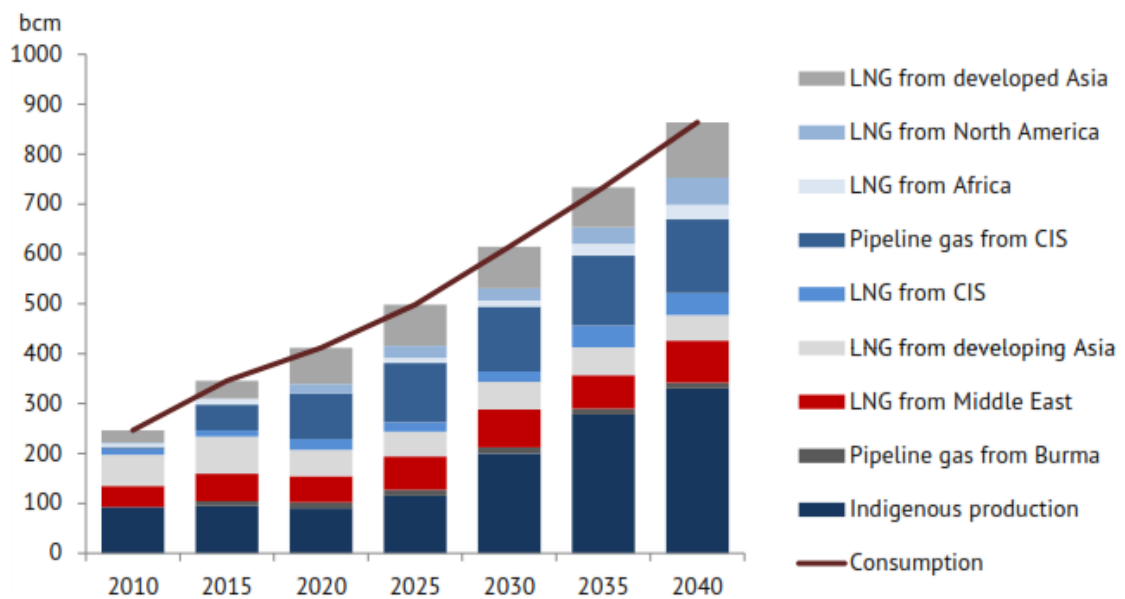
Sometimes, environmental problems did not delay the projects directly. For example, it was true with the Sakhalin Energy pipeline project. The pipeline manager Guyt reported that inadequate data impacted the development of project. Lack of data or relying on old data was the reason behind apparent miscalculation of required depth. In fact, available data regarding the sea lanes posed complications in this case. It was simply the inadequacy of data which was not collected recently and had even no updates according to the new requirements. When the real required depth was shown to the management, project was bound to delay. In the second scenario, advanced and more powerful equipments were required for that deeper burial. In turn, more capital was required to come up with parameters of the project. Since Sakhalin Energy relied on the old data, and had no contingency plans of such a magnitude, the project estimate fell down. It finally resulted in a delay. The problem of data “led to a high-profile decision to reroute a subsea pipeline, leading to more overruns. Following a late 2003 survey, Sakhalin Energy announced in April 2004 that ice was formed even deeper into the seabed than previously expected and that, as a result, the pipeline would have to be buried to greater depth” (Ahn 2007). Therefore, it was only indirect impact and concerns regarding environment which ultimately “contributed to an expected delay in gas production” in this case.

There are some continual problems in the region. These are general in nature. Socio-political and economic backwardness of the region remained a setback in the development. These troublesome but general concerns contributed to the slow growth and development. It held responsible for the delayed transformation of the region into an energy market. Rozman elucidated the systemic predicament and acknowledged that: “the region’s problems are nothing new, suffering as it does from five general negative aspects, tendencies that clearly hinder today’s further economic development. These include: Localism flirting with separatism, including threats to

revive the short-lived Far Eastern Republic of the early 1920s; near domination by organized crime in a region already criminalized by Stalin’s labor camps; xenophobic paranoia about international conspiracies; dictatorship by local demagogues; and an economically inspired population exodus - an inviting vacuum for nearly overpopulated China” (Rozman 1997; Larin 1995; Stephan 1994; Ahn 2007).

If exactly as not the same anywhere else, Russian Duma representation is also based on seats and population. Thirty six percent of Russian territory has only 4% representation which is economically a backward region (Wuchte 2001). It is said that various parts of these regions were comparatively prosperous but declining federal support over a period of time made the region considerably neglected. At the beginning of this century many had a skeptical thought about the future of this region. In general, it was believed that Kremlin would not pay enough attention to solve the structural problems and its development. Over a period of time huge Chinese settlements in the border areas and dominance in the region created a different political thinking. Nationalist fervor has spread around the region and “often seen in the form of anti-Chinese rhetoric or fear of Asian dominance”. Now some believe that this spirit of nationalism could mess up the hope and “potential for energy cooperation with Northeast Asian” (Wuchte 2001) states.

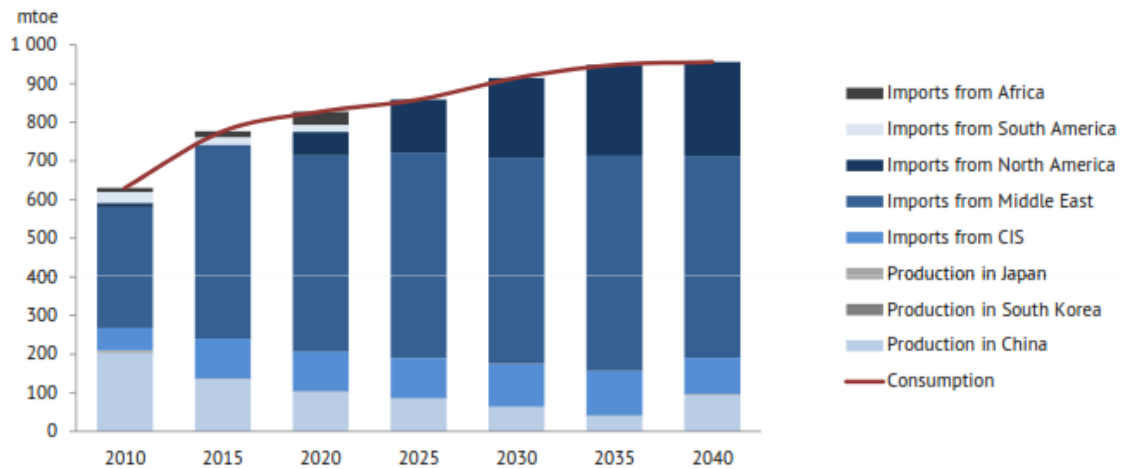
### Gas Balance in North-east Asia



Source: ERI RAS



## Crude oil balance in the North-east Asian market



Source: ERI RAS

In general, the problem of local infrastructural development should be priority. Since an effective distribution set up is lacking, development of local distributaries network is particularly significant for gas market in the region to proceed. It is not required only for local development, but also significant for potential bilateral as well as multilateral cooperation through energy sector in Northeast Asia. The region holds the required energy strength which could bring shared growth, development, and prosperity. It is argued that diverse energy profiles of various states and their different economic scales in general could be advantageous to cementing the cooperation. In addition, other than local and systemic problems, “supply infrastructure, technologies for utilization and supply, development of markets for gas products and services, and facilitating policies and regulations at both domestic and international levels are essential”. Northeast Asian states “can advance the frontiers of cooperation in areas such as trans-boundary power interconnections, natural gas pipeline networks, and joint use of existing supply infrastructure, transfer of technology and know-how, and joint exploration and development of energy resources (APEC Energy Demand and Supply Outlook 2002; Ahn 2007).

Energy cooperation is not a new phenomenon in various continents and regions. It is a well established concept in Southeast Asia, Europe, America, and even in African continent. However, it is relatively a new debate among Northeast Asian states. Previously, they had no such debate either focusing on bilateral or multilateral cooperation in the energy sector. Until recently, the whole region was lacking any

strong multilateral framework to cooperate. They used to go for bilateral relationship to develop any trade or otherwise. The region did not develop any “general economic or institutional agreements or unions” such as the ASEAN Council on Petroleum (ASCOPE), OPEC, the European Union, the European Energy Charter, or the ASEAN in general (Khartukov 2000). Regional as well as country specific problems blocked the development of any effective regional energy security system. These states have been struggling hard to solve their energy issues individually since long. It is not only lack of institutional drawbacks, but also their ethnic, cultural, and political obstacles made them helpless. It finally compelled them to handle their energy problems by their own mechanism (Khartukov 2000).

Though, energy cooperation is the demand of time; it is also stated that competitive national interests may create tensions. Challenging each other to get a share or bigger share in various energy projects might lead to competition rather cooperation (Valencia & Dorian 1998). At least in current situation, a possibility of rivalry cannot be ruled out in a structure where “common legal and institutional frameworks for energy cooperation” is absent (Khartukov 2000). Japan and Russia have accepted the conciliatory energy trade mechanism and signed both the Energy Charter Treaty and the European Energy Charter altogether (Khartukov 2000), while Japan and South Korea are “the only members of the IEA” vis-à-vis Northeast Asian states. However, it is interesting to envisage that a region which is not united due to complex political reasons, energy cooperation may lead to unite them. Vulnerable situation of energy security is a common reality in the region. Therefore, states may get compelled to promote integration and regional energy cooperation. Such an integrated Northeast Asian community of states may solve the problem of energy security while Russia could receive required finance and other supports such as demand security to develop its Far East. In fact, ongoing projects in Russia’s Far East could play a pivotal role to integrate the region rather than to create a rift and build a bulwark of competition regarding the quest for energy.

On the other hand, these states are skeptical enough to be over dependent on a single supplier of their needs. In this case, Japan is concerned about China while Chinese are evidently concerned about Russian supplies. Exclusive possible dependence over Russian oil and gas supply is not acceptable to China. That is why it has followed a

path of large diversification to receive energy from every nook and cranny around the world. It has massively financed various energy projects all over the world wherein majority of them intended to have a priority of Chinese market. However, Russia on the other hand, is worried about the overdependence on Chinese market. It has concerns over consumer monopoly where rules of the energy supply of Russian products could be dictated by the Chinese alone. Since spot market is different from long term pipeline relations; Russian concerns over price settlement appears genuine (Saneev 2003).

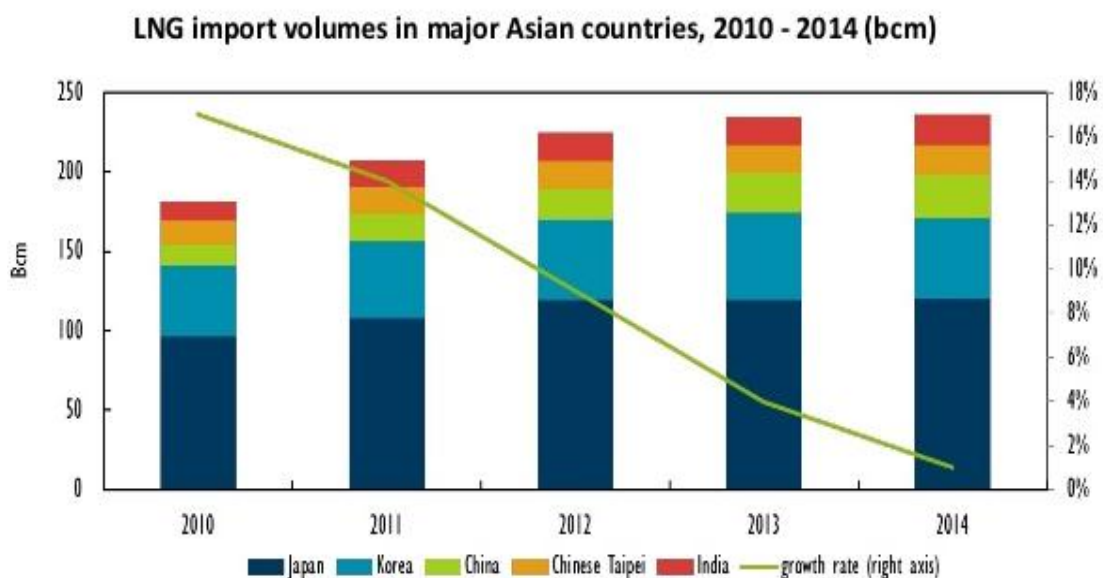
However, South Korea is scared of disruptions and cutoffs. Its oil and gas supply through the pipelines via China or North Korea is likely to be interrupted. In this situation Russian energy supply might not be able to dominate the energy market in the region (Khartukov 2000). Khartukov opined that “neither Russia’s gas exports, even at maximum possible levels of  $50\text{bm}^3/\text{y}$ - $70\text{bm}^3/\text{y}$  in the 2020s nor the country’s crude supplies (up to  $20\text{Mt}/\text{y}$ - $30\text{Mt}/\text{y}$ ) can replace East Asia’s traditional source of energy imports. He adds that the looming energy imports from the Russian Far East should not be regarded as the long-awaited panacea for all of East Asia’s energy ills” (Ahn 2007). This argument shows that Russia would likely to become “a key supplementary supplier” and highly likely that it would be able to balance the existing supply to the Northeast Asia. It could offset the supply from Middle East which is not only the usual source of energy import deliveries, but also holds the capacity to swing the market (Khartukov 2000).

In fact, there are two ways to look at the energy security in the Northeast Asian region. First is to focus on demand and supply equations and adopt a typical open market approach to achieve energy security according to the strength of a particular nation. On the other hand, the second approach is to build a “multilateral energy framework on the basis of regional energy importers and exporters instead of focusing on either supply or demand side(s)” (Ahn 2007).

In both ways Far East could play a significant role but the second approach is far more positive and reliable vis-à-vis energy security of the region as a whole. It is more practical and having better possibilities. Many past experiences show that any effort to improve or strengthen the energy security with focusing only on one side is bound to be unsustainable in the long run. However, focusing on any “multilateral cooperative

framework” which involves producer, transit, as well as consumer states proves to be more useful and advantageous. Khartukov points out that “such efforts include the Council for Mutual Economic Assistance’s (COMECON) energy programs and trade protocols, the Caribbean’s San Jose Pact, and the ASEAN Council on Petroleum and its Petroleum Sharing Agreement” (Khartukov 2000; Ahn 2007). The reason of success in such an approach is that, they buttress the structured economic stability and are supportive enough to push a positive development through mutually accepted and amicable regimes. However, in this framework, Russia as a producer and main supplier of the region has its own constraints. Ivanov argues that “the size of the market for natural gas in the Russian Far East is not particularly small, but at the same time it is not big enough to justify the construction of the infrastructure for a major pipeline”. Another serious issue is related to the finance and capital expenditures. Any large scale energy project requires billions of dollars financed either by involved recipient governments, any multilateral organization, or international economic/financial institution. Currently, it is obviously absent either in Korea or the Russian Federation (Ivanov 2000; Ahn 2007).

**Asian LNG Demand- slowdown (“Total import volumes of Japan and Korea haven’t stabilized, along with slower growth in Chinese demand”)**



Source: IEA <http://image.slidesharecdn.com/naturalgasandbiomethaneasfuelfortransport-t-150630120224-1va1-app6892/95/natural-gas-and-bio-methane-as-fuel-for-transport-t-yamamoto-10-638.jpg?cb=1435667257>

These concerns compel Russia to diversify energy export destinations. It cannot be over-reliant on the Northeast Asian markets. Russian energy resources must seek active market involvement in the United States, Japan, China, two Koreas and even potential markets such as Mongolia and other adjoining states. If focusing on the energy security, it has to go for joint ventures as far as mega pipeline projects are concerned. It has to find out the way where all the participating nations and international companies should get their proper value in “various joint venture agreements”. A proper and conciliatory energy regime is required to formulate the norms where ownership of assets should not be contentious issues. And finally, the structure of agreement should consolidate all the parties where everyone should have a win-win perception rather a challenging one. Such multilateral energy cooperation could bind the region as an inevitable energy community which ultimately could lead to “the process of regional integration” (SRC 1999). In this direction “three key policy challenges derived from implications of energy demand and supply can be applied to the Northeast Asia. These are so-called three essential E’s: Energy security, Economic development, Efficiency and environmental sustainability” (Ahn 2007). This approach is similar to the International Energy Administration. In this way, energy security would not be an issue confined only to the Northeast Asia or a regional concern. It would largely be connected with the global market and by all means concerns regarding the same would become more global (Lee 2003).

Therefore, since the collapse of Soviet Union, Russia has always a desire to achieve its lost status. Later on, it wanted to be pivotal in the region and worked for being a regional player. Its first and foremost aim was to safeguard its territorial borders and secure the sovereign status in the world system. Though, as compared to western and southern borders, Russia’s east was not that much significant initially; however, the Korean peninsula<sup>44</sup> was certainly a matter of deep concern for the new apparatus in Kremlin. New Russia was making efforts to restore its lost prestige and image in the region. It was interested to become an objective moderator. It was interested to create “a multilateral security framework in Northeast Asia” and establish influence over Korean peninsula. It appears that since the disintegration of Soviet Union, the new Russia has been presented as a declining economic and political force. Koreans

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<sup>44</sup>“The Korean peninsula is approximately 1200kms in length with 75% of its landscape being mountainous. The South is the most heavily populated with 50 million people living in about 30% of hospitable landscape.”

had this waning image of Russia in particular. However, in regards to “new geopolitics of energy” now it cannot be ignored simply because of its historical recklessness. Current production of energy resources and its potential to supply the same in the region makes it a significant player for energy as well as geopolitics. Its huge energy resources provide leverage in a game of regional geopolitics of energy resources (Mitchell 1996).

It is true that Russian growth and development hugely depends on intelligent use of enormous natural resources on the one hand, and exports of energy resources on the other hand. Since its conventional European market has started facing various troubles, it has to diversify its energy supply markets. Northeast Asia has provided a big opportunity for diversification. It “has the economic interest to expand its energy exporting market in” the region. As far as Northeast Asian “regional economic security perspective” is concerned, its “integration depends upon a certain degree of shared economic, political, and ideological interests before it can be successfully launched”. Moreover, “economic interdependence is essential for regional security cooperation. In this regard, the Kovykta and Sakhalin oil and gas projects clearly provide Russia and Northeast Asian countries with a possible key to energy security. From this point of view, it will be extremely interesting to observe the development of these two projects over the next several years” (Ahn 2007).

### **Russian New Approach to East Asia**

In context of contemporary oil and gas history, the energy strategy of the Soviet-era has made Russia vulnerable in the post Cold War period. Various oil and gas pipelines toward European states made it dependent on a single energy market and *demand security* of a confined region. The demand and supply structure was largely based on cheap energy resources of vast Russian reserves. Though Russia secured a sustainable market and profit at the time; the structure was mainly supported by the concept of reliable supply security from the Russian state. The supply was almost based on pipelines. States made long term contracts to exploit natural resources. However, in the long run, along with dependence on one market, this business model made Russia reluctant to diversify energy resources and market as well.

Having this background, the new Russian state faced many problems of transit as well as its old supply structure. The new millennium reached with new policies, strategies, and leader as well. President Putin took some new initiatives to restructure the energy industry. He focused on conventional market and its geopolitics along with new diversification plans. He started seeking some new energy destinations in the Asia-Pacific. The growing demand for energy resources of Asian region has provided an opportunity to one of the largest oil and gas producer state to diversify its market. Therefore, Russia decided to play some meaningful role in Asia. It has made an ambitious energy strategy to increase the market share in the region. In fact, Russian conventional European energy market is declining due to geopolitics and many other reasons as well. On the other hand, currently, it has not enough infrastructure and supply chain to the rising Asian energy market. This new market requires oil and natural gas in large quantity. Accordingly, Russia has a plan to double the oil export to the region, which could increase the region's share to roughly one-third vis-à-vis export of the Russian oil by 2035 (Reuters 2014). Moreover, by 2020, it aims to export 1 Mb/d to China, which would be a threefold increase (Reuters 2014). This huge oil export increase is possible because in recent years developing nations have a tremendous growth in oil consumption. Even in China it is expected to grow at 18 Mb/d by the 2035, as compared to the current consumption of 10 Mb/d (BP 2014). However, in the last decade, China has doubled its oil consumption which made it the second largest oil consuming nation in the world after the United States (BP 2014).

