

**INTERNAL AND EXTERNAL DIMENSIONS OF RUSSIA'S  
ENERGY POLITICS, 1998- 2018**

*Thesis submitted to Jawaharlal Nehru University  
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**Under the Supervision of**

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## DECLARATION

I declare that the thesis entitled "**Internal and External Dimensions of Russia's Energy Politics, 1998-2018**" submitted by me in fulfillment of the requirements 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 other degree of this University or any other University.

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## CERTIFICATE

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

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*Dedicated to Mumma and Papa.*

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## **ABBREVIATION**

BEMIP	:-	Baltic Energy Market Interconnection Plan
BNEF	:-	Bloomberg New Energy Finance
CIS	:-	Commonwealth of Independent States
CMEA	:-	Council for Mutual Economic Assistance
CNPC	:-	China National Petroleum Company
DER	:-	Distributed Energy Resources
EBRD	:-	European Bank for Reconstruction and Development
ECT	:-	Energy Charter Treaty
ESPO	:-	Eastern Siberia Pacific Ocean
GDP	:-	Gross domestic products
GHG	:-	Greenhouse gases
IEA	:-	International Energy Agency
IRENA	:-	International Renewable Energy Agency
LNG	:-	Liquefied Natural Gas
MBD	:-	Eastern Siberia Pacific Ocean
MET	:-	Minerals Extraction Tax
NAT)	:-	North Atlantic Treaty Organization
OAPEC	:-	Organization of Arab Petroleum Exporting Countries
OECD	:-	Organization for Economic Cooperation and Development
OPEC	:-	Organization of the Petroleum Exporting Countries
PCA	:-	Permanent Court of Arbitration's judgement
PPP	:-	Purchasing Power Parity
RUB	:-	Russian Ruble
TCF	:-	Trillion Cubic Feet



TCM	:-	Thousand Cubic Metres
TNK	:-	Tyumen Oil Company
UNCLOS	:-	United Nations Convention on the Law of the Sea
USD	:-	united states dollar
WMP	:-	World Market Prices

## CHAPTER I – INTRODUCTION

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### 1.1 BACKGROUND

When it comes to oil reserves, Russia ranks high among the world's nations. Russia's energy resources are not only plentiful but also diverse, suggesting that the country has access to a wide variety of energy sources, putting it in a position of potential leadership in this area. Because of this, it has become a leading producer and distributor of oil and natural gas. Russia's energy strategy is thus front and centre. Russia has the largest proven reserves of natural gas, second largest of coal, and seventh largest of oil in the world. Russia is home to 12% of the world's proven oil reserves, 8% of the world's known uranium reserves, 32% of the world's proved natural gas reserves, and 10% of the world's found coal resources. Vladimir Putin, who has been Russia's president since 2000, has made the energy sector a top priority. Russia's economic and political clout have been bolstered by the oil price boom. Russia's foreign policy as a consequence became more assertive on a global scale.

This preemptive approach includes using 'energy resources' as a diplomatic tool. The huge energy reserves in Russia are both a boon to the country's might and a soft underbelly just begging to be scratched. The rising price of oil worldwide has significantly impacted Russia's economic might and diplomatic stance. Energy prices have been quite high since the turn of the century, although they have just begun to fall. If this decline continues, the Russian economy would weaken and Russia's foreign policy will revert to its 1980s and 1990s era of passivity. Following the fall of the Soviet Union, Russia shifted its focus from ideologically driven policies to one that sought to liberalise the country's governing structure.

The reforms begun by Mikhail Gorbachev's government have been supplemented by other measures. Under Boris Yeltsin's administration, privatisation efforts were made to hasten the transition from central planning to a market economy. As a consequence, an unequal economic system developed, with the rise of a tiny, powerful capitalist elite alongside the widespread poverty that followed. When the Asian crisis unfolded in 1997, the Russian economy was already on the point of collapse. During this time period, worldwide oil prices were relatively low, which hurt Russia's economy. The Russian government had to adopt a cautious foreign policy in order to focus on home challenges during its period of reorganisation. As a result, the Kremlin started paying more attention to energy problems. Once upon a time, the Soviet Union's

energy sector was a major contributor to the country's overall economy and budget. However, Soviet Russia's productivity was predicated on central planning and the country's technical might. Pipelines carrying oil and natural gas were constructed during this period throughout the countries that were formerly part of the Soviet Union and its Eastern European allies. Since the 1960s, Western European nations like Germany have been connecting to the rest of the world through energy transmission networks. The ability to export energy via these pipelines was a major boon for post-Soviet Russia. On top of that, other former Soviet republics that competed with Soviet Russia in this sector lacked this unique advantage.