The year of 2013 has experienced the unprecedented oil demands in various developing countries. Data shows that the non-OECD countries have surpassed the total oil demand of the developed (OECD) world, which happened for the very first time in the history of oil (Reuters 2013). In fact, the new energy consumption pattern in Europe is very different from the developing nations. It is not only different from the perspective of current environmental concerns and technological points of view, but also from the development or sustainable developmental models. The growth potential of energy consumption in the Asian region is remarkable as compared to declining or stagnated European energy market. It is expected that oil consumption in various European nations would decline due to saturation effects, inter-fuel substitution and/or efficiency gains (IEA 2012). On the other hand, emerging markets have shown tremendous economic expansion wherein their energy consumption is

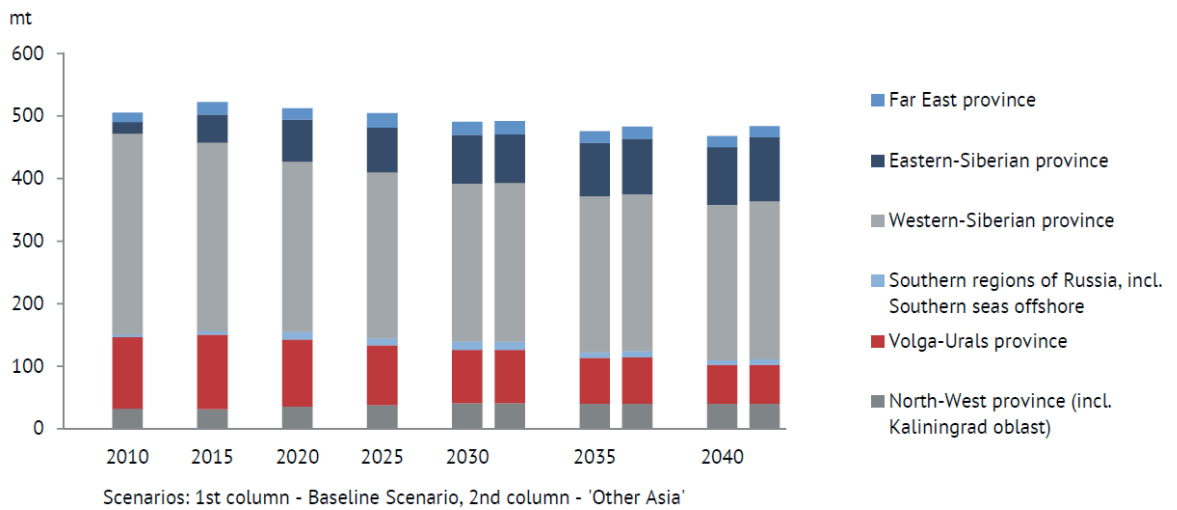


growing, specially the Asia-Pacific region. This new trend of growth in the region is responsible for the increased energy consumption at least for the last two decades (BP 2014). Furthermore, as far as the forecast of the net growth of oil demand is concerned, the potential growth in the Middle East and new demand in China, India and other East Asian countries provide the opportunity where Russia could play a pivotal role in the development of the region. However, on the other hand, this new regional demand could strengthen the Russian oil and gas sector not only by sound long term demand security but also financial support to develop the Eastern region to exploit the untapped natural resources of Russia.

This new scenario has created a situation where Russia has to move toward Asian market, especially to the East Asian region. These compulsions are deep-rooted in the historical model of Russian energy market. Europe has been its main supply region for the last so many decades. The geopolitics of the post Second World War had pushed Russia to build such an infrastructure that could cater its geopolitical needs through the supply of huge energy resources to the contiguous region as well as distant allies. On the other hand, Europe had to seek a reliable energy supplier in the long run. Therefore, Russia created a long pipeline network to supply energy resources to fulfill the European needs. Over a period of time, Russia has developed strong relations with many European nations and created a reliable market (EIA 2014). Due to decade's long market and geopolitical relations, it (European energy market) now sounds like a conventional or traditional market vis-à-vis Russia.

However, the new energy strategy of the Russian Federation has great focus on the new avenues in the East Asian market. It is going to focus on the untapped eastern region and exploring new production centers. These explorations are focused in the Far East and eastern Siberian regions. The energy strategy foresees the whole area as a primary hub point to further production and to fulfill potential demand to the new Asian energy market. It is expected that by 2030 (RAS-Russian Academy of Sciences 2014), Russia would produce roughly 20% of its total production from the eastern region, though, current production is declining marginally from 10Mb/d or above.

## Oil and gas condensate production in Russia by key producing region



Source: ERI RAS;

## Distribution of Natural Gas Reserves and Resources in Russia

(trillion cubic meters)

	Number of deposits	Initial aggregate resources	Increment of production	Reserves		Resources	
Total	837	248.62	15.37	47.83	20.95	28.87	135.60
Onshore (by federal)	804	174.79	15.35	41.94	16.73	20.87	79.90
Northwestern	48	2.70	0.42	0.64	0.08	0.07	1.49
Southern	226	11.61	0.92	2.94	2.55	1.31	3.89
Volga	192	5.08	1.29	1.04	0.13	0.71	1.91
Urals	198	102.96	12.60	33.37	9.18	14.84	32.97
Siberian	53	37.88	0.03	2.60	3.56	3.73	27.96
Far Eastern	87	14.56	0.09	1.35	1.23	0.21	11.68
Continental shelf	33	73.83	0.02	5.89	4.22	8.00	55.70
Barents Sea	n.a.	23.47	—	2.77	1.20	1.07	18.43
Kara Sea	n.a.	30.86	0.01	1.40	2.26	6.35	26.11
Okhotsk Sea	n.a.	6.22	0.01	0.87	0.32	0.10	4.93
Pechora Sea	n.a.	2.31	—	0.02	0.06	—	2.23
Caspian Sea	n.a.	1.91	—	0.29	0.40	0.18	1.04
Others	n.a.	9.06	—	0.54	0.02	0.30	2.96

Source: The fuel-energy complex of Russia in 2000–2007 (Moscow: Institute for Energy Strategy, 2008), p. 206.

**Natural Gas Production in Russia, 1990–2010 (billion cubic meters)**

Federal district	Siberia	Federal subject	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northwestern			8.4	3.7	4.1	4.1	3.9	4.0	4.0	4.1	4.2	4.3	4.6	4.2	4.3
			8.5	8.5	14.4	15.4	16.1	16.7	16.8	18.0	17.9	18.2	18.2	18.1	15.5
Southern			46.1	35.2	28.6	27.5	26.7	25.6	24.3	23.9	23.6	23.8	24.0	23.3	24.3
					530.4	526.4	54.0	20.8	564.5	577.8	585.3	600.9	591.7	601	514
Volga		Tyumen Region	29.0	17.6	20.1	20.4	20.8	24.4	26.2	27.5	29.2	28.4	29.6	31.1	31.8
		Khanty-Mansi Auto. Region													
Urals		Yamalo-Nenets Auto. Region	545.2	527.0	510.2	506.0	519.1	540.0	551.5	557.8	571.6	562.0	572	483	538.0
		Subtotal-Urals	574.2	544.6	530.4	526.4	539.9	564.5	577.8	585.3	600.9	591.7	601	514	570.0
Siberia		Novosibirsk Reg.	—	—	—	—	—	0.0	0.1	0.1	0.1	0.2	—	—	—
		Omsk Region	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—
Siberia		Tomsk Region	0.2	0.1	2.6	3.7	4.4	5.3	5.3	5.0	4.6	4.7	4.5	4.3	4.0
		Subtotal-Western Siberia	574.4	544.8	533.0	530.1	544.4	569.8	583.2	590.5	605.7	596.6	605.5	518.3	574.0
Siberia		Krasnoyarsk Reg.	—	—	0.4	0.4	0.4	0.5	0.7	0.8	1.0	1.2	—	1.7	2.2
		Irkutsk Region	—	—	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	—	—	—
Siberia		Subtotal-Eastern Siberia	—	—	0.4	0.4	0.4	0.6	0.8	0.8	1.1	1.3	—	—	—
		Subtotal-Siberia minus the Urals	0.2	0.1	3.0	4.1	4.9	5.9	6.2	6.0	5.8	6.3	6.4	6.2	6.4
Far East		Sakha Republic	1.4	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.8	2.0	2.2
		Kamchatka Reg.	—	—	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	—	—
Far East		Sakhalin Reg.	1.8	1.6	1.9	2.2	2.1	2.0	1.9	2.0	2.2	6.8	7.9	18.7	24.3
		Chukotka Reg.	—	—	—	—	—	—	—	—	—	0.0	—	—	—
Far East		Subtotal-Far East	3.2	3.3	3.6	3.8	3.7	3.6	3.6	3.5	3.9	8.4	11.0	20.7	26.6
		Total	640.6	595.5	583.9	581.4	595.1	620.2	632.6	640.8	656.3	652.7	664	584	649.0

Sources: Russian statistical yearbook 2007 (Moscow: Federal State Statistics Service of the Russian Federation 2008, 2009, 2010).

According to one estimate recoverable reserves expected roughly up to 161 billion barrels in the Far East and eastern Siberian regions. However, active companies in the Far East and eastern Siberian region have some different views. Their asset data shows that probable and proven oil reserves would be roughly only 10 billion barrels, which is good in absolute sense but not huge as compared to the major production basins of Russia; especially western Siberia where 48 billion barrels reserve have been expected (OIES-The Oxford Institute for Energy Studies 2011).

Though, in spite of all these estimates, it difficult to believe that the data could provide real full image of reserves. It is because the climate of those remote areas is very harsh and the size it covers is gigantic where still only a limited effort of exploration has taken place properly. Due to its tough conditions, the region has often been compared with the western Siberia and always defined as oil man's nightmare as compared to oil man's dream, i.e. West Siberia. The geology of the eastern Siberia is also very complex and heterogeneous. The quality of oil, as some analysis depicts, is not comparable to the West Siberian oil. Furthermore, this expanded region holds scattered sites of production which are normally isolated and exists in remote areas. The weather condition and lack of infrastructure are added problems to make production environment difficult. Huge temperature fluctuation of this region makes it extreme cold to extreme hot in the winter and summer. It varies from intense temperature (when heat reaches up to 40°C) to as low as -60°C. However, global warming has also added some difficulties in the region through the relentless permafrost erosions. It has made installation of infrastructure difficult and hard to expand the network of complex technological nature as well (Gustafson 2012). All this has created a challenge to enhance the output and to achieve a desired level of production.

The Russian government has made various arrangements to sort out these issues through a range of means through the new energy strategy. A variety of generous tax schemes have been announced where tax breaks have been given to the companies. The policies of 2011 have been reversed in 2013 by the government wherein a range of tax discounts were announced. In 2011, the annulment of export duty and many tax breaks had largely been lifted. In addition, a grace period of five year was also declared on property, land and income taxes to enhance the production, exploration

and export from the region. Discounted insurance premiums were also given by the state. Though, export taxes were reintroduced, but they were still lower as compared to the national levels (RIA Novosti 2013; Rosneft 2013; EIA 2014). These financial and other incentives are only a part of new energy strategy of the Russian Federation to diversify its market in the East Asian region.

All this makes it clear that in reality, it is difficult to estimate the potential of real energy reserves in the eastern Russia. As far as existing or working companies in the region is concerned, Rosneft is the main upstream performer. It is strategically involved in the development of eastern or remote area resources in the region. Since Rosneft, a state owned Oil Company has the possession of the assets of TNK-BP and old Yukos in the region; it poses competition and fierce challenges to others in the eastern Siberia. Potential reserves of energy and other natural resources have made the region strategically significant for the state. Access to these resources is not being taken as a simple trade and development activity and due to this understanding President Putin has called the whole gamut of activity in the region as the “national priority of the century”(RIA Novosti 2013). It has highlighted that getting access to the eastern region of Russia is now linked with the security and national interests.

Though, due to current push and speed to expand production center infrastructure and supply chain in the eastern region, it appears that Russia has opted this strategy only in recent times. It also seems that as if it has focused to diversify its production centers only due to Ukrainian crisis or competition in the conventional European market. In fact, these moves are not new. Various efforts to expand and set new frontiers of production (centers) have been going on for decades, which is a continuous process in the Russian oil and gas industry. Over a period of time, the major domestic centers of production have been shifted towards the eastern frontiers. In this process, the distance between new production centers slowly went along from conventional consumption centers, especially of the south and west (Gustafson 1989). The best example of this mechanism of shift could be found in the sixties, when reallocation of the Soviet oil industry has taken place from Volga-Ural<sup>45</sup> to the

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<sup>45</sup> *Volga-Ural provincial region is the second most significant oil production area for Russia where depletion rate is high and production has been declining. It is expected that its output could further go declined by more than 40% by 2030.*

western Siberia region. However, the eastward expansion had increased the cost of transportation as well as development, which in turn reduced the marginal returns on per incremental barrel. The same impact has been experienced through current shifting process of production centers and developments.

On the other hand, depletion and production declining pattern has also been experienced in the Russian oil and gas industry. It could be seen in the western Siberia regarding daily oil produce. This major oil province used to produce roughly 60% of the total liquid output of Russia; however, the production was declined by around 7% in between 2006 to 2012, which is further expected to drop to 10% in the next five years or so. The rate of average decline among matured oil fields in the western Siberia regions is expected to exceed up to 3.5% a year, which is quite high as per depletion rate in the oil industry is concerned. Various sources predict which a subject to contestation is certainly that over one third of all oil fields in Russia has roughly been depleted a third over the years as far as their total expected production is concerned, and the Samotlor field is one of them. Samotlor (crown jewel of the western Siberia) is the largest oil field in Russia and the sixth largest in the world.

### Samotlor



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## **Russia's Samotlor to produce for 90 more years**

**Alan Petzet**

*OGJ Chief Editor-Exploration*

( 04/03/2009 )

**HOUSTON, Apr. 3** – “Western Siberia's supergiant Samotlor field should continue to produce until the year 2099, said the TNK-BP Russian amalgam, which plans to invest \$1 billion/year through 2011 to sustain it.

*Samotlor, discovered in 1965, on marshlands and taiga in the Khanty-Mansi Autonomous area just north of Nizhnevartovsk in the Tyumen region, has produced 19.2 billion bbl of oil since development began in 1969, TNK BP said.*

*The latest study found remaining recoverable volumes of more than 7 billion bbl of oil and 3.53 tcf of gas. Samotlor is one of the world's five largest oil fields, TNK-BP said.*

*Apr. 3, the 40th anniversary of Samotlor's commercial development, finds the field producing 582,750 b/d. TNK-BP said its efforts should maintain production at or slightly above this level at least until 2012 even though decline rates are accelerating in the field's most mature parts.*

*Production peaked in 1980 at nearly 3.2 million b/d, almost half of Russia's output, and had fallen to 400,000 b/d by 1999. Samotlor has 13,400 oil wells and 4,500 injection wells.*

*Under a development plan approved in 2005 by Rosnedra, Russia's agency for subsoil use, the existing well stock and certain specific exploration and technological activities will account for just over 70% of production in the next 90 years. The rest will come from access to new reserves in field extensions and application of advanced technologies.*

*Samotlorneftegaz and TNK-Nizhnevartovsk, incorporated into TNK-BP, took over operation of the field in 2003. TNK-BP's license runs until 2038.*

*Since 2003, it has reactivated more than 1,250 idle wells, pumped hydrofracs at workovers, run electric submersible pumps, and drilled sidetracks.*

*It is near completion of 4,000 sq km of 3D seismic from which it has identified numerous satellite structures, five of which are under development with extended reach drilling. One satellite, Ust-Vakh, has yielded more than 46.5 million bbl of oil in 5 years with 100 million bbl left to recover.*

*Samotlor's ultimate recovery was estimated at 15 billion bbl of oil in a 1986 compilation by the American Association of Petroleum Geologists. It listed the producing formation as a Cretaceous sandstone at 7,300 ft.*

*The US Energy Information Administration in 1997 gave Samotlor's EUR as 24.7 billion bbl of oil, 11.9 tcf of associated gas, and 3.2 tcf of non associated gas”.*

Contact Alan Petzet at [alanp@ogjonline.com](mailto:alanp@ogjonline.com).

<http://www.ogj.com/articles/2009/04/russias-samotlor-to-produce-90-more-years.html>



However, in order to balance the total production decline in the older oil fields of mature basins, along with eastern fields, Russia has opened up many new exploration regions as well. It has identified these regions to offset the declining production level in the Volga-Ural and western Siberia region (Corsi 2005; Centre for Global Studies 2006; UPI 2009; Petzet 2009; Centre for Eastern Studies 2012; EY 2013; WSJ 2013). It is important to look that as far as shifting goal post of production strategy is concerned; the oil and gas industry has been adopting a new ‘all of the above’ Exploration and Production strategy as a panacea for the old energy business structure.

Russia is focusing on its Arctic shelf. Its vast potential production stretches have attracted huge upstream investments. Along with the Caspian Sea basin and north western fields of Timan Pechora Sea, the Arctic shelf is expected to be the future of Russian energy industry. As various reports show that roughly 6m sq km expansion of the Russian continental shelf may hold an estimated 90bb of oil and approximately 1669 tcf of gas. It could be 70% of the whole Arctic oil and natural gas reserves. The Ministry of Energy has projected its potential goal in the Energy Strategy as follows:

**Provision of efficient international cooperation in risky and complicated projects implemented in Russia (including shelf projects under the Arctic conditions)**

Phase-1	Phase-2	Phase-3
Formation of favorable, stable, transparent and mutually beneficial conditions for attraction of foreign investments and competent foreign partners in the frames of international cooperation	Enhancement of the competitiveness of Russian companies in the specified sphere of complex energy projects implementation	
Increase in the share of direct foreign investments into the overall structure of investments into the fuel and energy complex to at least 5%	Increase in the share of direct foreign investments into the overall structure of investments into the fuel and energy complex to at least 8%	Increase in the share of direct foreign investments into the overall structure of investments into the fuel and energy complex to at least 12%
Achievement of rational volumes of extraction and reproduction of oil and gas reserves on the continental shelf and in other extremely difficult conditions		Large-scale participation of Russian companies in foreign projects implementation

Source: Ministry of Energy, *Energy Strategy of Russia for the Period up to 2030* (Moscow: Ministry of Energy of the Russian Federation, 2010), pp. 169.

The extended plateau region of the West Siberia, especially Kara Sea and Barents Sea, is the most promising for oil. Its oil potential hope is reflected in the Energy Strategy wherein Russia has made a big plan to increase Arctic oil production up to 5% of total output by 2035. Since the region is full of natural gas as well, the Energy Strategy plans to increase the natural gas up to 10%. However, these tough initiatives would require huge investments, which could be up to four hundred billion dollar, no less than ‘comparable to the cost of space exploration’ as said by Igor Sechin, the CEO of the Rosneft (USGS 2008; OIES 2007; EY 2013; RT 2012). Projections regarding investments into oil complex and gas industry have been elaborated in the following tables given in the Russian Energy Strategy:

**Forecast of the required capital investments into the oil complex development for the period up to 2030**  
(\$us billion, at constant prices of the year 2007)

Capital investments	Phase 1	Phase 2	Phase 3	Total 2009 - 2030
Total	162—165	134—139	313—321	609—625
<i>including:</i>				
exploration and production	110—111	109—112	272—278	491—501
refining	21—22	8—9	18—19	47—50
transportation	31—32	17—18	23—24	71—74

Source: Ministry of Energy, *Energy Strategy of Russia for the Period up to 2030* (Moscow: Ministry of Energy of the Russian Federation, 2010), pp. 146.

**Forecast of the required capital investments into the gas industry development for the period up to 2030**  
(\$US billion, at constant prices of the year 2007)

Capital investments	Phase 1	Phase 2	Phase 3	Total 2009—2030
Total	150—155	131—136	284—299	565—590
<i>including:</i>				
production	45—46	43—45	98—103	186—194
transportation	73—75	63—65	141—149	277—289
underground gas storage facilities, gas conversion, etc.	32—34	25—26	45—47	103—107

Source: Ministry of Energy, *Energy Strategy of Russia for the Period up to 2030* (Moscow: Ministry of Energy of the Russian Federation, 2010), pp. 147.

On the other hand, according to new reports, Russia holds huge amount of unconventional shale energy sources as well. Its Bazhenov play is expected to be the largest unconventional shale basin in the world. It is estimated that it holds approximately seventy five billion barrels, which could technically be the largest recoverable shale oil reserves in the whole potential unconventional energy world. Roughly, all the unconventional energy resources are present in the Bazhenov- shale-play. It is the same source rock as of many West Siberian gigantic oil fields. It encouraged the Russian Ministry of Natural Resources, which has set a massive target for future tight oil production from these shale oil reservoirs. The ministry is intended to produce one million barrel a day, which could be 10% of the total output by 2025. In spite of being a new resource and avenue in Russia, it expects that within a decade it could match the production level of Bakken (EIA 2013; OIES 2013) the birth place of American shale oil revolution in North Dakota.

**PRESS**

**RELEASE**

**23/05/2014**

*Paris, May 23, 2014 – “Total signed today an agreement with Lukoil creating a joint venture (JV) to explore and develop the tight oil potential of the Bazhenov play in Western Siberia. Total will hold 49% of the JV and Lukoil 51%. This agreement finalizes the memorandum of understanding signed between the two companies in December 2013.*

*The JV will assess the technical feasibility of developing the tight oil potential of the Bazhenov formation initially on 4 licenses covering an area of 2,700 km<sup>2</sup> in Khanty-Mansi Autonomous District. Seismic acquisition will start in 2014 and exploration drilling will follow in 2015. Total will contribute its Lyaminskiy 3, Vostochno-Kovenskiy and Tashinskiy licences to the JV while Lukoil will add the Galyanovsky license.*

*“Total’s entry into the Bazhenov play, one of the world’s largest shale oil formations, reinforces our position in non-conventional hydrocarbons where the Group has developed significant experience with its numerous projects”, outlined Christophe de Margerie, Total’s Chairman and CEO. “Our international expertise leveraged with Lukoil’s experience in the region provides a balanced partnership and an excellent basis from which to appraise the huge potential of this Western Siberian play.”*

**Total Exploration & Production in Russia**

*Total has been present in Russia for over two decades. In 2013, the Group’s equity production was 207,000 barrels of oil equivalent per day. This production comes from the onshore Kharyaga field (Total 40%, operator), located in the Nenets autonomous district, and through Total’s share in Novatek (17% at the end of 2013), which produces more than 10% of Russia’s gas output.*

*In addition, Total and Novatek are partners in the Yamal LNG project, located in the Yamalo-Nenets Autonomous District, and in the Termokarstovoye gas and condensate field, which are both currently under development”.*

<http://www.total.com/en/media/news/press-releases/russia-total-combines-efforts-lukoil-explore-and-develop-tight-oil#>

<http://ru.total.com/en/home/media/list-news#sthash.LYJCJbBk.dpuf>

Though, Russia holds huge conventional as well as unconventional energy resource, it requires advanced technological expertise to exploit the natural endowments. The difficult topography of the Arctic region has led the country to work and partnering up with some big Western International Oil Companies. These companies have a better know-how in the field of exploration or otherwise as compared to Russian petroleum industry. Any collaboration in the field of upstream or downstream<sup>46</sup> could manage and provide a better way to access and exploit the unconventional and untapped Arctic energy resources<sup>47</sup>.

In this context, some Chinese energy companies are playing significant role in the 'joint venture business model'. China National Petroleum Corporation (CNPC) and China Petroleum & Chemical Corporation or Sinopec Limited, two of the largest National Oil Companies of China, are engaged in upstream activities and working with Russian counterparts in some East Siberian blocks (Wood Mackenzie 2013). Recently, Rosneft has sold some stakes (10% equity) to the CNPC in the largest oil field of Vankor in the North-East Siberian region. It is central to the crude supply chain for ESPO (FT 2014). Though, China is one of the foreign sources of huge investments in the eastern Siberia along with several western giant oil companies; Russia has offered some equidimensional deals to the Indian Oil & Natural Gas

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<sup>46</sup> "Upstream and downstream are general business terms referring to a company's location in the supply chain. The closer to the end user a function or firm is, the further downstream it is said to be. Raw material extraction or productions are elements of the supply chain considered to be upstream. The oil and gas supply chain is commonly referenced in this manner. The upstream companies identify oil and natural gas deposits and engage in the extraction of these resources from underground. These firms are often called exploration and production companies. Refiners represent the downstream element of the oil and gas supply chain.

*Upstream oil and gas operations identify deposits, drill wells and recover raw materials from underground. This sector also includes related services, such as rig operations, feasibility studies, machinery rental and extraction chemical supply. China National Offshore Oil Corporation and Schlumberger are examples of large companies that focus on upstream services. Many of the largest upstream operators are the major diversified oil and gas firms, such as Exxon-Mobil.*

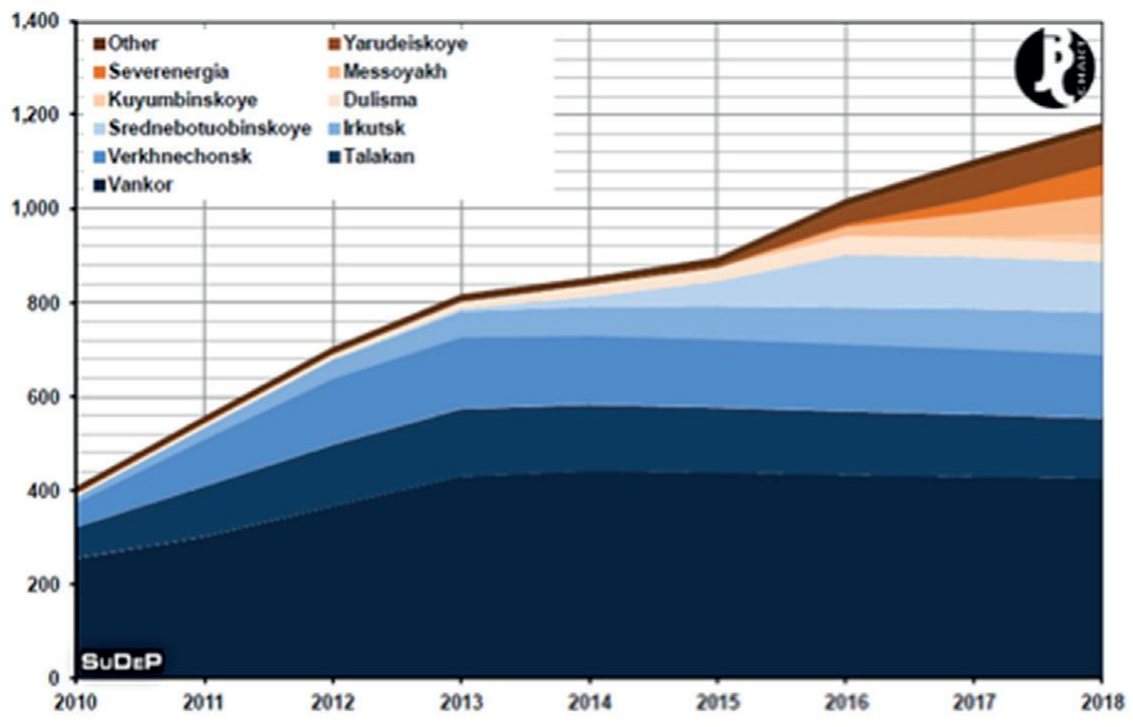
*Downstream operations include refineries and marketing. These services turn crude oil into usable products such as gasoline, fuel oils and petroleum-based products. Marketing services help move the finished products from energy companies to retailers or end users. Marathon Petroleum and Phillips 66 are two noteworthy examples of downstream companies.*

*Midstream operations link the upstream and downstream entities. Midstream operations mostly include resource transportation and storage, such as pipelines and gathering systems. Kinder Morgan and Williams Companies are two examples of midstream firms."*

<http://www.investopedia.com/ask/answers/060215/what-difference-between-upstream-and-downstream-oil-and-gas-operations.asp>

<sup>47</sup> *Some of the involved IOCs are Rosneft-ExxonMobil (2011), Rosneft-Statoil (2012), Rosneft-Eni (2012) Lukoil-Total (2014), Shell-Gazprom Neft (2014).*

Corporation as well (ET 2014). These fields have been producing oil from 2009 and in 2013 they achieved a limit of 4, 30,000 b/d. similarly, by 2025 the Yanao-Krasnoiarsk cluster is projected to double its production from its current volume (Oilprice 2014). All these developments give the impression of a good and positive or open market Russian energy strategy to lure foreign investments in the energy sector and intension to grow the untapped far flanged regions. However, if these offers and initiatives, on the one hand, show the propensity toward allowing foreign investment in the previously closed Russian energy sector, it also indicates the impact of western sanctions where financial difficulties of the Russian oil and gas companies have come out due to denial of access in the western capital markets (Bloomberg 2014).



Source: JBC; Eastern Siberian Supply

It appears that, the Ukrainian political crisis of the 2014 and infliction of Western sanctions regime has hit the Russian future plans to work with the Western IOCs at least in the short run. It was focused on Russia's energy sector and financial structure. Various joint business ventures have become hostage to the political crisis (Natural Gas Europe 2014) and its impact is apparent in the developmental schemes of the eastern region, where increased foreign investments are much needed to get the benefits of energy as well as other natural resources. Other than the Arctic region, it is

significantly more ‘technology and capital intensive’ *as* compared to many potential frontiers of the energy resources. Now, the development in the region has received a blow, at least for a short duration. It has further resulted in retaliatory sanction regimes between the West and Russian establishment.

Simultaneously, the diplomatic strains of this situation have provided an opportunity for the Russia and China to come closer not only politically, but also in the fields of finance (to challenge the hegemony of dollar based monetary system) and other economic activities (WSJ 2014). Certainly, energy resources have played an instrumental role in this development. The most significant case could be the \$400 billion deal between CNPC and Gazprom which was concluded in May 2014 to supply natural gas from Russia. Though, the talks (FT 2014) on this project was going on for more than a decade and both sides had a difficult time of tough negotiations; however, timing of its final step to get stamped has signaled something crucial that has a sense more than a simple trade relationship between these two giants.

Since, Russia and China are significant players not only in the Asian security structure and current world order, but also in the energy market; this new close relationship has been seen by some (Six 2015) as:

*“The ever-close energy ties between Russia and China are, however, primarily the result of mutually beneficial commercial interests rather than a full harmonization of political agendas. The entanglement of China in Russia’s eastern frontier can be seen in this light. Apart from satisfying obvious security of supply interests – Russian oil as a hedge against rising Middle Eastern imports – eastern Russia is also a prime destination for long-term Chinese investments<sup>48</sup>”*(Six 2015).

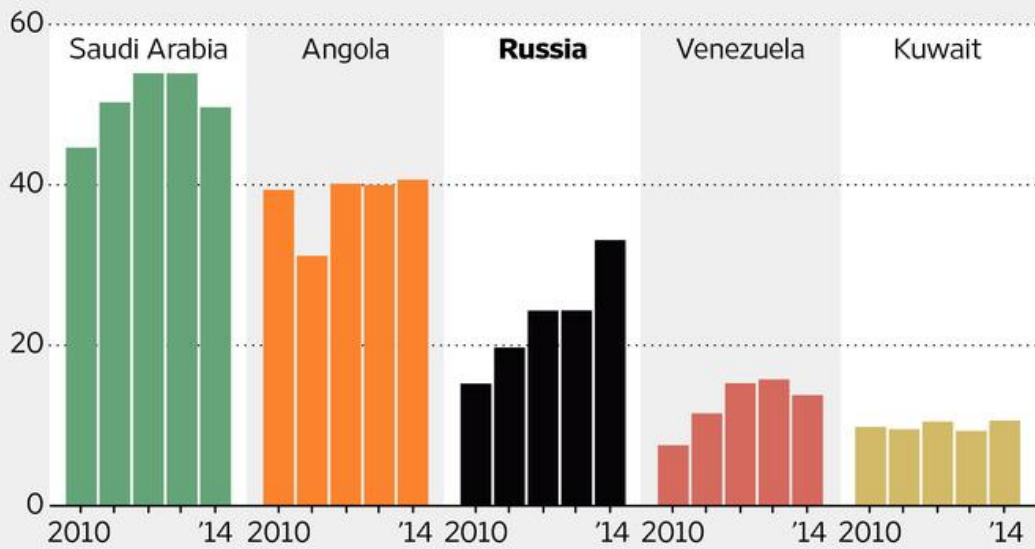
These investments are implicit in the context of diversification of supply chain for the growing Chinese demand. It has rapidly been changing in favor of Russian market expansion to Asia for the last few years. Chinese oil supply had a diversified group of suppliers wherein Saudi Arabia used to dominate by 19% of supply followed by others; i.e. Angola-14%, Russia-9%, Oman-9%, Iraq-8%. This scenario has been changed last year and Russia became the most important supplier in the Chinese market.

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<sup>48</sup> Chinese capital, for example, financed the construction of the second phase of the Eastern Siberia Pacific Ocean (ESPO) pipeline.

## Shifting Sands

China's yearly crude-oil imports from Russia and select OPEC nations, in millions of metric tons.



Source: China General Administration of Customs

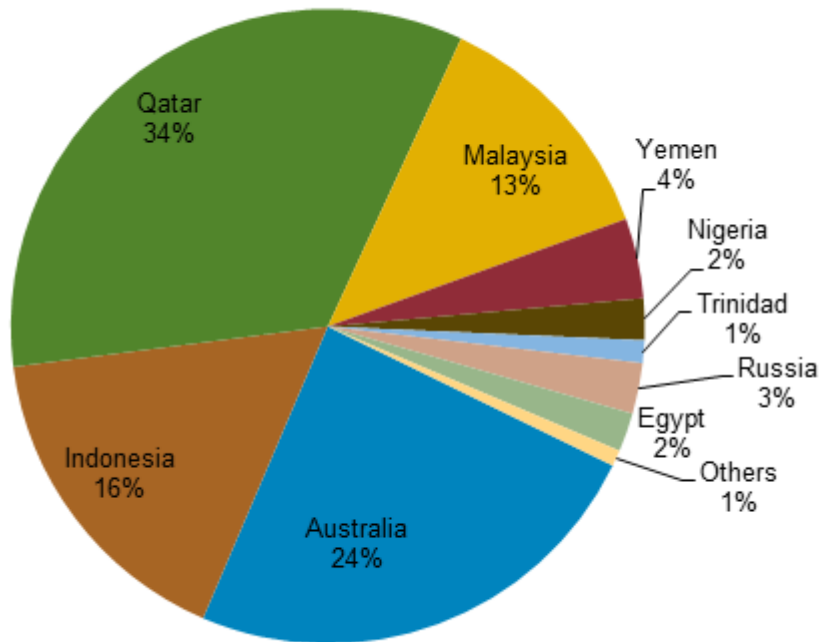
The Wall Street Journal

It was well expected that as soon as Chinese demand for crude oil and other energy requirements would increase; China would certainly go not only for other suppliers, but also volume of conventional supplier would change and it would be hard to keep conventional pool of supply chain simply intact. As China has been dependent for more than half of its crude oil imports on the Middle East for the last so many years; its new growing demands have compelled to seek for new supplies or to ask for more from its conventional suppliers. The dependence on the Middle East could increase; however, due to geopolitical reasons, it has some implicit complications and fear to disruption of those supply chains.

On the other hand, China finds Russia as a reliable supplier where Russia has adopted a long term diversification strategy to penetrate the Asian energy market. It is expected that ninety percent of the Middle East's oil would flow to Asian energy market by 2035 (IEA 2012; EIA 2014). This analysis could be true, but it has intrinsic problem vis-à-vis destination countries of that potential supply.



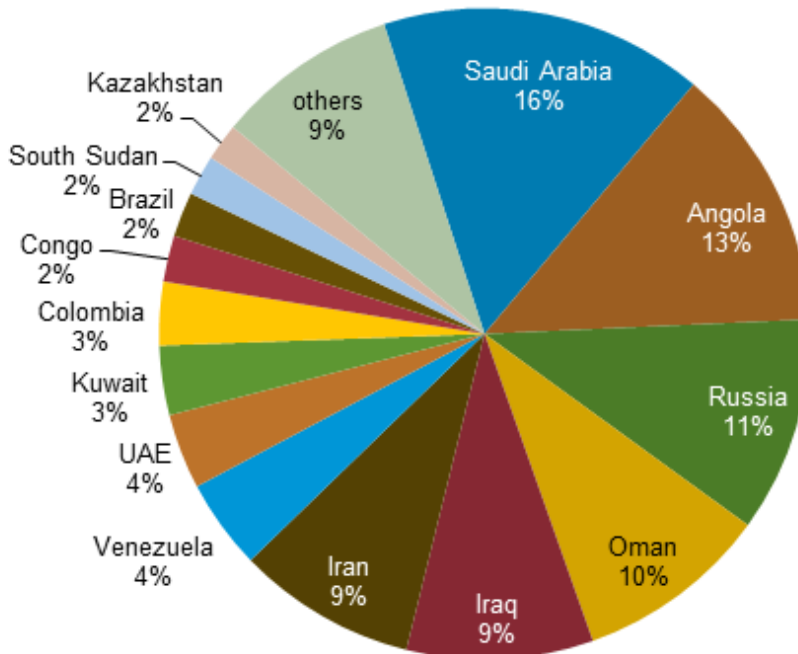
### China LNG import sources, 2012



Source: FACTS Global Energy.  
Others: Oman, Algeria.

[http://www.marcon.com/library/country\\_briefs/China/pic11.png](http://www.marcon.com/library/country_briefs/China/pic11.png)

### China's crude oil imports by source, 2014



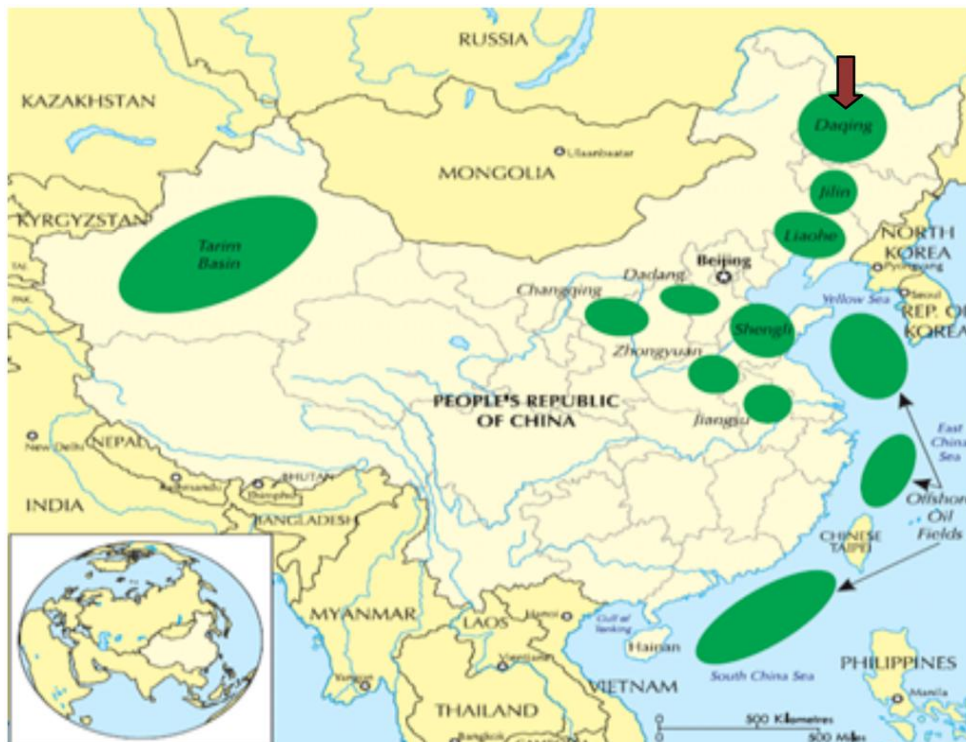
Sources: FACTS Global Energy, Global Trade Information Services, Inc.

[http://cdn.mothership.sg/wp-content/uploads/2015/05/crude\\_oil\\_imports\\_source.png](http://cdn.mothership.sg/wp-content/uploads/2015/05/crude_oil_imports_source.png)

The pattern could show that China could become the largest share holder of that supply chain; however, the new trends do not support the idea with the same conviction. Rather, Chinese focus on Russian energy sources gives sense of changing the old pattern of dependence and hope to increase the volume as well as building new supply chain with Russia. If the eastern region of Russia could be a proper destination of Chinese long-term investments, it would help Russia as well to expand the eastern market on its new found energy strength to capture new market shares. Reuters (2014) reports that Russia initially had a plan to increase the capacity of even ESPO pipeline up to 1.6 MB/d from its previous approved limits of 1 Mb/d by 2030; but now, it has made it clear that in order to achieve that target, it would speed up the project and try to attain that limit up to 2020.