The goal of constructing these pipelines was to make the countries of eastern Europe and the former Soviet republics dependent on Russia for their energy needs. However, since these pipes were based on antiquated technology, they were inefficient and could only transmit energy in limited amounts. As a consequence, research into novel energy sources, improvements to the efficiency of current energy production, and the construction of new energy transmission infrastructure were all necessary. The Russian government made a number of adjustments with this end in mind, hoping to lure in more foreign investment. In particular, the privatisation drive was put in place to increase output. Under this approach, some of the businesses handed over from the Soviet Union were privatised, while the others were allocated to domestic businesses. Energy production and distribution have been recognised once again as the key to revitalising Russia's economy..

## **1.2 INTRODUCTION**

In terms of hydrocarbon production and exports to international markets, Russia is a major player. Conversely, the bulk of the country's resources are found in the Arctic and the Northern regions. Several nations and international organisations have an interest in oil and gas because ensuring a steady supply of hydrocarbon raw materials is crucial to economic growth. Many Russian oil firms increased production to meet rising export demand.

Russia has been working on creating a whole new form of energy state, one that will have more of an international impact than OPEC. Russia's prominence in many energy sectors, including oil, gas, coal, and nuclear power, is a major factor. For a long time, this country has dominated international hydrocarbon exports (oil and gas combined). It's important to note that this includes crude oil and natural gas in addition to the refined petroleum products (gasoline, diesel, jet fuel, etc.) that are exported to Europe and Asia. Combining the reduction in oil prices with sanctions

placed on the oil and gas sector as a consequence of aggression in Ukraine has had a devastating effect on the Russian economy. As a consequence, a lot of planned oil and gas development has been put on hold. Russia has been able to offset the reductions in older fields with the use of increased recovery technologies, while new production from the East Siberian Basin and Sakhalin Island have contributed to the gradual but steady rise in output.

Russia's Arctic has vast untapped reserves, while the Caspian Sea, North Caucasus, and regions of East Siberia and Sakhalin all provide promising prospects for the country's energy industry. The huge untapped potential of the West Siberian Basin's shale oil and gas reserves is ignored. The country's hydrocarbon reserves much outweigh those of the United States. Due to the critical significance of oil and gas to the Russian economy and government income, Russia has no alternative but to maintain high production levels despite the dramatic reduction in prices since 2014. Long-term, Russia's hydrocarbon outlook remains murky, but the country has massive reserves that may be tapped at a higher price.

Natural gas, which the nation is believed to have in large amounts, is a prime example. Since 2000, the main export commodities have been fuel oil (45% of total exports) and diesel fuel (12% of total exports). Gasoline exports have remained relatively unprofitable (representing around 5% of physical exports and roughly 6% of export revenues) due to strong and steady domestic demand at prices that are very attractive to suppliers. In addition, as EU laws on oil product quality become more stringent, Russian enterprises are compelled to increase spending on refining capacity upgrades. Russia is second only to the United States in coal reserves worldwide. Its exports have also increased steadily, albeit they are not nearly as lucrative or important as oil and gas.<sup>1</sup>

Since the year 2000, they have increased from 45 million tonnes to more over 150 million tonnes, making them the world's third largest. These shipments, which also include oil and gas, go to Europe and East Asia, with a particularly high and rising share going to China, Japan, and South Korea. Demand for imports in India, South Korea, Turkey, and other Southeast Asian

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## 1

Scott L. Montgomery (2016), **Russia: a global energy powerhouse that's much more than a petro-state**, available at <https://theconversation.com/russia-a-global-energy-powerhouse-thats-much-more-than-a-petro-state-57766>

countries has increased while China's has fallen. Russia's geographical location affords it the opportunity to ship products to important markets in the West and East by sea and rail. As a consequence, the competitiveness of Russian industry has increased as coal prices have decreased. Oil product exports and refining a bigger percentage of oil meant for export are major focuses of the country's Energy Strategy, which will be in effect through 2020. Russia's Arctic area is unlike any other on Earth and is a goldmine of natural gas and oil. The substantial natural resources of Russia are essential to the country's international status. It produces around 12% of the world's primary energy sources and is home to about a third of the world's oil and natural gas reserves. About a third of Russia's GDP, one-third of industrial output, and half of government budget revenue and hard currency profits all come from the fuel/energy business. The domestic hydrocarbon processing and consumption market in Russia is far larger than in the vast majority of hydrocarbon exporting nations. Considering these numbers, it is essential that domestic market interests be protected from competing with international demand.