However, the commitment to realize the target could be seen through the current achieved supply targets where 440,000b/d was sold from Kozmino on a spot basis while 330,000 b/d oil of the ESPO was transported directly to the new destination in China. Even, the ESPO blend has been exported through tankers. It was exported from Kozmino to various destinations like the United States in the west and China, South Korea and Japan to the East (Wood Mackenzie, 2013).

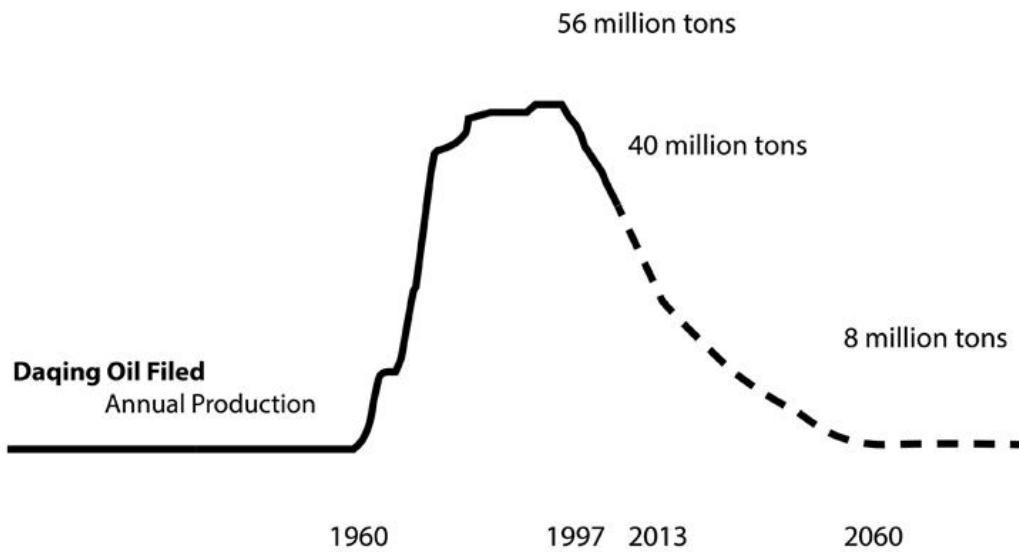
### Daqing Oil Field



[http://www.mdpi.com/sustainability/sustainability-03-02323/article\\_deploy/html/images/sustainability-03-02323f1-1024.png](http://www.mdpi.com/sustainability/sustainability-03-02323/article_deploy/html/images/sustainability-03-02323f1-1024.png)



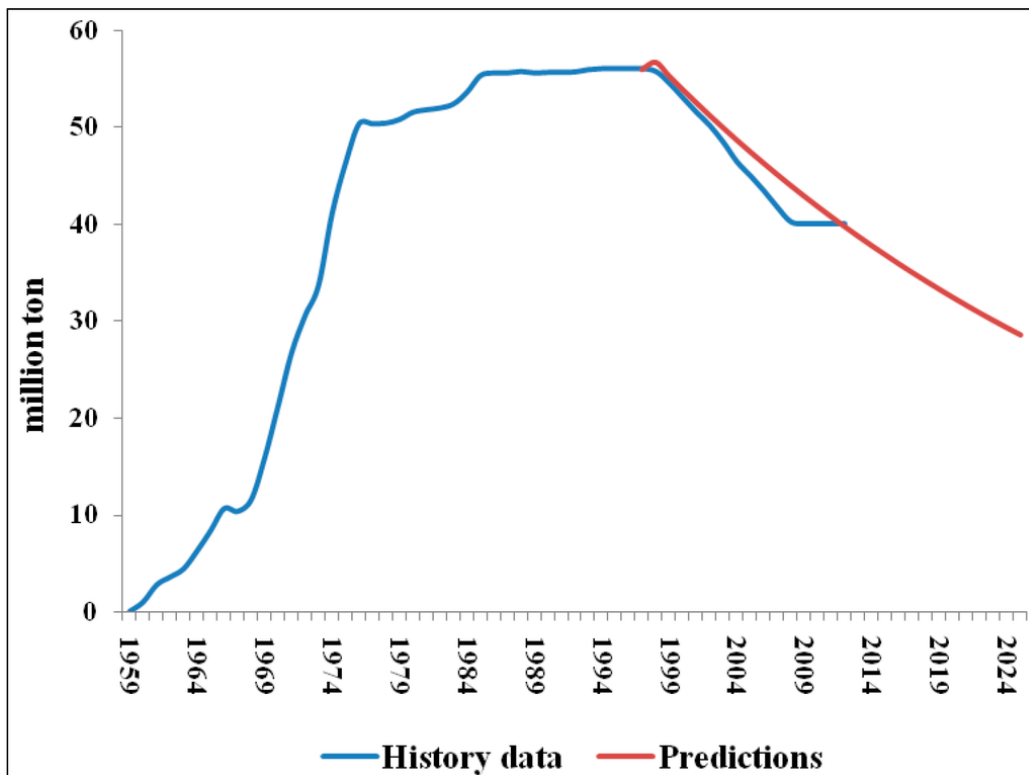
<http://www.sinoautoil.com/IRM/ShowMedia.aspx?MediaId=5>



\*Forecast of oil reserves and production in Daqing oilfield of China" Energy 2013, Vol. 35, Issue 7, 3097-3102  
 URL: <http://dx.doi.org/10.1016/j.energy.2013.03.043>

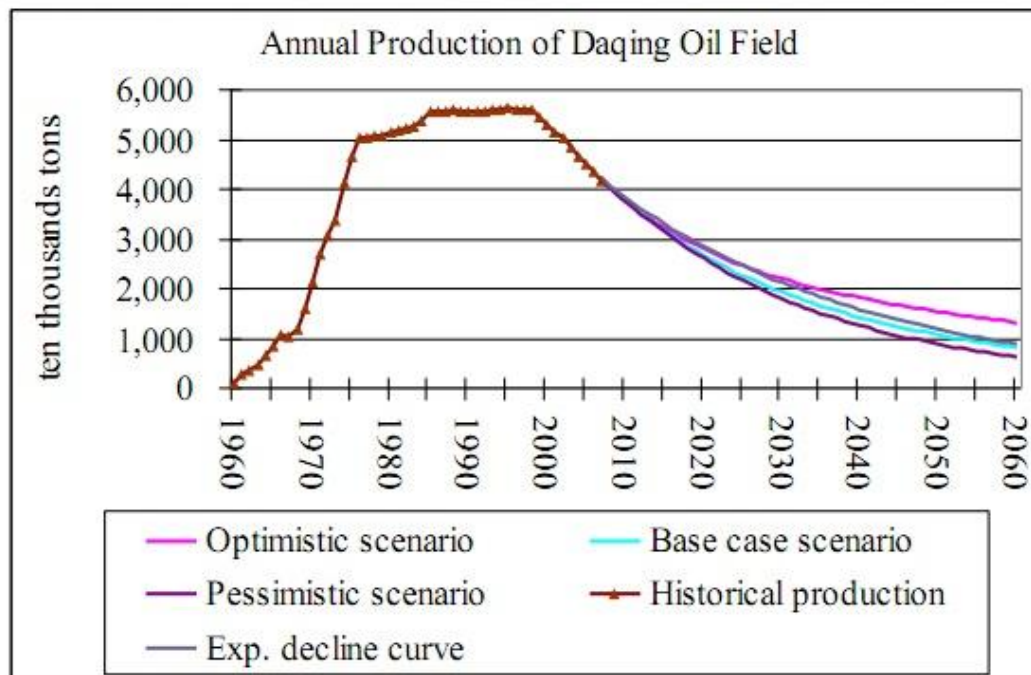
[http://www.designboom.com/wp-content/dbsub/385229/2014-06-19/img\\_9\\_1403213702\\_239cc5543c4ed5846e00f8fc4acb5cf2.jpg](http://www.designboom.com/wp-content/dbsub/385229/2014-06-19/img_9_1403213702_239cc5543c4ed5846e00f8fc4acb5cf2.jpg)

## Daqing oil production



[http://www.mdpi.com/sustainability/sustainability-06-08262/article\\_deploy/html/images/sustainability-06-08262-g001-1024.png](http://www.mdpi.com/sustainability/sustainability-06-08262/article_deploy/html/images/sustainability-06-08262-g001-1024.png)

[www.tsl.uu.se/uhdsg/Publications/Daqing.pdf](http://www.tsl.uu.se/uhdsg/Publications/Daqing.pdf)



**Figure 8.** Model results of the oil production in Daqing oilfield along with an exponential decline curve fit.

[http://crudeoilpeak.info/wp-content/uploads/2011/05/Daqing\\_oil\\_production\\_scenario\\_Xu\\_Tang.jpg](http://crudeoilpeak.info/wp-content/uploads/2011/05/Daqing_oil_production_scenario_Xu_Tang.jpg)

The total length of ESPO pipeline is roughly 5,000 km. it is the longest crude oil pipeline in the world. Its total cost has roughly been estimated about \$30 billion, which was the most costly energy plan of Russia as reported in 2010 (EurActiv 2010); however, it could be surpassed by the new Sino-Russian gas deal of the Power of Siberia in future. Furthermore, since 2010 one pipeline of 1 Mb/d has been shipping oil to Russian Kozmino Pacific coast outlets from the East Siberian region (Reuters 2014) and since 2011 another Russian spur-pipeline transporting crude oil directly to Daqing<sup>49</sup> in China.



Source: Platts, J.P. Morgan Commodities Research

Source: <http://1.bp.blogspot.com/-N7vp4XzXDRw/UJiJ6eJsZtI/AAAAAAAAASds/kvMePNNcMJ8/s1600/Russia+China.png>

<sup>49</sup> "China: Daqing oilfield to explore unconventional energy resources" 21 September, 2009

"Besides traditional oil and gas exploration and development, Daqing oilfield, China's largest oilfield and flagship of Petro China, also plans to explore unconventional forms of energy resources, such as oil shale, oil sands and coal-bed methane.

According to statistics from the gas field available here, an oil shale reserve estimated in oil equivalent of 30 billion tons has been found in northern part of Songliao Basin close to Daqing oilfield, while coal-bed methane reserve with estimated volume of 400 billion to 500 billion cubic meters has also been discovered in the same basin.

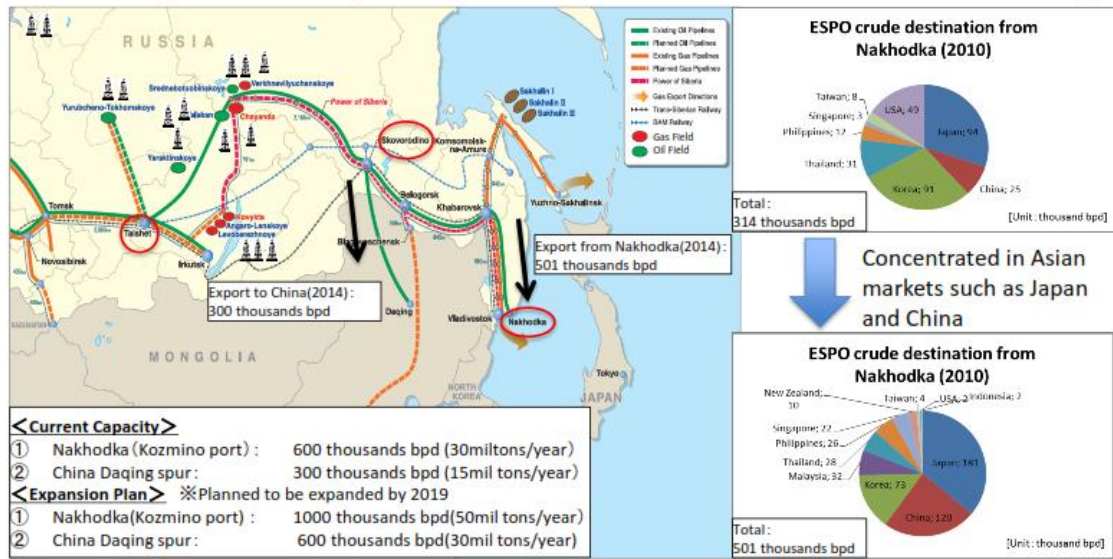
Discovered in 1959 by Wang Jinxi (known as 'Iron man' Wang, who led No. 1205 drilling team), this field has produced over 10 billion barrels (1.6 km<sup>3</sup>) of oil since production started in 1960.

Daqing contained 16 billion barrels (2.5 km<sup>3</sup>) or 2.2 billion tons in the beginning; the remaining recoverable reserves are about 3.6 billion barrels (572,000,000 m<sup>3</sup>) or 500 million tons. The current production rate is about 1 million barrels (160,000 m<sup>3</sup>) per day, making it the fourth most productive oil field in the world". **Source: Xinhua**

<http://www.energy-pedia.com/news/china/daqing-oilfield-to-explore-unconventional-energy-resources>



# ESPO Pipeline Capacity and Crude Destination History



- Crude supply to Asia is increased after ESPO pipeline start up.
- Crude supply to Asia is also increased contributing to strengthening Japan's energy security and diversification of oil resources.
- ESPO expansion may boost crude oil supply to Asia.

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[https://www.spf.org/topics/20151106PanelDiscussion\\_Mr.HiroshiMeguro\\_Mitsui.pdf](https://www.spf.org/topics/20151106PanelDiscussion_Mr.HiroshiMeguro_Mitsui.pdf)



Source: Argus; Oil Fields In Eastern Russia And ESPO Pipeline



[http://66.media.tumblr.com/tumblr\\_m1nlsnZaF81r4d88zo1\\_1280.jpg](http://66.media.tumblr.com/tumblr_m1nlsnZaF81r4d88zo1_1280.jpg)



Source: FT. <http://im.ft-static.com/content/images/7d4318c2-f318-11de-a888-00144feab49a.img>

Though, the Chinese investments are huge and have the potential to develop the untapped regions of east Siberia; these investments differ from normal market or investments of big western oil companies. They are said to be strategic in nature. They have one common feature wherein, oil-for-export or loan-for-oil as a typical term of agreement that has been attached with the investment proposals. It shows that Chinese are concerned about guaranteed oil and gas supply in exchange of making funds available for new resource development destinations. This approach is apparent in the ESPO and Daqing projects where second phase and spur-pipeline respectively would transport oil for the next two decades (Reuters 2014). In turn, China has allocated \$25 billion investment as a loan for oil where CNPC would receive 300,000 b/d from Rosneft in twenty years. Since this approach is mutually beneficial due to demand and supply security; Rosneft and CNPC have set an agenda to expand this

contract in 2013. Accordingly, as a part of \$270 billion supply deal for 25 years, now China would receive more than 600,000b/d from Rosneft by 2018. Enhancing the supply and agreeing to make it double, for the next more than two decades, made it clear that both countries are confident in the long term reliable energy relations.

Therefore, it is not surprising that leading oil and gas companies of Russia has been pushing for additional energy supply agreements with Chinese IOCs. However, these are mainly focused on crude oil deliveries to existing as well as potential refineries in China. Of course, these arrangements are well beyond the mega gas contracts between two states. It is expected that Rosneft would transport over a million barrel per day of crude oil to China by the end of 2020. These plans and projection are going to set Russia as the single largest supplier to Chinese demand that would overtake the existing German supply.

Though, the new aggressive moves and Russian export strategy to capture new markets in China are good for the plans to develop new and far flanged energy regions, which additionally provide long term demand security up to some extent as well; it would not be necessarily a positive step towards the Russian export diversification plans and strategy in general. It is also estimated that the manner in which Russia has been making increasing commitments for oil supply to China, the availability of oil in the spot market, at least along the Pacific Coast, would limit the accessibility of already limited total volumes. The spot market selling to exporting crude oil to various Asian as well as to even American buyers from Kozmino were projected to increase up to 600,00 b/d by 2014; however, the Wood Mackenzie had expected a short of roughly 100,000 b/d in its 2013 calculations (Moscow Times 2014; Wood Mackenzie 2013). It is also expected that currently Russia is not in a position to fulfill all the supply commitments along with raising the limits of seaborne exports. In effect, Russia would not be able to comply its growing Chinese supply obligations. Thus, it has no option but to redirect some crude to spur-pipeline into China, which was otherwise intended to set off for Kozmino (Platts 2013). On the other hand, insufficient or declining supply on the Kozmino port would hamper Russian efforts of promoting the ESPO-blend as a new bench-mark in the Asian market. However, sufficient supply of crude is not the only factor to get established ESPO-blend as an Asian or Russian bench-mark, it requires many other factors such



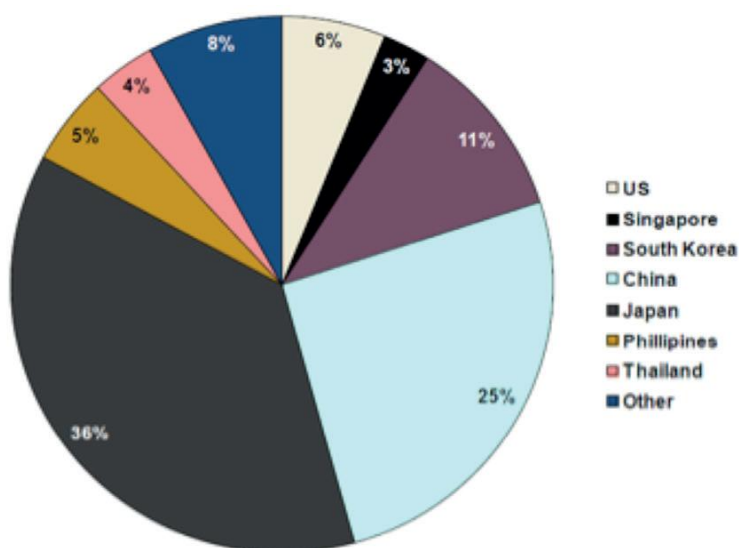
as quality content in the long run, hedging opportunities, and variety of sellers and buyers as well. Henderson (2013) analyzes the issue of building a new Russian/Asian benchmark ESPO crude (Henderson 2013) as:

*“With more than 60 market participants already using the contract to provide a reference to the price for crude produced in the major exporting region to Asia, it is clear that buyers will not give up a Middle East benchmark easily. As a result, ESPO crude would have to pass a number of crucial tests if it is to have any hope of usurping the position of Dubai or DME Oman as key benchmarks in Asia, given that, according to the BP Statistical Review of World Energy 2012, more than half of the region’s imports still come from the Middle East.*

*The first key question is whether there is adequate crude supply to maintain throughput through the ESPO at full capacity. The answer at present would appear to be a reserved yes, although Russian companies will need to establish a long-term development and production plan for new and existing fields if consumers are ultimately to be convinced that an ESPO benchmark is sustainable. The construction of the pipeline has already provided development incentives, with three major fields, Vankor, Verkhnechonsk, and Talakan, supplemented by a number of smaller fields, providing the initial foundation for Russia’s eastern production. Two other large fields, Yurubcheno–Tokhomskoye and Kuyumba, are set to be linked to the ESPO by 2016, and a number of other discoveries have been made by Rosneft close to its existing assets in the region. As a result, production of 1 mb/d from East Siberia alone is possible within the next five years. Added to this will be fields in West Siberia that have now been linked to the ESPO via a new pipeline connection from the Yamal region, and as a result it is possible to create a production profile that can fill the fully expanded three-phase ESPO with 1.6 mb/d of output by 2020. When one also considers that East Siberia has 10 billion barrels of identified reserves and at least as much again of potential resources, then the opportunity to increase production is obvious.*

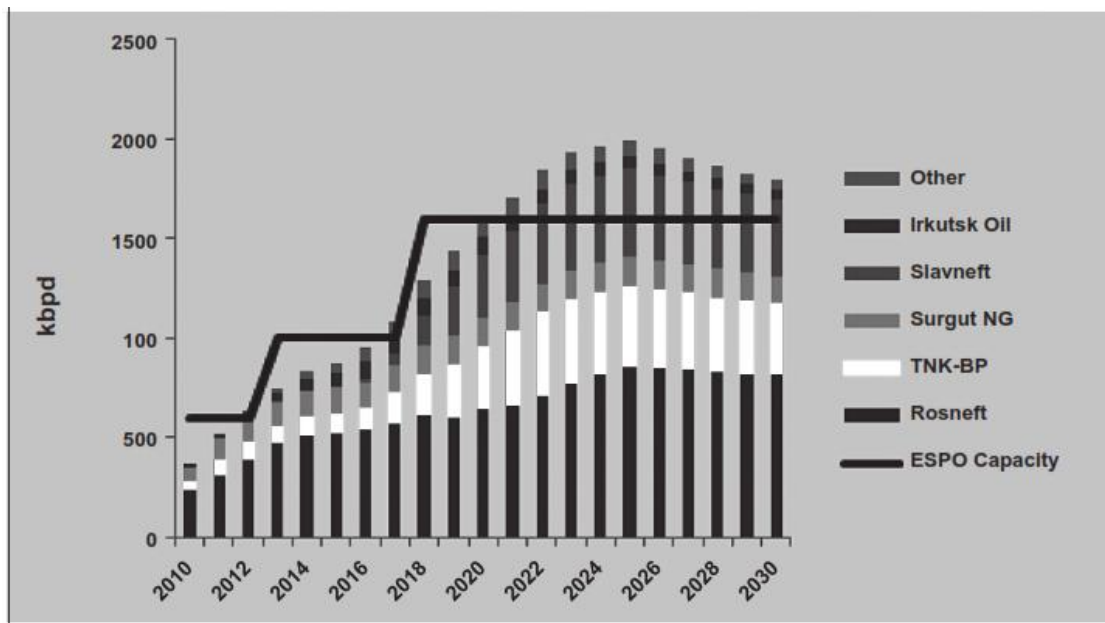
*However, what is also clear is that both the Russian government, via a stable tax regime providing appropriate tax incentives, and Russian oil companies, via a commitment to invest, must demonstrate that this potential can become a reality before ESPO crude can hope to become a benchmark” (Henderson 2013).*

### **ESPO Buyers by Share in 2013**



Source: JBC

### Potential Russian production that could be exported through the ESPO.



(Source: Henderson J.) His estimates are based on company data and Wood Mackenzie Consultants CAT database.