The energy revolution is the fourth significant structural shift in the global energy sector.. Smil (2018)<sup>2</sup>, Between 1840 and 1900, coal's share in the energy equation increased from 5% to 50%, marking the first recorded energy transfer from biomass to coal. Natural gas largely replaced coal and oil during the third energy revolution, which began with oil's development (from 3% in 1915 to 45% in 1975). (with the growth of its share from 3 percent in 1930 to 23 percent in 2017).

These shifts were heavily influenced by the relative economic viability or accessibility of new energy sources against traditional energy sources. A fast growing percentage of the world's primary energy demand was met by renewable sources in 2017 (excluding hydro). In contrast to the previous three, the fourth energy revolution is being driven by the fight against global climate change, which has led to mandated de-carbonization objectives in the energy industry. After the Fukushima nuclear power plant accident in the early 2010s, the German word 'Energiewende' gained prominence, and the English phrase 'energy transition' is a simplified form of that term. Since it is one of the most ambitious de-carbonization efforts in the world, the Energiewende is a

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<sup>2</sup> Smil, V.: Energy and civilization: a history. MIT Press, US (2018)

prime example of climate-driven transformation on a massive scale in the energy industry..<sup>3</sup> The energy transition is currently being driven by two factors: the development of new technologies and the identification of new technical solutions capable of significantly increasing the performance of the power sector and changing its conventional task to perform, as well as the desire of all countries to maintain their economic systems' competitive edge and advance further as affiliates. De-carbonization, de-centralization, and digitalization are the pillars of the energy transition that must be managed to realise these objectives. This standard framework may be used to compare the energy transition efforts of different countries, including the Russian Federation.

Despite providing just 3% of global GDP and 2% of global population, Russia has a significant impact on the global energy system. Russia is responsible for 10% of global energy production, 5% of global energy consumption, and 16% of global energy consumption world energy commerce.<sup>4</sup> According to BP and the International Energy Agency<sup>5</sup>, in 2017, Russia came in second in oil exports, the first one in terms of gas exports, and the third in terms of coal exports. It was placed fourth in primary energy consumption, power output, and carbon dioxide emissions due to its heavy reliance on oil, gas, and coal for combustion-related processes, behind only China, the United States, and India. Considering this massive contribution, Russia's energy reform strategy is crucial not only for the country but for the whole planet.

It is becoming more doubtful that Russia's economic development can be sustained in the long run, as is the case with other resource-rich and energy-exporting countries. The expansion of energy exports was halted in 2008 due to the global financial and economic crisis. Net exports were constant during 2011-2014, when oil prices were high but the economy had recovered. Gross domestic product has remained flat at about 110 dollars per barrel due to a lack of petrodollar income, indicating serious underlying economic concerns. Since the peak of 2008–2012, when oil and gas export revenues were at their highest, they have declined as hydrocarbon prices

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<sup>3</sup>Federal Ministry of Economics and Technology, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety: Energy concept for an environmentally sound, reliable and affordable energy supply. Organization for security and co-operation in Europe. <https://www.osce.org/eea/101047> (2013). Accessed 22 Apr 2019

<sup>4</sup>Trüby, J., Schiffer, H.W.: A review of the German energy transition: taking stock, looking ahead, and drawing conclusions for the Middle East and North Africa. *Energy transitions* 2, 1–14. <https://doi.org/10.1007/s41825-018-0010-2> (2018). Accessed 22 Apr 2019

<sup>5</sup>ERI RAS: Global and Russian energy outlook up to 2040. ERI RAS, AC RF. [https://www.eriras.ru/files/forecast\\_2016.pdf](https://www.eriras.ru/files/forecast_2016.pdf) (2016). Accessed 22 Apr 2019

have fallen. Even yet, hydrocarbons were responsible for roughly a quarter of all national investments in 2017, making up 25% of GDP, 39% of federal budget income, 65% of export profits, and nearly a quarter of all national imports..<sup>6</sup> Russia's financial stability is seen as in jeopardy as a result of the global trend toward renewable energy and the shift toward a decarbonization paradigm..<sup>7</sup> However, the equilibrium of the world market is shifting, and hydrocarbons' position will undoubtedly shift in the next two decades. Oil and gas's contribution to GDP is predicted to drop from 31% in 2015 to 13%-17% by 2040 by the Energy Research Institute of the Russian Academy of Sciences (ERI RAS) (depending on the situation). Changes in the global economy and a decline in demand for Russian hydrocarbons might threaten this. In light of this, climate actions that seek to reduce GHG emissions from hydrocarbons may have a significant impact on Russia's economy.