From a Russian perspective, ESPO-blend benchmark is in making and if gets success would challenge other established benchmarks in Asia; however, China would be the best consumer beneficiary of this development. It is not only the benchmark, but also mode of transportation which suits the Chinese demands in the long run. More and more oil imports through pipelines would reduce the risks associated with the Strait of Malacca and the Strait of Hormuz to the Chinese energy security in coming years. Seeking various sources and destinations of energy supply along with new Central Asian targets, China is well intended to reduce its dependency on these transit chokepoints, which are the largest existing chokepoints in the world energy market (EIA 2014). While, various aspects of supply and demand in an open market and ability to transport the required resources have given the impetus to the Russian strategy which could solidify as well as spread its market in Asia. The eastern energy resource potential does support the idea of being a strong upcoming supplier. Administration and strategy are firm to create and promote its supply-infrastructure in the region. Till now, the existing network is encouraging and gives hope to achieve its large potential goal to become a dominant supplier to the region. However, sometimes a simple doubt has been raised that a focused diversification toward East Asian market could make Russia a captive supplier and it may face problems in future to seek again some diversifications due to being heavily dependent on a single market.

In December 2009, Financial Times reported that Vladimir Putin, Prime minister of Russia, would start

*“a new oil export terminal on the Pacific ocean... providing Russia with a strategic window on the fast-growing energy markets of Asia. The terminal at Kozmino, near the port city of Nakhodka in Russia’s far east, will export oil from new fields in east Siberia, where Russian companies are developing one of the world’s last untapped oil provinces. It will eventually be served by a \$22bn (€15bn, £13.7bn) oil pipeline across east Siberia to China and the Pacific, allowing Russia to reorientate a large part of its oil trade, which is now focused on Europe towards the east” (FT December 2009).*

The launch of this terminal was a major advancement toward further diversification plans. Furthermore, in November 2009 the Russian oil major Transneft had completed its first stage (1,713 miles) of a pipeline project, which stretches from Skovorodino (near to Chinese border) to Taishet (Irkutsk region). Oil would be transported from Skovorodino to Kozmino by railcars, which is located 1300 miles further in the east. This project had a plan to phase out rail supply by the pipeline construction which connects Skovorodino with Kozmino. Russian oil major TNK and British oil major BP are also working to exploit the oil reserves of east Siberian region and would use Kozmino to export oil to the new Russian energy market.

Additionally, Transneft planned to transport roughly 300,000 b/d from Skovorodino through the 67km oil pipeline to China from 2010. It had a plan to double its transport from east Siberian pipeline to *“ending dependence on export pipelines to Europe. On completion, the pipeline will be capable of carrying up to 1.6 barrels of oil a day, about a third of Russia’s current oil exports”* (FT 2009). To complete projects at a faster pace, China has been providing loans to Russia. In 2009 it had provided \$25 billion to receive oil supplies from Russia. All this has been making a strong energy trade relation between the fastest growing oil and gas consumer and a long term capable energy supplier. It is also said that

*“the pipeline would give Russia flexibility to focus oil trade in premium markets, and could be used as a political weapon. Oil traders said Transneft planned to halt oil exports via Ukraine’s Black Sea ports in January, freeing supplies for delivery to Kozmino. Russia would boost oil production by 1m barrels a day to 11m barrels a day after 2012, Transneft said this month, providing enough oil for exports in both directions. Some Kremlin-friendly oil companies have been given tax breaks to encourage development of east Siberian reserves. Oil exports from Kozmino will be exempt from customs duties. Rosneft,*

*the state oil company, which has invested \$7bn in the Vankor field in east Siberia, will load the first tanker at Kozmino, signaling support for the project.... Russia has embarked on multi-billion dollar pipeline projects to diversify its foreign energy trade and avoid oil and gas transit across other countries. A pipeline built this decade to Primorsk on the Russian Baltic has reduced dependence on export routes across Ukraine to Europe” (FT December 2009).*

As far as natural gas is concerned, The Ministry of Energy has shown remarkable optimism to enhance the production by 2030. This hope is based on new explorations and consumption destinations and well explained in the new energy strategy. Far East and eastern Siberia has been given priority in the total production of natural gas. It is projected that the increase could go up to 130-152 bcm till the end of third phase of new energy strategy. If compared to the total production of 2008, when it was only 13 bcm, this new high projection plans are far-fetched in terms of real volume. It intends to boost production more than ten times within twenty years. It was expected that natural gas production would grow from 2% to 7-8% in the first phase of the strategy, i.e. up to 2013-15. In its second phase by 2020-2022 and third phase by 2030, the new energy strategy projects total increase up to 12-14% and 15% respectively (Ministry of Energy):

**Phase-by-phase gas production development for the period up to 2030**

	(billion m3)				
	2005 (actual)	2008 (actual)	Phase1 2013–2015	Phase2 2020–22	Phase3 2030
<b>Total</b> - Gas production	641	664	685–745	803–837	885–940
<b>Including:</b>					
Tyumen Region	585	600	580–592	584–586	608–637
<i>including the following regions:</i>					
Nadym-Purtazovsky	582	592	531–559	462–468	317–323
Ob-Taz bay	-	-	0–7	20–21	67–68
Bolshekhetskaya valley	3	8	9–10	24–25	30–32
Yamal	-	-	12–44	72–76	185–220

Tomsk Region	3	4	6–7	5–6	4–5
European regions	46	46	54–91	116–119	131–137
<b>Including:</b>					
Caspian Sea Region	-	-	8–20	20–22	21–22
Stockman deposit	-	-	0–23	50–51	69–71
Eastern Siberia*	4	4	9–13	26–55	45–65
Far East	3	9	34–40	65–67	85–87
<b>Including:</b>					
Sakhalin Island	2	7	31–36	36–37	50–51

Source: Ministry of Energy, *Energy Strategy of Russia for the Period up to 2030* (Moscow: Ministry of Energy of the Russian Federation, 2010), pp. 146–147.

\* Includes the Sakha (Yakutia) Republic.

As it is shown in the energy strategy of Russian Federation that the “gas reserves of major exploited deposits in the Western Siberia – the main gas producing region of the country (deposits Medvezhye, Urengoiskoye, Yamburgskoye) have been depleted by 65-75%. Currently they are at the phase of actively declining production” (Energy Strategy of Russia...2030). However, as far as total natural gas production is concerned, due to its eastern potential, Russia does not find any hard urgency required to accelerate the production of natural gas as compared to its crude oil production.

While:

*“The current inferred reserves and resources of distributed sub-soil fund in main oil and gas producing regions may provide reproduction of mineral resource base not more than by 50% in the nearest 10-15 years. The rest of increment will come from new deposits, including in new oil and gas producing regions and waters of Russia. In particular, the increment of oil reserves required for achievement of optimal production levels in the Eastern Siberia and Far East is estimated at 1.8 billion tons by2020 and over 3 billion tons by2030. This will require substantial increment of reserves outside the zone of the oil pipeline Eastern Siberia Pacific Ocean.*

*Within the whole period up to 2030 the Western-Siberian, Leno-Tungussskaya, and Timano-Pechorskaya oil and gas producing areas will be the main regions of oil and gas reserves increment. Prospecting, exploration and development of oil and gas deposits on the continental shelf of Arctic, Far Eastern and Southern seas will become the promising areas of the Russian oil and gas industries resource base development”*(Energy Strategy..2030).

**The forecast of phase-by-phase oil production development for the period up to 2030**

	2005 (actual)	2008 (actual)	Phase 1	Phase 2	Phase 3
Total oil production (million tons)	470.2	487.6	486–495	505–525	530–535
same (in % as compared to 2005)	100	103.7	103–105	107–112	113–114
<i>Including (million tons)</i>					
North, North-West	24.5	29.1	32–35	35–36	42–43
Volga Region	52.7	54.1	49–50	44–45	34–36
Urals	49.2	52.6	45–47	36–41	25–29
Caucasus, Caspian Sea Region	4.9	4.8	7–11	19–20	21–22
Tyumen Region	320.2	319	282–297	275–300	291–292
Tomsk Region	14.1	13.7	12–13	11–12	10–11
Eastern Siberia	0.2	0.5	21–33	41–52	75–69
Far East	4.4	13.8	23–25	30–31	32–33

Source: Ministry of Energy, *Energy Strategy of Russia for the Period up to 2030* (Moscow: Ministry of Energy of the Russian Federation, 2010), p.145.

On the other hand, eastern regions have become more significant because of the western supply approach of Russia as well as various European countries as well. However, since the European Union nations have reached at the peak demand in 2006, the total volume of gas shipments to these destinations have been projected to declining. The development of new technology of energy conservation and use of unconventional methods may push this declining trend rather fast than expected. In addition, efforts to diversify the supply routes of gas and reducing the consumption dependence on import from Russia are other significant issues to be considered.

Accordingly, Russia has focused on the development of its eastern resources. The region has become significant due to the new growing natural gas demands in the countries of Asia Pacific region, which on the whole is a new energy market for Russian decision makers (Perovic et al 2009; Smith 2008; Itoh 2008). The focus of new energy strategy is based on the East Siberian and its Far Eastern resource regions, which does not include the continental shelf. These areas accounts for roughly 18% and 6% respectively, which is of initial aggregate of Russian natural gas. The Eastern Russia holds the initial aggregate of gas reserves about 52.4 tcm onshore and 14.9 tcm offshore (Eastern Gas Program).

However, the “proven reserves in three of the major gas fields in eastern Russia- the Kovykta gas field in the Irkutsk Region, the Chayandin gas field in the Sakha Republic (Yakutia), and the Yurubcheno-Tokhomsk gas field in the Krasnoyarsk Region- amounted to more than 1.9 trillion cubic meters as of the beginning of 2009” (Itoh 2011), which is given in the following table:

**Crude Oil Reserves (Category C1) from Categories C2, C3, and D1 in Eastern Siberia and the Sakha Republic, 2025 (est.) (million tons, estimated as of January 1, 2007)**

Area	Unproven reserve (C2)		Resource (C3)		Resource (D1)		Total increment of C1
	Standing stock	Targeted amount of upgrade into C1	Standing stock	Targeted amount of upgrade into C1	Standing stock	Targeted amount of upgrade into C1	
Total	610.6	366.4	1,533.7	466.1	3,350.3	1,005.1	1,837.6
Eastern Siberia	519.6	311.8	1,402.1	420.6	3,036.6	911.0	1,643.4
Sakha Republic	91.0	54.6	151.6	45.5	313.7	94.1	194.2

Source: Andrei Dement'ev (presentation by the deputy minister of Russia's Ministry of Industry and Energy, 2007), [www.minprom.gov.ru/appearance/report/48/](http://www.minprom.gov.ru/appearance/report/48/).

**Major Gas Fields in Eastern Siberia and the Sakha Republic**

(billion cubic meters)

Gas field	Federal area	Reserve category	
		A+B+C1	C2
Kovykta	Irkutsk	1,406.4	572.0
Chayandin	Sakha Republic	379.7	861.2
Yurubcheno-Tokhomsk	Krasnoyarsk	144.1	434.1

Source: The fuel-energy complex of Russia in 2000–2009] (Moscow: Institute for Energy Strategy, 2009- 2010), p. 210.



Furthermore, since 2007 the production of natural gas in the Sakhalin Region has got impetus and increased up to 26.6 bcm in 2010 against the previous total production of 3.6 bcm in 2000. Table Natural Gas Production in Russia, 1990–2010 (billion cubic meters). It is also estimated that Sakhalin-1 holds about 485 bcm (17.1 tcm) of natural gas and 313 million tons (2.3 bb) of crude oil; while as of 2009 December, the proven natural gas reserves in this first project were 21 bcm along with 5.2 million tons (38 mb) of oil<sup>50</sup>. To expand the network, the construction of an oil terminal was started in the De-Kastri (Khabarovsk Region) all along the Tatar Strait along with a crude oil pipeline in 2004. It would connect the oil terminal with the Sakhalin-1 project. However, as far as domestic supplies are concerned, the commercial production of oil and gas was started in October 2005 in the Chaivo field. In August 2006 the crude oil terminal in the De-Kastri was completed and followed by the starting of crude oil exports in October when the pipeline was finally completed. Its peak oil production rate (2,500,000 b/d) was reached in February 2007. In 2010, the commercial production of oil and gas began in the Odoptu of the Sakhalin-1. The annual production of the Odoptu field reached at 7.7 bcm of natural gas and 7 million tons of oil. Efforts were also intensified to produce maximum from the Krkutun-Dagi field<sup>51</sup>.

As far as Sakhalin-2 project is concerned, it is estimated that a recoverable reserves are about 480 bcm (17.3 tcf) of natural gas and 150 million tons (1.1 bb) of crude oil in the project. It was started in May 2003 when along with two platforms, i.e. Lunskeye-A and Piltun-Astokhskoye-B, three other platforms off the north-eastern coast of the Sakhalin Island, started to be connected with the off shore pipelines to extend the networks up to 300 km. While, to connect the northern areas of the island to the southern regions, an 800 km Trans Sakhalin onshore crude oil and natural gas pipeline has also been started to build in addition to a crude oil terminal and LNG plant in the South coast of the Sakhalin Island at the Prigodnoye in the Aniva Bay<sup>52</sup>.

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<sup>50</sup> “Sakhalin-1 Project”, Exxon, [www.exxonmobil.ru/Russia-Russian/PA/news\\_info\\_project.aspx](http://www.exxonmobil.ru/Russia-Russian/PA/news_info_project.aspx); “Sakhalin-1,” Rosneft,

[www.rosneft.com/Upstream/ProductionAndDevelopment/russia\\_far\\_east/sakhalin-1/](http://www.rosneft.com/Upstream/ProductionAndDevelopment/russia_far_east/sakhalin-1/)

<sup>51</sup> “Sakhalin-1 Project: Fact Sheet, July 2010,” Exxon Neftegas, [www.sakhalin1.ru/Sakhalin/Russia-English/Upstream/Files/facts\\_ENG.pdf](http://www.sakhalin1.ru/Sakhalin/Russia-English/Upstream/Files/facts_ENG.pdf); “Odoptu,” Exxon Neftegas, [www.sakhalin1.com/Sakhalin/Russia-English/Upstream/about\\_phases\\_odoptu.aspx](http://www.sakhalin1.com/Sakhalin/Russia-English/Upstream/about_phases_odoptu.aspx); *Nef't i Kapital*, no. 1–2 (2011): p. 79.

<sup>52</sup> “Sakhalin-2: Oil and Gas Extraction,” Shell in Russia; [www.shell.com.ru/home/content/rus/aboutshell/shell\\_businesses/e\\_and\\_p/oil\\_gas/sakhalin/](http://www.shell.com.ru/home/content/rus/aboutshell/shell_businesses/e_and_p/oil_gas/sakhalin/); Shakalin Energy, [www.sakhalinenergy.com/en/default.asp](http://www.sakhalinenergy.com/en/default.asp).

The crude oil production in the Molikpaq platform of Piltun-Astokhskoye field was started in 1999 July, and its annual volume of 150,000 b/d came online shipment in 2008 December, however, it has been operated only in the summer.

On the other hand, the first LNG plant of Russia was completed in 2009 February with the maximum capacity of 9.6 mt/y. Its first shipment of LNG was also started just in the following months. While, “additional phases of the Sakhalin offshore project, ranging from Sakhalin-3 – Sakhalin-6, are being contemplated” (Energy Strategy of Russia...2010). Moreover, Gazprom has laid down a plan ‘Easter Gas Program’ for the Eastern Siberia and Far East to develop natural gas production. It is focused on to increase natural gas consumption in the region and boosting gas export to the new market of the Asia-Pacific region. Additionally, it has a program to construct a new pipeline network to connect the eastern regions of the nation with the United Gas Supply System which was expanded to western Siberia. It also focuses on Irkutsk, Krasnoyarsk, Sakha Republic (Yakutsiya) and Sakhalin Region to produce natural gas and processing along with gas chemical facilities. Gazprom holds the estimate of 7.4 tcm in Irkutsk, 25tcm in Krasnoyarsk, 3.6 tcm in Sakhalin, and 10.4 tcm in Yakutsk region. However, in September 2007, the Eastern Gas Program has named Kamchatka region as one of the focused areas for the future development after one official endorsement of this program.