The decline in domestic oil and gas use does not compensate for this decline in any meaningful way. In light of the structural financial slump, global financial and technology restraints, and an unfavourable investment environment, projections for Russia's GDP have been lowered in recent years to 1-2% every year..<sup>8</sup> Low energy use, stable domestic prices, and little funding for deploying new technologies all contribute to a sluggish local economy. All of these things point to a significant slowdown. Investment prospects are hampered by these issues, and are made worse by banking penalties and a weak domestic financial system with extremely high prices..

### **1.3 INSTITUTIONAL STRUCTURE OF RUSSIAN ENERGY SECTOR**

The energy market in Russia is highly regulated. With the state-level, somewhat more sophisticated growth plans (5-year plans) of the Soviet Union came a centralised structure of all energy businesses, with a uniform transport, exporting, and storage infrastructure, but also central scheduling, all overseen from the Center. Despite several market reforms in the 1990s, the institutional structure of the Russian energy industry is marked by excessive corporate

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<sup>6</sup>International Energy Agency. Coal 2018: Analysis and forecasts to 2023. OECD/IEA. <https://www.iea.org/coal2018> (2018). Accessed 22 Apr 2019

<sup>7</sup>Trading Economics: Russia GDP growth rate. <https://tradingeconomics.com/russia/gdp-growth> (2018). Accessed 22 Apr 2019

<sup>8</sup>Presidential Decree of May 13, 2017 No. 208 On the Strategy of Economic Security of the Russian Federation for the Period until 2030" (Russian. <https://www.garant.ru/products/ipo/prime/doc/71572608/> (2017). Accessed 22 Apr 2019

control and insufficient market processes. Both the government and powerful corporations are against the concept of decentralisation.

After decades of growth, Russia's electrical sector now has both state-owned and privately held corporations. About 70% of the capacity in the power production sector is held by state-owned businesses. This also holds true for all high-voltage networks (220 kV and above) and almost all transmission distribution grids. Combined heat and power plants (CHP) in Russia are highly developed alongside the country's centralised heat supply. More than half of the nation's fossil fuel installed capacity is CHPs, and almost every one of the country's roughly 50,000 cities only uses one heat source.. State-owned companies produce more than half of the oil<sup>9</sup>, and domestic oil prices are de facto controlled through artificial 'freezes agreements'.

In contrast, state-owned Gazprom dominates the natural gas market, with gas prices for both household and business consumers run by the state and presently frozen at rising prices.<sup>10</sup> Thirty years after the Soviet Union established a command economy, low energy costs are still considered as a 'public dividend' in Russia. They are met with fierce backlash from consumers whenever there is an effort to raise them. The low cost of energy prevents companies from investing in modernising older facilities with high specific fuel consumption and increasing efficiency. The contentious and complex institutional architecture of the Russian energy sector, which combines significant state control and some competitive forces, sends mixed signals to market actors. One of the biggest obstacles to a nationwide energy transition is the high trade expenses associated with it..

#### **1.4 RUSSIA'S APPROACH TO ENERGY TRANSITIONS AND ITS DRIVERS**

Russia is an exceptional scenario where only '1.5 D' is actually suitable; the international 'three-D' drives function in other nations in a variety of other ways as well. ' Russians don't give a hoot about the environment since the country has access to cheap and abundant hydrocarbons, which boosts the country's economic competitiveness and guarantees the country's energy supply. In light of this, technical policy and the capacity to avert a substantial technical deficit are the sole

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<sup>9</sup>World Bank Group: Modest growth ahead. 39 Russia economic report, May 2018. Open knowledge repository. <https://openknowledge.worldbank.org/bitstream/handle/10986/29913/127254-WP-PUBLIC-ADD-SERIES-JuneFinalRussiaEconomicReportENG.pdf?sequence=1&isAllowed=y> (2018). Accessed 22 Apr 2019

<sup>10</sup>Mitrova T., Grushevenko E., Malov A. The future of Russian oil production: life under sanctions. SKOLKOVO Energy Centre. <https://energy.skolkovo.ru/downloads/documents/SEneC/research04-en.pdf> (2018). Accessed 22 Apr 2019



critical drivers of Russia's energy transition. And because de-carbonization and, to a lesser degree, de-centralization are now unappealing to the country's leadership and important actors, digitalization has become the main focus for Russian investment in the energy industry. Given the lack of incentive to aid Russia's energy transformation, there are significant opportunities in a few sectors. Controlling it might have huge advantages for the Russian economy and boost investment. The primary foci are as follows:

- Efficiencies in energy;
- Renewables;
- Decentralization and energy resources that are dispersed;
- Digitalization;
- Hydrogen.

### **Energy efficiency**

Cold weather, long commutes, an excessively large raw material composition, poor financial management, and substantial technology backwardness all contribute to Russia's high energy-intensity GDP, which is 1.5 times the global average and twice that of the top European nations. When compared to the state-of-the-art and actual energy use in other countries, almost all manufacturing technologies have a long way to go before they reach energy efficiency parity. Compared to industrialised and many rising countries, Russia has a larger share of its overall production expenditures devoted to fuel and energy, notwithstanding the cheap prices they now command.<sup>11</sup> According to Bashmakov,<sup>12</sup> Russia's GDP energy intensity in 2017 was only 10% lower than in 2007. Significant government budget subsidies were provided, but there was very little improvement. Thus, the original goal was cut to 9.41 percent, and federal support terminated.<sup>13</sup> According to IEA estimates, efficiency measures like OEC may save 30 percent of Russia's energy consumption and massive amounts of hydrocarbons, highlighting the importance of energy efficiency and conservation for such an energy-intensive country.

Structured energy conservation and a rise in the share of non-energy-intensive businesses and goods might dramatically slow the rate at which energy consumption is rising. Saving energy via

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<sup>11</sup>Bashmakov I. Driving industrial energy efficiency in Russia. Moscow, March 2013. <http://www.cenef.ru/file/Industry-eng.pdf> (2013). Accessed 22 Apr 2019

<sup>12</sup>International Energy Agency (IEA): World Energy Outlook 2011. IEA/OECD Publications, Paris (2011)

<sup>13</sup>Bashmakov, I.: What happens to the energy intensity of Russia's GDP? (Russian). Ecol. Bull. Russ. **7**, 8 (2018)

technological means may account for another 25-40% of the total. However, catching up to OECD countries would be very challenging, and the resulting scarcity of capital expenditures would make quick infrastructure rehabilitation and financing for resource efficiency much more challenging. Russia is stuck in a high energy intensity situation due to this, as well as the long-term durability of relatively cheap natural gas prices, and ongoing administrative issues including the lack of 'long money' and incentives for effective use of energy for small market players. Strong steps and a significant increase in energy prices are needed to reverse this trend, but the benefits might be just as substantial..

### **Renewables**

Overall, 53% of Russia's primary energy comes from natural gas, with the remaining 47% coming from coal and 8% from oil-based liquid fuels. ' Carbon-free energy is most often generated by large-scale hydropower and nuclear power (which enjoy strong state support). In 2015, renewables provided just 3.2% of Russia's main energy needs (including hydro, solar, wind, biomass, and geothermal). By the end of 2015, Russia's total installed renewable power production capacity was 53.5 GW. As of 2015<sup>14</sup>, solar and onshore wind has installed 460 MW and 111 MW, respectively. According to the planned Energy Strategy for the period up to 2035, the renewable energy share of Russia's total primary energy consumption should increase from 3.2 to 4.9 percent by 2035.

Authorized goals for solar PV, onshore wind, and geothermal capacity in Russia total 5.9 GW by the end of 2024. The Russian government adopted Decree 449 in 2013 to provide the groundwork for the expansion of renewable energy in the nation. It established a constitutional framework for the nation's renewable energy capacity system. Wind, solar photovoltaic, and, to a lesser degree, small-scale hydropower are the primary targets of the order's efforts to promote renewable energy development. The bill specifies the steps necessary to enter the national capacity markets for renewable energy. Energy producers with projects of at least 5 MW in size are eligible to participate in yearly auctions held by Russia's Trading Scheme Administrator to get contracts to provide capacity. With the help of this legislation, developers will be able to sell

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<sup>14</sup>Ministry of Economic Development of the Russian Federation: State report on the state of energy savings and energy efficiency in the Russian Federation in 2017 (Russian). Moscow (2018)

capacity independently of energy, and investors will be able to rest easy knowing that their money is being put to good use.

Manufacturers of renewable energy sources must guarantee they have the ability to meet demand on time and using locally sourced, adequate equipment.<sup>15</sup> In 2017, the capacity market programme welcomed five waste-to-energy facilities with a total capacity of 335 MW. However, in 2018, bidders were unable to meet the severe new performance guarantee standards for waste energy capacity. Russia's engagement in renewables is mostly the result of technological policy, and the government is now working to expand its production capacities. In order to ensure the long-term viability of many renewable energy projects in Russia, the country has mandated that a significant percentage of local content be used. In the sphere of wind farm building, where Russian-made equipment has been limited, these high levels have been the driving reason for numerous bids. As a consequence of the rules, several foreign corporations have formed partnerships with Russian energy providers and manufacturers. Several international partnerships have taken shape, including a wind investment fund between Finnish company Fortum and Russian state-owned technology investor Rusnano.