In fact, Gazprom has planned to produce more than 55bcm in the eastern Siberia from the Krasnoyarsk and Irkutsk regions as well as 95bcm of natural gas from the Sakha Republic and Sakhalin Region in the Far East by 2020. It aims to increase the production up to 57 bcm and 105 bcm respectively by 2030. It is also estimated that the annual gas supplies to the eastern region would jump up to 27bcm by 2020 and 32 bcm by 2030 as well, while natural gas transportation could increase roughly up to 35bcm/y to the UGSS. However,

*“Gazprom’s forecast of natural gas production in the eastern Russia was more optimistic than calculations shown by the Energy Strategy of Russian for the Period up to 2030 at the time of the Eastern Gas Program’s publication. As late as summer 2009, the Russian government announced that the Krasnoyarsk centre, the Irkutsk centre, the Yakutsk centre, and the Sakhalin centre were projected to produce 11.6 bcm, 39.5bcm, 34.6bcm, and 59.4bcm respectively a year by 2020 (a post on the Russian PM’s official web page). At a later stage,*

*Kamchatka Region, where natural gas reserves were projected to increase to approximately 200bcm in 2009-2011, was also included as one of the focused areas in the Eastern Gas Program”(Itoh 2011).*

**Russia-China Oil Pipelines: Existing, Under Construction, and Planned**



<http://china.praguesummerschools.org/files/china/1china2012.pdf>

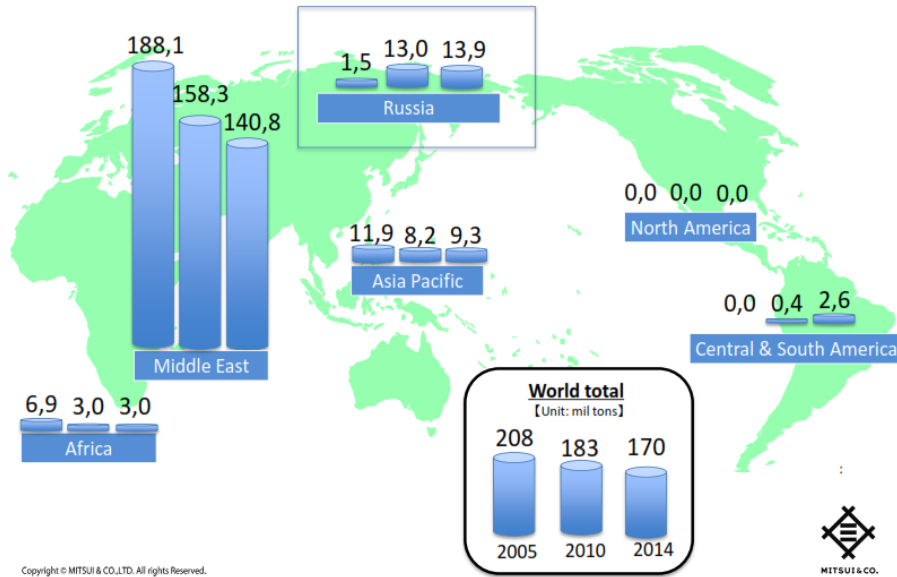


<http://www.matthieuthery.com/wp-content/uploads/2012/02/kazakhstan-china-oil-pipeline-petrole-chine.png>

As far as natural gas market is concerned, the consumption of natural gas has been increasing in the North-East Asian countries. China and Japan are leading countries in the region regarding this increased natural gas demand. Though, in 2008, the total demand share of natural gas was only 3% in its entire primary energy demand, it is

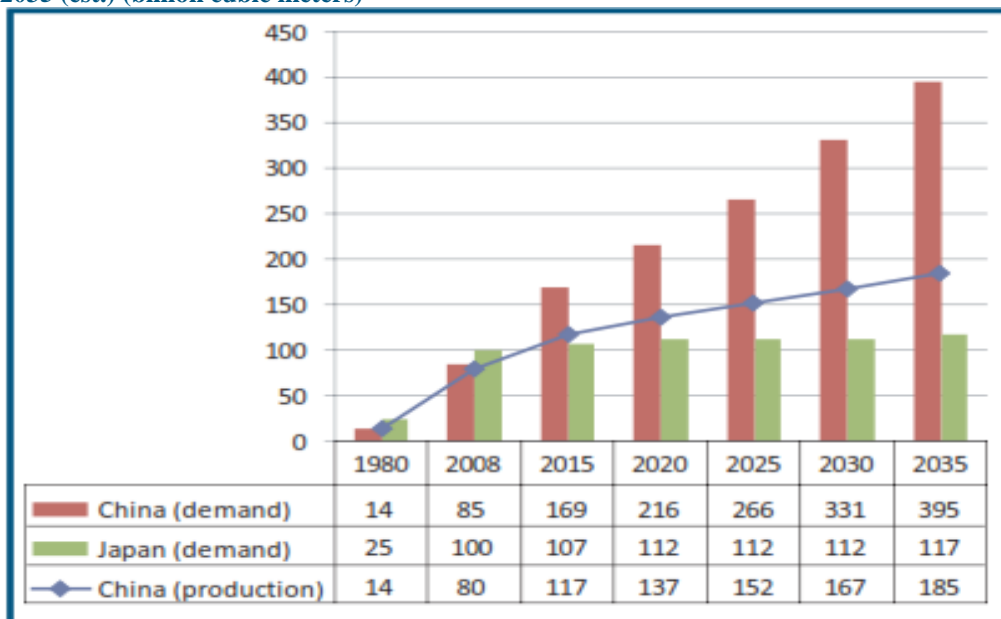
rapidly growing in China. It is more apparent with the fact that in 2009, the Chinese demand for natural gas overtook Japan, which at the beginning of this century consumed 2.6 times more natural gas as compared to Chinese consumption. Though, China has been procuring natural gas from other states to meet out its growing demand, its own domestic production is also increasing at a fast pace. The first decade of this century has seen 3.6 times growth in the domestic natural gas production.

### Suppliers of Crude Oil to Japan



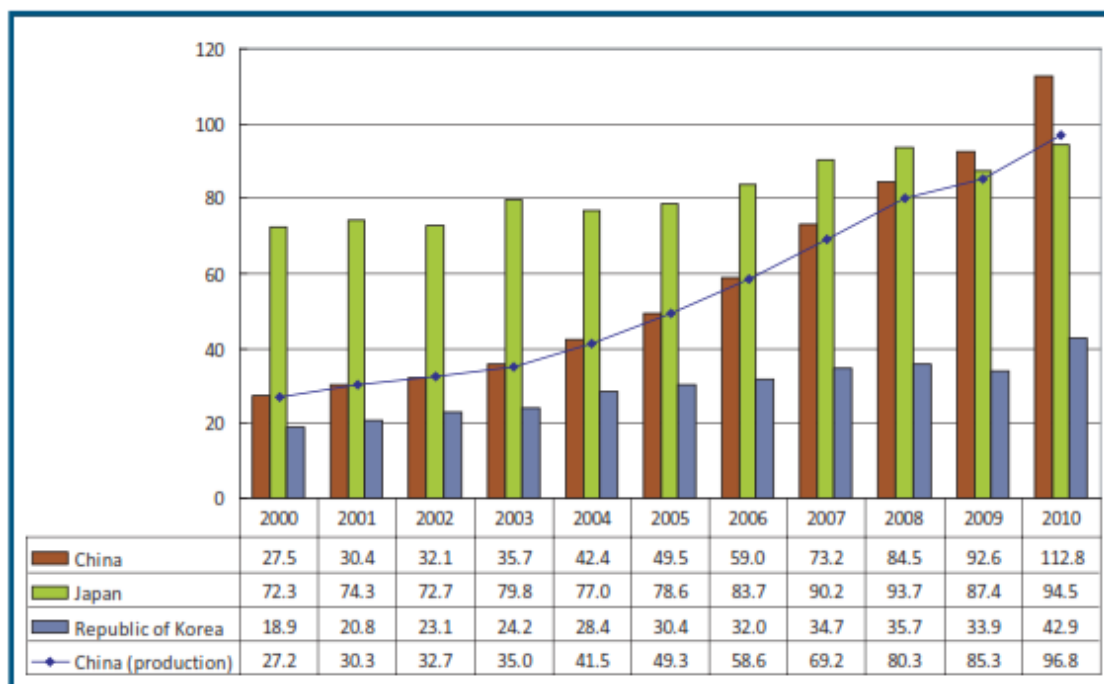
[https://www.spf.org/topics/20151106PanelDiscussion\\_Mr.HiroshiMeguro\\_Mitsui.pdf](https://www.spf.org/topics/20151106PanelDiscussion_Mr.HiroshiMeguro_Mitsui.pdf)

### Demand for Natural Gas in China and Japan and Production of Natural Gas in China, 1980–2035 (est.) (billion cubic meters)\*



Source: World Energy Outlook 2010 (Paris: International Energy Agency, 2010), pp. 182, 191.  
 \*The aforementioned estimate is part of the New Policies Scenario. According to World Energy Outlook 2010, page 59, the New Policies Scenario “takes account of the broad policy commitments that have already been announced and assumes cautious implementation of national pledges to reduce greenhouse-gas emission by 2020 and to reform fossil-fuel subsidies.”

**Natural Gas Consumption in Northeast Asia and Natural Gas Production in China, 1999–2010 (billion cubic meters)**



Source: BP, Statistical Review of World Energy (BP, various years)

The International Energy Agency has estimated the average annual growth of Chinese natural gas demand at a rate of 5.9 % up to 2035. In real terms volume, it could be from 85bcm in 2008 to 216 bcm in 2020 and up to 395 bcm in 2035. The Institute of Energy Economics, Japan, predicts that in 2020 Chinese dependence on its natural gas imports would reach about 30% that could escalate up to more than 50% by 2035<sup>53</sup>. However, CNPC has more aggressive predictions. Zhou Jiping, CNPC's vice president stated in a speech at the International Petroleum Technology Forum in 2009 that domestic demand could go up to 300 bcm by 2020 wherein imports would account for roughly 80bcm (Jiping 2009).

Taking these projections and estimates, Chinese government has started to expand its domestic natural gas pipeline networks all across China. It is expected that a total length of gas pipeline would reach up to 37,283 miles (60,000 km) by 2020 and by 2030 that would exceed roughly 49,800 miles (80,000 km) (NAGPF 2009). Its first West-East pipeline from Tarim basin (Xinjiang Uygur Autonomous Province) to Shanghai has become on line in 2004, which is about 2388 miles long. While, the Shaan-Jing pipeline (570 miles), which originates from the Changqing natural gas

<sup>53</sup> IEEJ (2010), Asia/World Energy Outlook, The Institute of Energy Economics, Tokyo, Japan, p. 50.

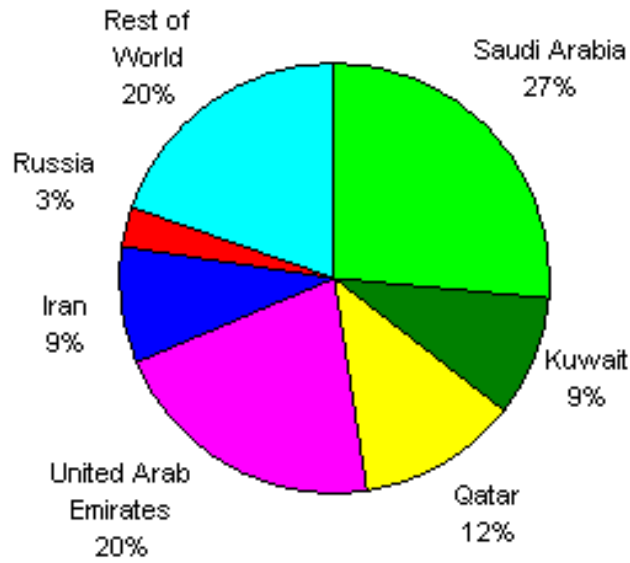
field and goes from Shaanxi province to Beijing and Tianjin gas pipeline (581 miles) have been completed respectively in 1997 and 2005. In 2010, another important gas pipeline network project from Danzhou (Sichuan province) to Shanghai has become commercially operative. This Sichuan to East Gas Pipeline is more than 1056 miles long and covers many significant destinations (Sichuan-East China Gas Project-Sinopec Corp). One gas pipeline (West-East) goes from Xinjiang Uygur Autonomous Region at Horgos to the Guangzhou. It is roughly 5408 miles long and includes a trunk line with eight branches. It has finally been completed (CNPC 2011), in June.

In 2010, natural gas import of China was 16.4 bcm wherein LNG accounts for 12.8 bcm. In this context, along with some new terminals, which are at their planning level, a few LNG terminals are being under construction in various provinces; e.g. Ninpo terminal in Zhejiang province, Caofeidian terminal in Hebei province, Dalian terminal in Liaoning province, Jiaonam terminal in Shandong province, Zhuhai and Jieyang terminals in Guangdong province. However, in addition, four LNG terminals were in operation in 2011; i.e. Meizhou in Fujian province, Rudong in Jiansu province, Dapeng in Guangdong province, and Yangshan in Shanghai BP (2011). However, in 2015, the imported volume has been estimated to increase roughly up to 50-60 bcm (IEA 2011).

### **Oil Market:**

The Energy demand of China has been increased significantly in the last two decades. This new demand primarily pushed an unprecedented jump in their primary energy requirements, and secondly, turned China into a deep energy hungry nation. According to International Energy Agency, China has become the largest consumer of primary energy in 2009 and surpassed the United States. Its primary energy requirements grew from 872 million tons (1990) of oil equivalent (Mtoe) to 2,131 Mtoe (2008) (IEA 2010). It has also been projected that from 2008-09 to 2035, the estimated Chinese primary energy requirements would bulge about 1.8 times (following figure), which is certainly a staggering figure and cause of concern for Chinese authorities. Meanwhile, Japanese demand for primary energy has already peaked. The demand for its crude oil peaked in 2002. The IEA forecasts that it will decrease from 496 Mtoe in 2008 to 470 Mtoe in 2035. Since 2003, the Japanese demand for crude oil in its net import has also been gradually declining.

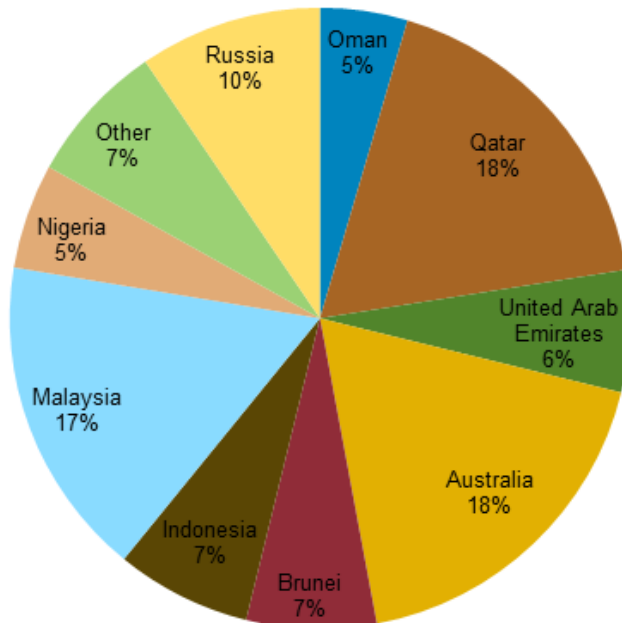
### Japan's Crude Oil Imports by Major Sources 2009



Sources: EIA, Global Trade Atlas, Japanese Government Sources

<https://mulrickillion.files.wordpress.com/2011/03/image142.png>

### Japan's LNG imports by source, 2012



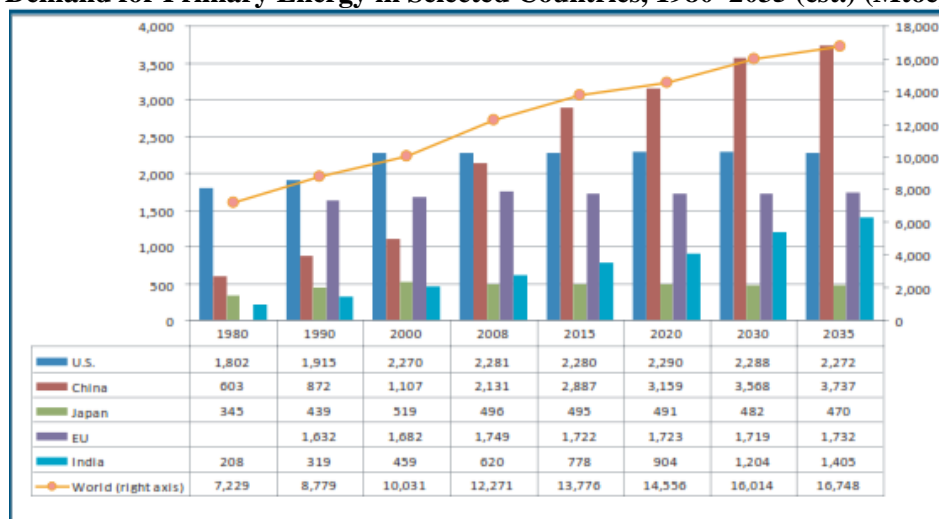
Source: FACTS Global Energy

Other: United States, Algeria, Egypt, Norway, Equatorial Guinea, Trinidad, Yemen, Peru

[http://www.shalegas.international/wp-content/uploads/2014/10/lng\\_imports.png](http://www.shalegas.international/wp-content/uploads/2014/10/lng_imports.png)



### Demand for Primary Energy in Selected Countries, 1980–2035 (est.) (Mtoe)

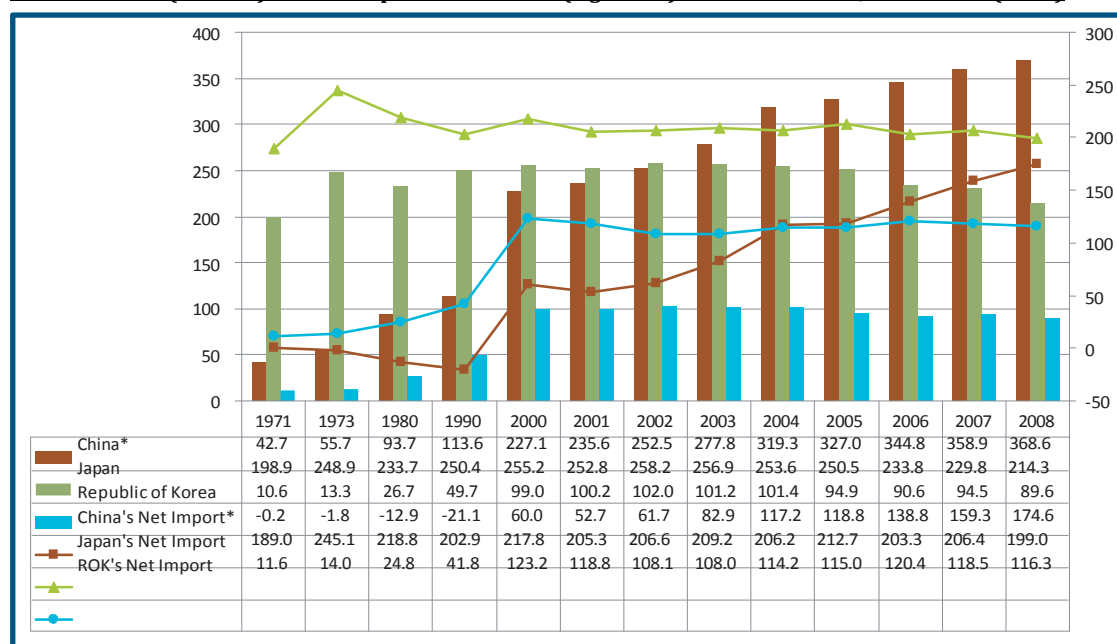


Source: *World Energy Outlook 2010* (Paris: International Energy Agency, 2010), p. 85.

Note: This estimate is part of the New Policies Scenario. According to *World Energy Outlook 2010*, page 59, the New Policies Scenario “takes account of the broad policy commitments that have already been announced and assumes cautious implementation of national pledges to reduce greenhouse-gas emission by 2020 and to reform fossil-fuel subsidies.”

The International Energy Agency has estimated that Japanese oil consumption would decrease from 214 Mtoe (2008) to 164 Mtoe by 2020. IEA also predicted that “this declining trend is unlikely to be reversed as the share of oil in the composition of primary energy declines and as Japan builds its low-carbon economy” (IEA 2010). However, if we compare with China, in 1990 Chinese consumption was only less than half of the Japanese burning up. In 2003 China not only overtook Japanese consumption but also tripled its use up from 1990-2006.

### Demand for Oil (left axis) and Net Imports of Crude Oil (right axis) in Northeast Asia, 1971–2008 (Mtoe)



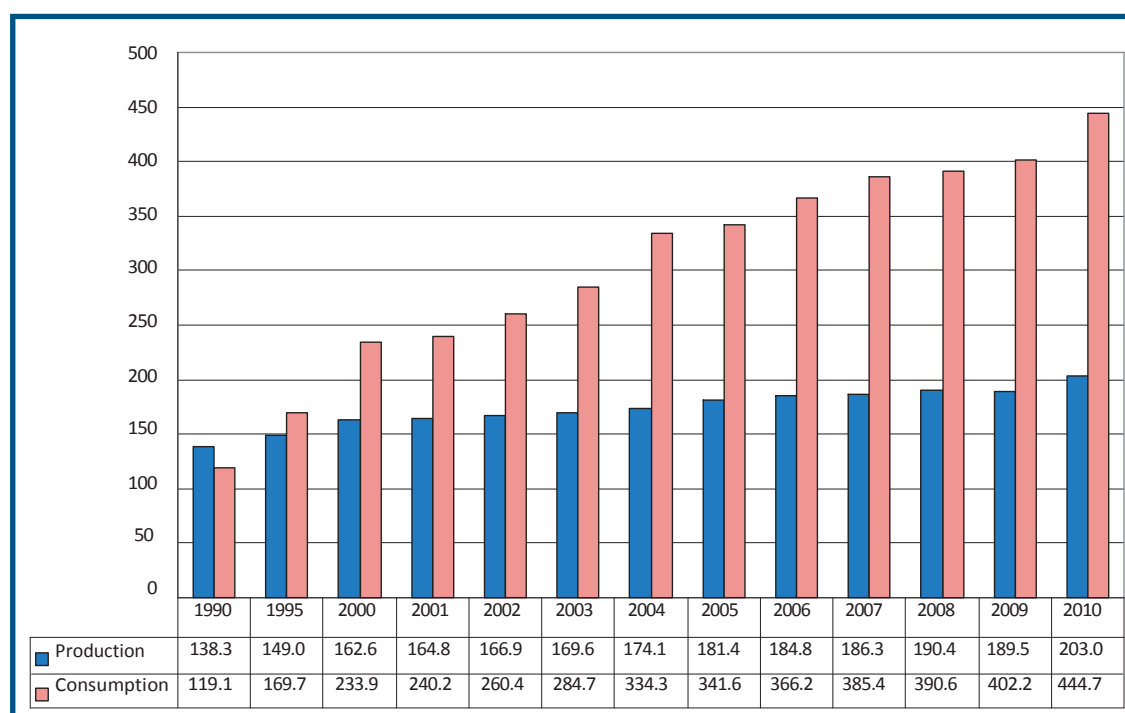
Sources: International Energy Agency, *Energy Balances of Non-OECD Countries*;

*Energy Balances of OECD Countries; Energy Statistics of Non-OECD Countries; Energy Statistics of OECD Countries* (Paris: IEA, various years). \*Includes Hong Kong.