The abundance of oil, gas, and coal is stifling the spread of renewable energy, despite the country's enormous potential in wind and solar resources and nearly endless area accessible for expansion. Changing this energy mix to include more carbon-free energy sources is challenging because of low prices for hydrocarbons, the disadvantageous geographic location of potential renewable resources compared to the place of use, and the comparatively high cost of these resources. According to the International Renewable Energy Agency, Russia has the potential to increase its reliance on renewables from 4.9% of total primary energy consumption in 2015 to 11.3% in 2030. (IRENA). However, this may be unachievable without a fundamental shift in its energy policy goals and a comprehensive overhaul of its energy infrastructure..

## **1.5 DECENTRALIZATION AND DISTRIBUTED ENERGY RESOURCE POTENTIAL IN RUSSIA'S CENTRALIZED POWER SYSTEM**

Russia's energy infrastructure has always relied on a centralised model. The energy system in question is highly structured, with dedicated long-term planning bodies at its core. Distributed

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<sup>15</sup>International Renewable Energy Agency (IRENA): Renewable energy prospects for the Russian Federation (REmap working paper). IRENA. <https://www.irena.org/publications/2017/Apr/Renewable-Energy-Prospects-for-the-Russian-Federation-REmap-working-paper> (2017). Accessed 22 Apr 2019

energy resources (DER), such as renewable micro-grids, are still in their infancy and are only found in remote and isolated regions, whereas the centralised model has served as the backbone of energy policy for decades. Only in the Arctic, Siberia, and the Far East has a scattered generation played a significant role because of the high expense of joining the national backbone. Integration of DER into the centralised system, however, has begun, as has been the case across the world. When technical advancements eliminated the need for economies of scale in power production on a worldwide scale, decentralisation of the power industry started. In the latter part of the millennium, the market for reciprocating gas engines across the world grew rapidly.<sup>16</sup> The electric power industry, for instance, in the United States has long included dispersed generating. A shift away from the historical trend of these DER being composed entirely of dispatchable resources has occurred, as seen by the recent surge in non-dispatchable PV capacity. By 2040, decentralisation is expected to reach above 15% in eight countries, according a Bloomberg New Energy Finance (BNEF) report (as it did in Germany in 2017). Distributed generation's annual capacity increases have already overtaken those of centralised production, and in 2014, the United States had more potential for demand response and energy efficiency [37 GW] than for combined heat and power [18 GW] and solar [8 GW].

While the use of DER became more pervasive in the Russian electrical sector in the 2000s, for the last 17 years, it has been limited to distributed generation, as it has been in other countries. It is the financial interests of the greatest power users in Russia, not the global climate objective or concerns about energy independence, that are driving the growth of this system. In order to get a more affordable power supply, almost all of Russia's big industrial businesses construct their own distributed generating plants. Microgeneration using renewables in the home is still largely the domain of enthusiasts in Russia.

There are just a few documented occurrences over a wide range of contexts, and they are almost completely driven by cost-cutting measures. The development of DER of the non-generational kind is only getting started in Russia at the moment. ‘ In contrast, DER has a lot of promise in the Russian market. According to a research conducted by the Skolkovo Energy Center, this capability may assist conceal more than 50% of the required production capacity. Distributed

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<sup>16</sup>Ministry of Energy of the Russian Federation: Presentation on the results of the fuel and energy complex functioning in 2018 and its targets for 2019 (Russian). Moscow (2019)

cogeneration has the biggest potential among DERs in Russia (17 GW). The deficit may be fully gone by 2035 if a DER scenario is utilised to its full potential.

Matching the goals of new participants with the current model necessitates structural planning and regulatory adjustments to increase the use of DER technologies in the Russian energy industry. The most efficient strategy seems to be a steady, tolerable mix of central generation and DER. Concepts and market processes for merging centralised and decentralised components and their successful combined operation must be established if such a combination is to be implemented..

## **Hydrogen**

Even now, Russia has no access to foreign communities or hydrogen technological cooperation. As has already been said, this is primarily because climate change and de-carbonization continue to play a limited part in Russian energy policy, stunting the development of any and all low-carbon technologies. Russia has vast potential domestic demand segments for hydrogen, as well as some R&D activity and existing hydrogen production capacity. Russia's energy transition attitude is controversial since the nation is trying to centrally execute certain components of the trend. First, by rejecting the de-carbonization aim and innovation, which is behind the trend, the nation is effectively rejecting the pattern. The energy transformation is not reflected in existing strategy papers. However, the government will eventually need to adopt a long-term strategy for both local energy market growth and an export plan in response to the fundamental restructuring of the global energy system.

Since Vladimir Putin came to power in Russia, the nation's focus has been in large part on the oil and gas industry as a means to restore its former worldwide dominance. Historically, this strategy has been used to thwart European Union (EU) efforts to diversify its gas supply. Other policy elements, such as expanding into the MENA region and targeting emerging markets like China, have also become more important over time. Long-term, Moscow faces new competition from the United States as it positions itself to become a major supplier of Liquefied Natural Gas (LNG) to the European Union.

Russia's worldwide strength and influence have traditionally been tied closely to the energy sector of geopolitics. Russia's foreign ministry said in 2013 that the country aimed to 'strengthen its strategic collaboration with important suppliers of energy resources while actively developing

talks with consumers and transit states.’<sup>17</sup> This broad objective was translated through actions across the whole energy sector, including oil and gas coverage, transit pipeline construction, supply management to the EU, supply boosts to Asia, and price suppression. Russia's persistent use of energy politics as a foreign policy instrument is puzzling given the importance of the energy sector to global trade.. The Jamestown Foundation<sup>18</sup> stated in 2018 that Russia's policy aims to achieve both global power and local economic goals: an overriding goal is to retain or grow its energy markets in neighboring Western Europe and China, two of the world's biggest oil and gas users. Russia seems to believe that doing so would allow it to restore its status as a global powerhouse by securing economic growth, increasing tax income, and bolstering government spending. Russia's international energy strategy has three pillars: thwarting the European Union's diversification plan, expanding into the oil and gas business in the Middle East, and establishing a strong position as a primary energy supplier to China.

In January 2006, as a result of a decision by Moscow to discontinue utilising Ukraine as the principal gateway for Russian gas exports to the EU, gas supplies to the European Union were cut off through Ukraine, a significant driver of the EU's diversification plan. The aim of the blackout was to get Europe to put pressure on Ukraine to sign a peace agreement. Russia was accused of ‘energy blackmail’ by European nations because of its demands that the continent cut its reliance on oil and gas. Stress tests were conducted to model two potential energy supply interruption scenarios lasting one and six months. Therefore, in 2014, the EU created the European Energy Security Strategy to address these concerns..<sup>19</sup>

Ukraine is a key transit country for Russian gas despite the existence of a pipeline network that runs between the Baltic Sea and Belarus. Having Russian gas transit through Ukraine is also a way to exert pressure on the Kiev administration. Russia views transit countries as its consumers, particularly those that are not part of the European Union or the North Atlantic

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<sup>17</sup>Ministry of Foreign Affairs of Russia. Concept of the foreign policy of the Russian Federation,18/02/2013. [www.mid.ru/en/foreign\\_policy/official\\_documents/-/asset\\_publisher/CptICk6BZ29/content/id/122186](http://www.mid.ru/en/foreign_policy/official_documents/-/asset_publisher/CptICk6BZ29/content/id/122186).

<sup>18</sup>Mamm adov, Rauf. Russia in the Middle East: energy forever?, Jamestown Foundation, 08/03/2018. <https://jamestown.org/program/russiamiddle-east-energy-forever/>

<sup>19</sup>European Commission. Energy Security Strategy. [https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/energy\\_securitystrategy](https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/energy_securitystrategy).

Treaty Organization.,’ according to a European Parliament study<sup>20</sup> published in April 2018. These are the countries that are most susceptible to energy extortion. Russia’s traditional realpolitik includes the use of energy exports as a tool of coercion or intimidation, with consequences felt all around Europe. According to a statement published<sup>21</sup> in POLITICO Europe magazine, the respective operators of Russia and Ukraine, Gazprom and Naftogaz, are still fighting over gas supply and transportation. An extreme example of this is the conflict over the Nord Stream 2 gas pipeline, which would short-circuit Ukraine and link Russia and Germany without going through Ukraine.

Russia has been ready to take advantage of internal Western divisions over Nord Stream 2, which Germany supports. Still, the US<sup>22</sup> and Poland opposes, which fears the pipeline would ‘transform Germany into a Russian prisoner.’ In May, the US Senate<sup>23</sup> proposed legislation to punish people and organizations engaged in Nord Stream 2, while Denmark<sup>24</sup> requested that the pipeline be re-routed owing to environmental concerns. Case in point: the acrimony over the planned Nord Stream 2 gas pipeline, which would short-circuit Ukraine and provide a direct link between Russia and Germany. This project illustrates Moscow’s<sup>25</sup> goal of strengthening its influence in Balkan gas supply while reducing reliance on the Ukrainian transit route.