The surge in Chinese crude oil demand has raised alarm among global community. Since mid 1990s, the gap between Chinese crude oil productions against consumption has greatly widened. It is due to, among many other things, rapid Chinese economic growth and new motorization.

The alarming forecast has been made by the Institute of Energy Economics, Japan. It has stated that the number of passenger vehicles in China is to increase from 51m in 2008 to 128m by 2020 and it could be 308m by 2035 (Institute of Energy Economics 2010). The oil demand in China has been projected to increase by almost 1.9 times. The average annual rate of increase could be 2.4%. In terms of volume it could be 8.1 mb/d in 2009 to 15.3 mb/d by 2035. This growth would surpass the U.S. by 2035.

#### Crude Oil Production and Consumption in China, 1990–2010 (million tons)



Source: BP, *Statistical Review of World Energy* (BP, various years). Demand for Oil in Selected Countries, 1980–2035 (est.) (million barrels per day)

During the same period, if this rate of increase continued, China would account for approximately 57% of the total increase in the global oil demand as well (IEA 2010). However, the CNPC has estimated that Chinese crude oil import would surpass Japanese total import-volume in 2012 (Yinghong 2009). This shows that the Chinese

oil import dependence would swell to 67.8% by 2020 (Yonghua 2009). The International Energy Agency projects that oil import dependence of China would be augmented from 53% in 2009 to 84% by 2035<sup>54</sup>.

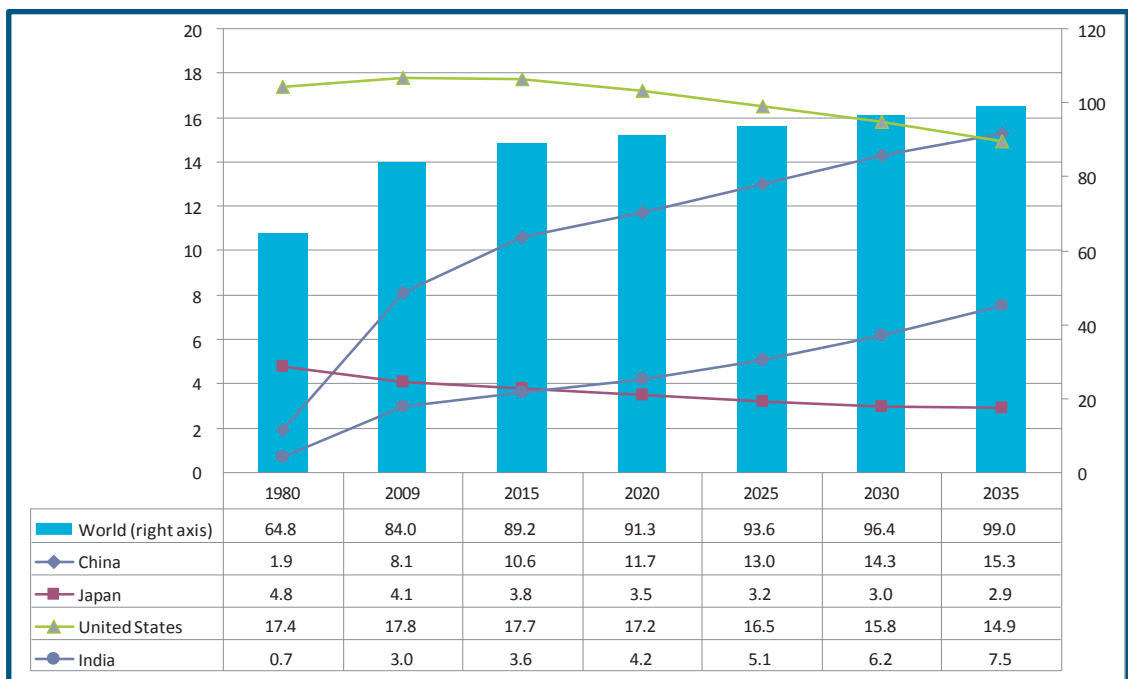
### **Russian-Chinese cooperation in oil and gas sector**

<i>Company</i>	<i>Project</i>	<i>Expectations</i>	<i>Current status</i>
Rosneft	Vankor oil field in eastern Siberia	In 2014, CNPC signed framework agreement to buy 10 percent stake.	Talks stalled over the estimated price of \$1.2 billion to \$1.4 billion.
Rosneft	Taas Yuriakh oil project in eastern Siberia	In 2013, CNPC signed memorandum to get a 49 percent stake.	BP holds 20 percent; Skyland Petroleum may buy up to 29 percent stake. The stake could be valued at up to \$1.9 billion. So far, the deal has gone nowhere.
Rosneft	Oil supplies to Sinopec	Under memorandum, Sinopec was expected to get 10 million tons per year from 2014 under prepayment.	Supplies did not start. Yearly sales were seen at \$8.5 billion.
Rosneft	East Siberia–Pacific Ocean spur pipeline expansion	Capacity was expected to reach 20 million tons by 2015 from 15 million tons.	Spur expected to pump 16 million tons in 2015 as China failed to expand its part of pipeline. Rosneft supplies some additional volumes via Pacific port of Kozmino.
Rosneft	Tianjin refinery in China, annual capacity 16 million tons	Rosneft holds a 49 percent stake, CNPC has 51 percent. First expected in 2015 with capacity of 13 million tons per year.	In May 2014, Rosneft and CNPC agreed to launch refinery in late 2019. Joint investments were planned at \$5 billion.
Rosneft	Offshore deposits in the Pechora and Barents Seas; onshore deposits in Irkutsk, Krasnoyarsk, and Nenetsk regions	Rosneft, CNPC discussed cooperation in 2013.	No update.
Gazprom	Gas supplies to China of 68 billion cubic meters (bcm) per year, via two routes: Eastern (38 bcm) and Western (30 bcm)	First supplies were expected in 2011.	Eastern route, Power of Siberia, expected to start supplies at the end of 2018, start of 2019. Western route, Altai (Power of Siberia-2), still pending firm contract. Eastern route project costs estimated at \$55 billion. Analysts estimate Altai costs at up to \$20 billion.
Novatek	Yamal LNG, full capacity 16.5 million tons per annum (mtpa), total investments \$27 billion	Chinese banks were expected to provide up to \$20 billion by year-end 2014.	Novatek-led Yamal LNG expected to clinch deal to get over \$13 billion from Chinese investors by mid-2015, but Chinese-led financing package has been delayed several months.

Source: “Table-Energy Cooperation between Russia and China,” Reuters, August 27, 2015, <http://in.reuters.com/article/2015/08/27/russia-china-results-idINL5N10Z2JF20150827>

<sup>54</sup> These estimates are based on the New Policies Scenario in *World Energy Outlook 2010*, and the percentages are calculated from *World Energy Outlook 2010*, page 105 and page 135.

## Demand for Oil in Selected Countries, 1980-2035 (million barrels per day)



Source: *World Energy Outlook 2010* (Paris: International Energy Agency, 2010), p.105.

Note: This estimate is part of the New Policies Scenario. According to *World Energy Outlook 2010*, page 59, the New Policies Scenario “takes account of the broad policy commitments that have already been announced and assumes cautious implementation of national pledges to reduce greenhouse-gas emission by 2020 and to reform fossil-fuel subsidies.”

## Chapter 6

### CONCLUSION

The study was intended to understand the role of energy in the foreign policy behavior of Russia. It looks at hydrocarbons in particular as a major component. To analyze the subject, it starts off with identifying responsible factors having influence on devising process. The investigation identified various elements of structure, spirit, and sistema<sup>55</sup> (informal rules to govern) as vital force to pressurize the plan and practice. Russian political state machinery is not similar to liberal democracies and holds highly centralized character. It is deeply influenced by its recent past. Though, as a nation, it holds a long legacy of cultural values; its recent past has undergone a catastrophic change. It has impacted economy, society, and polity in general. However, the transformation influenced the minds and thought process of natives profoundly. People got influenced by disintegration and emergent tumultuous political progress. It left huge impulsive vestige to the psyche of common citizen. Stories, rhetoric, and narratives found a new place to reside. This new abode was certainly a suspicious and apprehensive mind of Russian natives. Therefore, it was required to focus on different existing political approaches having power to sway the foreign policy making in Russia. This requisite led the research to be designed accordingly. In view of that design, the study incorporated various approaches of state policy making and its impact on foreign policy priorities in its analysis. It identified factors such as legacy, aspiration, geopolitics, domestic economy, energy market, nationalization, diversification, and above all personality as significant elements to investigate vis-à-vis role of energy resources in the foreign policy making. The investigation paid special attention to values, role, and instrumentality of those resources in designing and execution of state policies. The background of foreign energy policy of a new Russian state was analyzed in this context in detail. It was required to understand the continuity and change in policy structure, planning, and implementation process.

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<sup>55</sup> “In ‘*How Russia Really Works*’ (2006) and its sequel book ‘*Can Russia Modernize? Sistema, Power Networks and Informal Governance*’, Alena Ledeneva looks at the informal governing system that characterizes ‘sistema’. She seeks to reveal how informal power operates. Concentrating on Vladimir Putin’s system of governance - referred to as sistema - she identifies four key types of networks: his inner circle, useful friends, core contacts and more diffuse ties and connections”.

Since the focus of study is to investigate energy as a factor in the foreign policy of Russia, it has initially put-up various foreign policy orientations to examine. These orientations have power to influence the design of policy and intentions of policy architects. Secondly, it was to explore some of Russian geopolitical motives where energy can play an instrumental role. Study finds that Russian sphere of influence has always been considered as an important factor in any foreign policy draft. Thirdly, the research has focused on various causes of conflicts over energy issues between Russia and neighboring states. Findings make it clear that geopolitics and energy market all together played a major role in those differences. These factors explain *raison d'être* of Russian state to initiate the process of diversification as well. Its energy acquisition vis-à-vis market and assets is a part of energy strategy. It has adopted new methods of diversification where joint ventures are taking new shapes along with national champions. As far as rationale behind nationalization of hydrocarbon resources is concerned, it is found that making strong hold of state apparatus was necessary to deal with foreign issues. It has provided strong grounds to increase state control on natural resources.

Various dimensions of identity have profound impacts on various foreign policy approaches. Elements such as language, ethnicity, Slavic entity, reintegration and civilian state have impacted the formation of identity and various foreign policy approaches. Liberalist Westernists, Pragmatic Nationalists, and Fundamentalist Nationalists are three approaches of Russian elites to formulate a New Foreign Policy. Important post-Soviet foreign policy perspectives such as Liberal and social democrats as Westernizers (Atlanticists), national communists and Eurasianists (hard-liners) as Civilizationists, Neo-Eurasianism (Slavophilism), Neo-Imperialists, and statist approaches have also influenced policy making and priorities of state in their own ways. History, geography, identity, worldview, perception of self, disintegration of the USSR, threats, Russian ideology/mission, Russian borders, FSU connect and relations, policy toward FSU, foreign policy directions, and domestic politics have been identified as foreign policy drivers. All of them have deep influence on complex process of policy formation. The security concerns of Russian federation shown in various policy documents are making regular impacts on policy makers and populace side by side. Foreign Policy Concept (1993) and Millennium Speech has given insights of Putin which rationalise his policies. Foreign Policy Concepts produced in 2000 and 2008 as

well as National Security Concept 1997 have reflected threats to the nation. The initial economic condition at the time of disintegration and transition of structure has paved the way to make new priorities. Various economic indicators along with oil and gas have proven the fact that tattered background created support for Putin and his ascendancy paved way to elevate the status of Russian state and society among world community.

The deep examination of hydrocarbon resources in Russian Federation has shown the strength and scope of its role in the foreign policy making. The strength of energy resources decides primary energy balance in a country and the same is true for Russia. Huge oil and natural gas resources have provided support to Russian export and generated enormous revenue. High revenue from fossil fuel exports helped Russia to pay debts and other international obligations. The study finds that various estimates of hydrocarbon reserves and its share in Russian Gross Domestic Products prove their significance in budget. Data shows that current depending situation is not the historical trade reality of Russian Federation vis-à-vis Federal Budget. It was developed along with price rise of energy resources. The trend caught the pace from 2002 onwards which got its height in 2012 when it had become 50.3% of the total Federal Budget Revenues. The problem with the policy makers is that the share of oil and gas has risen with the price rise, but it could not fall accordingly when prices went down in the market. It is also a fact that relatively production also went up along the side of price rise. It is certainly a dreaded figure for any country wherein one source of exports capture more than 65% share of the total exports (BRIC Spotlight 2011). It makes that country by all means vulnerable to any crisis either of economic or geopolitical one. It would be in trouble either price goes down or meager demand situation takes place.

Export of natural gas is different from oil trade. It is almost not linked with oil prices. Though, recently many players have started to link with, and mostly it is free from impacts of spot market. Finally, it has no obligations to the Organization of Petroleum Exporting Countries. All these attributes make natural gas trade different from oil trade and in turn make different impact on Russian economy along with providing helping hands to the foreign policy makers. In this way, Russia has almost a free hand in making a price mechanism according to its national and market interests. Due to nature and demand of commodity, Russia has an upper hand in dealing with its



consumers and may finalize different prices with different consumers. Russian geopolitics and geostrategic move also get some rooms in these trade relations. Last decade is an exemplar to this phenomenon. It has not only managed to earn huge income from this trade but also established and increased its status in world politics.

Russia's energy diplomacy has become increasingly active. Relationship has been changing due to new national priorities and national interests. Governments as well as national champions are making their best efforts to achieve best market shares and upper hand in geopolitics as well. Black sea region and adjoining states have the opportunities to cooperate. The region could be instrumental in supply security. However, relations with Ukraine and Georgia have tainted the image of Russia as a reliable energy supplier but only up to some extent. The ramifications of Russian political moves are more serious than trade disputes. It has enhanced its status in world politics and made increased efforts to establish state control over energy resources. It is working on reducing transit dependence. Its political moves, on the other hand, have undermined investment in Russian energy projects. Gazprom is working to improve its image. Russian state is trying to shun boasting terminology such as energy super power. It shows its intention to get out of the Cold War mindset. But at the same time, due to security concerns, it is focused on creating a secured base to have influence on near abroad. It has increased influence in the region but Ukrainian and Georgian crisis have created new challenges to build new faith in its neighbors. It is in competition with Central Asian states along with Azerbaijan but not using political clout. It is good to compete in market rather politically.

Russia has been blessed with natural resource endowments. However, it requires constant and stable supply of these resources. Its strength could be as weakness in case of unavailability of market. Likewise, many European states which receive constant supply from Russia are dependent but provide stable market to Russian supply. They need these resources but paid amounts are equally important to Russian budget. It means it is not a game of strength and weakness or dependence. It is a case of interdependence and both should handle this delicate relationship of mutual assistance carefully.

However, investigation proves that crude oil and natural gas exports, its domestic and international market prices hit Russia or give financial strength. High prices do open

opportunities to find out new destinations of supply. Russia requires export revenues from conventional as well as new destinations of exports. It has to focus on potential markets. Russia cannot avoid the strength of hydrocarbons export earnings and its contribution to the state budget. Lower production costs of oil and natural gas in Russia helps strengthen the budget. It makes Russian budget in a position to bear lower oil and gas prices even in an international market. The breakeven price of crude for federal budget is a factor behind some geopolitical moves of Russian state. The production costs of various important companies vary according to regions and age of the projects. The study finds that oil and gas companies do not work only according to market. Sometimes state promotes its policies through these national champions. They are responsible for social obligations as well. In turn, state develops export infrastructure in production basins. Study finds that primary regions such as West and East Siberia, Far East, Yamal peninsula, Arctic region, north Caucasus and Caspian, Urals-Volga and Timman-Pechora and Sakhalin Island are major supply source. Major state companies are involved in these regions. However, oil and gas production is influenced by external factors as well. Therefore, this study has investigated the issue at the global level and found that regional or international perspectives regarding oil and gas trade impacts domestic policies as well. In Russia, politics has been found well connected with the energy resources and its international markets.

Thirdly, Russian hydrocarbon export relations with Europe are important because of many reasons. The pipeline networks earn proceeds through total and net exports of oil and natural gas to the region. Russian share and percentage dependence of oil and gas in total European consumption is significant. It helps Russian leverage to deal with European nations. European reliance on Russia's hydrocarbons provides geopolitical leverage to Russia. There are many challenges of retaining production levels and reserves of strategic commodities. Market prices, costs of each stage of production activity, breakeven of production and breakeven for budgets are important issues to be taken sincerely by the policy maker in Russia.

The prime oil and gas pipelines to Europe, its import-export, demand and supply security of producer and consuming states are important factors which contributed Russia-EU relations. Russian energy foreign policy and geopolitical moves are influenced by these factors in the region. Its existing and proposed pipelines have

given financial strength and international cooperation to the Russian state. This strength of Russia provides sufficient ammunition to the U.S. to move strategically in the regional energy market vis-à-vis Russian future energy trade. In this context, when this study looked at Russian trade relations with the United States, it found only a dismal relation for the same. The nature of trade between these two nations is not healthy where Russia imports machinery and exports energy products to the American markets. Their relations have been landed in a collision of energy products, foreign policy, and geopolitics. Study finds that Ukrainian crisis is only one example of this relationship. Since European energy security is vulnerable and greatly depends on Ukrainian gas transit, its interruption involves geopolitics along with energy trade. This crisis opens various offers, hopes, and actions to all the stakeholders. Study also finds that politics of sanctions against Russia leads to geopolitics of diversification for both sides. Though, Russia was involved in diversifying its markets for hydrocarbons, the crisis pushed them for a greater pace. It is also an example of trade complication between Russia and the West. It should be seen from global energy market perspectives.

Fourth, Russian moves to Asian energy markets are interesting in respect of market and geopolitics. China, Japan, and Korea are main consumers in the East Asia. The diversification efforts have created new hopes to develop binding energy relations among these giants. Russian moves could strengthen their changed Asian perspective of energy security. However, these nations have their own concerns about increased interdependence and security strategy. The East Asian regional energy scenario is different from other parts of the world. Its net import of oil and composition of LNG trade is also different from the West. The natural gas export facilities in terms of infrastructure and potential market investments in the region are still not sound. Certainly, pipeline construction is a big issue to supply natural gas. It requires huge long term investments and healthy trade together with state to state relations. Pricing issues and other obstacles in trade are also important factors which still needs deep and serious consideration. In this context, role of new leadership is important especially of President Putin. Russian new approach to the East Asian countries for energy trade provides new opportunity and market to Russian national champions such as Gazprom and Rosneft. These companies have foreign subsidiaries and affiliates to develop new fields and diversify markets. In fact, high oil and gas prices in the first decade of 21<sup>st</sup>

century motivated Russia to reorient its energy strategy. Prices in the world energy market have not only encouraged increased state control in the oil and gas sector, but also influenced the foreign policy of Russia. It helped Russian state to secure best price deals and assets ownerships abroad through its national champions. In this respect, energy balance in Northeast Asia and LNG market along with oil and gas is a good opportunity for Russian energy industry. This study finds that growing energy demands of East Asian states, especially China, Japan, and Korea encouraged Russia to invest huge amounts in its Far East. These states have become major targets of energy diversification plans of a new Russian strategy. It has provided Russia a better bargaining power in dealing with the West. However, Europe remains the main market for Russian energy resources.

On the basis of existing Russian energy (re)resources and recently developed Far East projects; it is clear that energy sector has the vital potential to recover and improve its modernization plans. It could be responsible and catalyst for developing domestic infrastructure. It can simply change the life of common residents if used properly and intelligently. Though, these resources have been ascribed as a source of conflict by the West, its better use can make Russians to look forward for multilateralism and mutual assistance not only in the field of energy but also in geopolitics of the same. This conclusion is supported by many hopeful developments in evidence. Leaving few scattered cases of trouble and disputes apart, Russian energy cooperation with the European Union is increasing. Though the peak consumption of oil in Europe approached in around 2006, the trade for the same is still robust. Even new pipelines are in considerations which show the potential trade of energy remarkably comprehensive. Its collaboration with the East Asian<sup>56</sup> countries such as Korea, Japan, and China made Far East energy exploitable and given hope for future energy security. The region as a whole has a good potential to realize the Siberian energy in the long run and make Russia confident for its demand security. The relation would certainly be based on mutual cooperation and assistance where regional states would solve their problem of supply security. Though both parties are skeptical up to some extent on the dependence factor, it would depend on their regional aspirations. Russian geopolitical stakes in the East Asia is not that big as compared to the near

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<sup>56</sup> *The Asia-Pacific region, in 2013 consumed a little over 30 Mb/d of oil, or about one-third of global consumption.*

abroad. Japanese have some geopolitical issues in the region but not that much potentially disastrous in nature. China involved in South-China Sea in a big way. It could be a serious trouble in the region. However, energy needs of China do not allow the state to go for any big geostrategic expedition or create hoopla regarding the issue. Energy potential of the South-China Sea could play an important role in the Chinese supply chain, but that is not imminent in near future. On the other hand, significance of Russian gas supply to Chinese market and being a potential long term reliable supplier to the region, Russia would not allow any mistake and misunderstanding among these consumer states. Any miscalculation regarding geopolitics or energy market could harm its potential growth and development especially for the Far Eastern energy projects. This approach seems to be reliable because Russia has adopted a new approach to resolve disputes even in its south-eastern region such as Nagorno-Karabakh. In fact, any turbulent situation in the East Asian region would not only disturb the potential market in East Asia but also could harm Arctic developmental and market projects vis-à-vis huge but tough to exploit oil and natural gas reserves in Russia. Arctic projects are very well linked with the development of East Asian market in terms of procuring direct financial investment or huge earnings from energy trade in the region. Russia could avail reliable capital investment from these states especially from Korea and Japan in its existing or potential projects as well as make profits in its energy trade with them. In addition, Russia could get benefit of Chinese investment as well but it is structurally export oriented in nature and difficult to find for purposes other than Chinese demands or requirements.

Lastly, Russia's relations with the United States seems weak in terms of trade but being a counterpart in the Cold War era and militarily stern opposite force in world politics makes Russian state the most dangerous enemy for the U.S. national security. Since United States cannot deal Russia militarily, it is working on other means to weaken Russia. The U.S. has started focusing Russian energy resources and its related issues around the world. Ukrainian crisis is just one example of this thought process of national security strategy of the U.S. In fact, real-politik has still been playing a dominant role in their relations. In the garb of liberalism (idealism), political realism<sup>57</sup>

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<sup>57</sup> *“Realism, also known as political realism, is a view of international politics that stresses its competitive and conflictual side. It is usually contrasted with idealism or liberalism, which tends to emphasize cooperation. Realists consider the principal actors in the international arena to be states, which are concerned with their own security, act in pursuit of their own national interests,*

still dominates American politics and the idea of national security. National interests are still being defined in terms of threat perceptions and mistrust around the world. Priorities may vary but fundamentals are same old principles of realism. United States' focus on the significance of energy resources and issues in the foreign policy of Russia has made it clear that their relations could be normal but not intimate as far as their existing security prism dominates. Growing nationalist and assertive tone of national interests in the Russian political corridors has always been a matter of concern for American policy makers. It seems that energy could be a factor "in defining a *new realism* in U.S. policy toward Russia" (Jaffee 2000). U.S. must understand the involvement of energy component in security perceptions of Russia. It could minimize their differences. It can also be the focal point of Russia-European relations and their defining national interests. Analysis of energy as a factor in the foreign policy behavior can provide insights and vision to the western policy makers on "how to give Russia a role in defining its own interests in a manner that enhances, not harms, Western security requirements" (Jaffe and Manning 2000). Western powers have defined and understood those interests very narrowly. In fact, understanding of energy in the foreign policy and security calculus of Russia could be a great start in positive and mutual cooperation rather than competition. It would promote inclusive approach and Russian commitments to world peace through existing international norms in world system.

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*and struggle for power. The negative side of the realists' emphasis on power and self-interest is often their skepticism regarding the relevance of ethical norms to relations among states. National politics is the realm of authority and law, whereas international politics, they sometimes claim, is a sphere without justice, characterized by active or potential conflict among states*" (Stanford Encyclopedia of Philosophy 2013; "Political Realism in International Relations"). <http://plato.stanford.edu/entries/realism-intl-relations/>

## Annexure

### “Ministry of Energy of the Russian Federation

#### **Energy Strategy of Russia For The Period Up To 2030 (Approved by Decree N<sup>0</sup> 1715-r of the Government of the Russian Federation dated 13 November 2009 Moscow 2010” Strategic guidelines**

“Energy security is one of the most important components of the national security.

Energy security is the country’s security, that of its citizens, society, state and economy from the threats to reliable supply of fuel and energy. These threats are determined by external (geopolitical, macroeconomic, market) factors, as well as by the condition and operation of the country’s energy sector.

Energy security is provided and determined by resource sufficiency, economic availability, ecological and technological acceptability. Resource sufficiency determines the physical possibility of deficit-free supply of energy resources to the national economy and the population. Economic availability determines the profitability of such supply at appropriate market prices. Ecological and technological acceptability determines the possibility of extraction, production and consumption of energy resources within the existing technological and ecological limitations determining operation safety for energy facilities at various phases.

Russia’s energy security has been provided in full during the implementation of the Energy Strategy of Russia for the period up to 2020. Nevertheless, it has not always been possible to avoid local short-term violations of energy security committed in some regions thus reflecting the existing systemic problems in the Russian energy sector”.

The main problems in the field of the energy security are as follows:

- “high degree of fixed assets depreciation in the fuel and energy complex (in the electric energy and gas industries - almost 60%, in the oil refining industry - 80%);”
- “low level of investments in the development of the fuel and energy complex (in the last 5 years, investments in the fuel and energy complex amounted to approximately 60% of the volume specified in the Energy Strategy of Russia for the period up to 2020);”
- “sole dependence of the Russian economy and its energy sector on natural gas the share of which represents around 53% of the domestic energy consumption;”
- “failure of the industrial potential of the fuel and energy complex to match the world scientific and technical level, including in terms of environmental standards;”
- “slow development of the energy infrastructure in the Eastern Siberia and Far East.”

“The strategic objective of the state energy policy in the sphere of energy security is to continually improve the following main characteristics”:

- “the ability of the fuel and energy complex to reliably provide for economically sound domestic demand for quality and affordable energy;”
- “the ability of the consumer sector of the economy to use energy resources efficiently by preventing irrational expenditures of society on energy supply;”
- “the stability of the energy sector against external and internal economic, technogenic and natural threats to the reliable energy supply, and its ability to minimize the damage caused by various destabilizing factors.”



“Energy security is achieved by implementing all major components of the state energy policy based on the following key principles:”

- “ensuring the guaranteed and reliable energy supply in the economy and to the population in full under normal conditions and in the minimum necessary amount under various exceptional circumstances by the creation of the system of strategic reserves of fuel and energy resources, regulations on minimum allowable reserves of generating and energy transporting capacities, levels of seasonal reserves of fuel, reserves of equipment necessary to eliminate the consequences of major accidents in the energy sector;”
- “separation of powers and responsibilities of the state bodies, executive bodies at federal and regional levels, of energy supplying companies and business entities-consumers in the area of providing for energy security to all sectors of the economy, population, socially important objects and business entities;”
- “ensuring reliable operations and predictable development of the energy infrastructure, including utilization of state-private partnership mechanisms, consistent lifting of restrictions in transportation of energy resources between different regions of the country and between territorial production complexes (energy hubs) within regions;”
- “ensuring timely exploration, preparation and development of new deposits (deposits, areas, sections, provinces) of traditional fuels, including through state-private partnership and rational tax policy (referring to the growth of proven recoverable reserves, which outruns the production thereof), timely preparation to the use of substitute innovative energy resources and energy sources in proportion to the depletion of traditional fossil energy resources;”
- “avoiding depreciation of fixed production assets to a level threatening the energy security and stimulating investments to modernize these assets by introducing tax credit investment mechanisms, tax holidays for project investment payback period, accelerated depreciation, and investment risk insurance;”
- “maximizing the use of competitive domestic equipment in all technological processes and projects, stimulating the development of domestic energy production with high added value and improving the quality of oil products by tightening quality standards for engine fuel, modernizing oil and gas processing facilities in Russia, differentiating excise rates on engine fuel of different quality;”
- “improving national energy security as a result of international cooperation in the energy sector while guaranteeing execution of the obligations under international export contracts for energy supply.”

## **Ministry of Energy of the Russian Federation**

### **Energy Strategy of Russia For The Period Up To 2030 (Approved by Decree N<sup>o</sup> 1715-r of the Government of the Russian Federation dated 13 November 2009 Moscow 2010**

#### **Foreign energy policy**

“The strategic objective of the foreign energy policy is the maximum efficient use of the Russian energy potential for full-scale integration into the world energy market, enhancement of positions thereon and gaining the highest possible profit for the national economy.

The global nature of energy problems, their rising politicization, as well as objective importance of the Russian fuel and energy complex in the world energy sector predetermine the important role of the foreign energy policy of the country. Currently Russia has already occupied one of the leading positions in the world system of energy resource turnover, it takes an active part in international cooperation in the sphere of fuel and energy resources production and their supply to energy markets. Russia is interested in provision of further increase in efficiency of production and export of all major energy resources and products of processing thereof, as well as of technologies with respect to which Russian energy and industrial companies have competitive advantages.

Stable relationships with traditional consumers of Russian energy resources and shaping equally stable relationships on new energy markets are the most important vectors of the country’s energy policy in the sphere of global energy security provision in accordance with national interests of the country. The policy of Russia in the stated field is being realised in accordance with decisions and recommendations adopted at the St. Petersburg G8 summit in 2006. It is open and built on the principles of predictability, responsibility, mutual trust and taking into account interests of energy producers and consumers.

The progress of implementing the Energy Strategy of Russia for the period up to 2020 in the stated field is characterized with the following features.

Export of major Russian fuel and energy resources is growing, oil products export, substituting the export of crude oil, is also developing”.

“The following large-scale projects on export energy infrastructure construction aimed at enhancing the reliability of supply and transit of Russian energy resources to Europe were implemented”:

- “Goluboy Potok” (Blue Stream) gas pipeline (16 billion m<sup>3</sup> of gas per year, 2005);”
- “the first phase of the Baltic pipeline system (65 million tons of oil per year, 2006);”
- “Yamal-Europe gas pipeline (33 billion m<sup>3</sup> of gas per year, 2007);”
- “the first phase of the “Sever” (North) oil-product pipeline (8.4 million tons of oil products per year, 2008).”

“Implementation of the following new infrastructure projects, aimed at diversification of export markets for Russian energy resources, was started”:

- “Severniy Potok” (Nord Stream) gas pipeline (55 billion m<sup>3</sup> of gas/year);”
- “the Eastern Siberia- Pacific ocean oil pipeline (80 million tons of oil/year).”

“Agreements for construction “Yuzhniy Potok” (South Stream) gas pipeline (30 billion m<sup>3</sup> of gas/year), the Pre-Caspian gas pipeline (20 billion m<sup>3</sup> of gas/year), and the Burgas-Alexandropolis oil pipeline (35 million tons of oil per year) were signed.

Decisions were made on construction of the second phase of the Baltic pipeline system (50 million tons of oil/year), and expansion of the Caspian Pipeline Consortium.

The practice of energy assets exchange and mutual share participation of Russian and foreign companies in the entire economic chain- from exploration and production to distribution of energy resources to end users- is being developed. Transition to market relationships in the sphere of natural gas supply to the countries of the CIS is at the phase of accomplishment.

Energy dialogue with the largest countries — consumers and producers of energy resources, as well as with major regional unions (European Union, Eurasian Economic Community, etc.) and international organizations (Shanghai Cooperation Organization, Organization of Petroleum Exporting Countries, Gas Exporting Countries Forum, International Energy Agency, etc.) is being actively conducted.

Current trends in this field relate to high volatility of world prices for major fuel and energy resources and aggravation of competition on traditional sale markets for Russian energy resources”.

Among the main problems in the stated field are the following:

- “reduction in demand and cut in prices for energy resources due to the world economic crisis;”
- “insufficient diversification of sale markets for Russian energy resources and of export commodities structure;”
- “preservation of the Russian export dependence on transit countries;”
- “politicization in energy relationships between Russia and foreign countries;”
- “low level of Russian energy companies activity at foreign markets.”

“In order to achieve the strategic objective of the foreign energy policy the following goals must be realized”:

- “appreciation Russia’s national interests in the developing system of world energy markets functioning aiming at their predictable and stable development;”
- “diversification of export energy markets and export commodities structure;”
- “provision of stable conditions on energy markets, including guaranteed demand and sound prices for major exported Russian energy resources;”
- “enhancement of leading Russian energy companies’ positions abroad;”
- “provision of efficient international cooperation in implementation risky and sophisticated projects in Russia (including shelf Arctic projects).”

“Development and implementation of the foreign energy policy is based on the principle of consistency providing coordination of activities at the regional level and in relationships with international organizations, synchronized activity of the state and energy companies, mechanisms of control and monitoring, determination to achieve the shared result.

The abovementioned goals should be realized with the diplomatic support of Russian energy companies abroad, as well as by means of the following measures and mechanisms of the state energy policy”:

- “active participation in international negotiation processes on energy issues, provision of balance between interests of importers, exporters and transmitters of energy resources in international treaties and international organizations.”
- “development of energy cooperation with the countries of the Commonwealth of Independent States, Eurasian Economic Union, North-Eastern Asia, Shanghai Cooperation Organization, and European Union as well as with other international organizations and countries;”
- “coordination of activity on world oil and gas markets with the countries-members of the Organization of Petroleum Exporting Countries and the Gas Exporting Countries Forum;”
- “assistance in developing the united European-Russian-Asian energy area;”
- “assistance in provision favorable and non-discriminatory environment for domestic energy and service companies (as well as for foreign companies with Russian share holders) on world markets, including their access to productive and distributive segments of foreign markets;”
- “assistance in foreign investments attraction, primarily for technically sophisticated and risky projects, on mutually beneficial basis;”
- “provision of Russian energy companies with access to the resources of world financial markets and advanced energy technologies;”
- “stimulation of Russian energy technologies and services development and export;”
- “promotion of transport infrastructure construction in the east, south, north-west and north of the country aimed at diversification of sale markets and export destinations for Russian energy resources;”
- “stimulation of the growth in the share of highly processed energy resources in the overall structure of the Russian energy export;”
- “rational development of transit energy flows through the territory of Russia;”
- “development of new forms of international cooperation (including technological one) in the energy sector;”
- “provision of the Russian energy policy transparency and coordination of its energy strategy with prospective plans and energy strategies of other market players;”
- “active participation of Russia in international cooperation on development of the energy of the future (hydrogen, thermonuclear, tidal energy, etc.).”

## **Ministry of Energy of the Russian Federation**

### **Energy Strategy of Russia For The Period Up To 2030 (Approved by Decree N<sup>o</sup> 1715-r of the Government of the Russian Federation dated 13 November 2009 Moscow 2010**

Russia on world energy markets

“Russia is among the world leading countries in the system of world circulation of energy resources. Russia actively trades these resources and takes part in international cooperation in this field.

Russia’s position is especially important on the world hydrocarbon market.

In the past years, Russia holds leading positions in terms of crude oil production and provided 12% of the world oil trade. Over four-fifths of Russian oil is exported to Europe and Russia’s share on the European markets amounts to around 30%. Russian oil products are also mainly exported to the European countries.

Russia is the world leading country in terms of reserves (23% of the world reserves) and annual production of natural gas. The country provides 25% of the world trade in natural gas, dominating both on the European gas market and on the gas market of the Commonwealth of Independent States. Russian gas accounts for approximately 30% of the overall gas consumption in the European countries (including Turkey, but excluding the countries of the Commonwealth of Independent States). With a unique gas transportation system, Russia also plays an important role in supplying gas from Central Asia to Europe and to the countries of the Commonwealth of Independent States.

Russia holds the second place in terms of coal reserves in the world (19% of the world reserves), the fifth place in terms of annual production (5% of the world production) and also accounts for approximately 12% of the world thermal coal trade.

Russian nuclear electric energy industry represents 5% of the world nuclear energy market, 15% of the world nuclear reactors market, 45% of the world uranium enrichment market, and 15% of the world market of spent fuel conversion. Russia also provides 8% of the world production of natural uranium.

Peculiarities of the forthcoming period of the world energy markets development are associated with the processes of their restructuring, growth in the share of developing countries, and intensification of competition. Recently, the degree of uncertainty and risks has significantly increased on world markets, including in connection with abrupt and unpredictable dynamics of oil prices, negative impact of the world financial crisis, the threats of energy supply shortages in the post-crisis period, multiple-valued prospects for concluding international agreements on environmental policy and climate change. On the other hand, the efforts to improve long-term stability of the energy markets and global energy security are increasingly understood and supported in the world, and this stability and security must be provided without prejudice to any national interests whatsoever. This trend was reflected, in particular, in the decisions and recommendations adopted at the St. Petersburg G8 Summit in 2006.

The stated factors with due regard to the Russian external energy policy will determine Russia’s future position on the world energy markets.

Russia will undeniably remain the leading player on the world hydrocarbon market and will actively participate in the development of electricity and coal markets, while strengthening its position in world nuclear electric energy industry”.



“In this case, maintenance of Russia’s stable relations with its traditional consumers of energy resources and development of equally stable relations on new energy markets will be one of the key principles.

Alongside with export of primary energy, a high emphasis will be put on export of highly processed energy products, as well as on developing the production thereof by Russian fuel and energy companies abroad. The highly competitive world markets of oil and gas chemistry will be of particular interest for Russia in the future.

Although at present Russia is practically not represented on the world renewable energy market, the country will develop this promising sector (taking into account the structure and features of the national energy sector development). The potential of renewable energy in the country, the scientific and technical achievements in this area along with development of international cooperation will be the basis of Russia’s stage-by-stage increased contribution to the development of this market.

Within the period up to 2030, export of energy resources will remain the major development factor for the Russian economy, but its impact on the economy will decrease. Growth rates of the energy export will gradually slow down and its volume is expected to stabilize by the end of the period.

This trend is consistent with the state long-term economic policy, which focuses on diversifying the economic structure and decreasing the country’s dependence on energy export.

The estimated figures for the Russian energy export are indicated in Appendix 1 to the Strategy.

The energy markets in Europe and the countries of the Commonwealth of Independent States will remain the main sales markets for the products of the Russian fuel and energy complex for the entire implementation period of the Strategy. Measures will therefore be implemented to reduce transit risks, including further development and improvement of full-scale export infrastructure to ensure reliable supplies of Russian energy to these markets.”

At the same time, the proportion of European energy markets in the total volume of Russian energy export will steadily decline due to export diversification to Eastern energy markets (China, Japan, Republic of Korea, other countries of the Asia-Pacific region). Moreover, by the end of the Strategy third implementation phase, the proportion of Eastern energy markets in the Russian energy export of liquid hydrocarbons (oil and oil products) should grow from the current 6 to 22—25%, while natural gas export should grow from 0 to 19—20%.

The Strategy also provides for a diversification of commodities structure of energy export on account of increased export of energy products with high added value (oil products, liquefied natural gas, engine fuel, production of gas chemistry and petro chemistry, electricity).

Russia will thus not only retain its position as the largest energy supplier in the world, but will also qualitatively change its presence on the world energy market by diversifying its commodities structure and destinations of energy export, actively developing new international energy business and increasing the presence of Russian companies abroad. This will make it possible to reduce the dependency of the Russian energy sector on export of energy resources to Europe, as well as increase profitability and efficiency of the international business of Russian energy companies without substantially increasing export of primary energy”.

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