Uncertainty remains because the European Union is just as sceptical of the Turkish Stream as it was of the doomed South Stream gas pipeline. The European Union has said that this strategy runs counter to their third energy package, which has as one of its goals the expansion of

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<sup>20</sup>Korteweg, Rem. Energy as a tool of foreign policy of authoritarian states, in particular Russia, European Parliament Study, April 2018. [www.europarl.europa.eu/RegData/etudes/STUD/2018/603868/EXPO\\_STU\(2018\)603868\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2018/603868/EXPO_STU(2018)603868_EN.pdf).

<sup>21</sup>Vitrenko, Yuryi Naftogaz of Ukraine vs. Gazprom of Russia. [https://euenergysecurity.com/?msg\\_pos=1&utm\\_source=POLITICO.EU&utm\\_campaign=f67bb6c46bemail\\_campaign\\_2019\\_04\\_29\\_04\\_46&utm\\_medium=email&utm\\_term=0\\_10959edeb5-f67bb6c46b-190019153](https://euenergysecurity.com/?msg_pos=1&utm_source=POLITICO.EU&utm_campaign=f67bb6c46bemail_campaign_2019_04_29_04_46&utm_medium=email&utm_term=0_10959edeb5-f67bb6c46b-190019153).

<sup>22</sup>Al Bawaba News. Pence says Germany’s dependence on Russian energy ‘unacceptable,’ Eurasia Review, 06/04/2019. [www.eurasiareview.com/06042019-pence-says-germanys-dependence-on-russian-energy-unacceptable/](http://www.eurasiareview.com/06042019-pence-says-germanys-dependence-on-russian-energy-unacceptable/).

<sup>23</sup>Carstensen, James. Germany remains committed to Russian pipeline project despite US and EU warnings, countermeasures, CSN News, 05/06/2019. [www.cnsnews.com/news/article/james-carstensen/germany-remains-committed-russian-pipeline-project-despite-us-and-eu](http://www.cnsnews.com/news/article/james-carstensen/germany-remains-committed-russian-pipeline-project-despite-us-and-eu).

<sup>24</sup>Shiryaevskaya, Anna and Khr ennikova, Dina. Why the world worries about Russia’s natural gas pipeline, Bloomberg, 13/06/2019. [www.bloomberg.com/news/articles/2019-06-13/why-world-worries-about-russia-s-natural-gas-pipeline-quicktake](http://www.bloomberg.com/news/articles/2019-06-13/why-world-worries-about-russia-s-natural-gas-pipeline-quicktake).

<sup>25</sup>Pierini, Marc. Russia’s gas strategy gets help from Turkey, Carnegie Europe, 03/12/2018. <https://carnegieeurope.eu/strategieurope/77855>.

competition in the natural gas market. The project's 30 billion cubic metres of Russian gas was a major selling point, and as a result, Serbia, Bulgaria, and Hungary enthusiastically accepted it. In addition to these massive endeavours, Russia is also supporting energy enterprises and projects in the Western Balkans via money and assistance.<sup>26</sup> Collectively, Russia is working to reduce the economic viability of the Southern Gas Corridor extension and the projected Trans-Caspian pipeline projects. Basically, Moscow is trying to limit how frequently the European Union receives natural gas from countries other than Russia. The sale of gas to Europe is just one part of Russia's plan. Russia has exhibited remarkable steadiness in the Middle East and North Africa among the intricate and ever-changing checkerboard of oil politics. Moscow has taken a cooperative approach, seeing regional actors as partners in a series of agreements and investment choices, rather than as rivals..

Further afield, Rosatom<sup>27</sup> became Africa's biggest nuclear energy provider in just four years. Similarly, when France's TOTAL and Italy's ENI (Ente Nazionale Idrocarburi) made significant subsurface gas discoveries off the coast of Lebanon, Russia took notice. Russia's efforts to control Syria's oil and gas markets have continued throughout the country's eight years of civil war. The true effect of these movements will be greatly reliant on the eventual political arrangement, given most of Syria's oil and gas resources are located north and east of the Euphrates River, outside the jurisdiction of government soldiers at now. Several Russian oil and gas companies have signed pipeline deals in Iraq's Kurdish area.

However, in the future, actual supplies will need to go via either Turkish territory or Syria. During the 2018 Russian Energy Week Conference, attendees were encouraged to continue working together with Libya in oil production, which led to the revival of energy projects originally conceived during the Gaddafi era. A strategic presence in Libya, such as the ownership of a stake in the country's oil business, might ultimately have an impact on consumer preferences in Europe. Gazprom is conducting hydrocarbon exploration in the El Assel region of Algeria, and Russia is also constructing power plants in the country of Egypt.

It would seem that Russia is taking an irregular approach to reuniting with oil and gas producers and exporters in the Middle East. It's true that Saudi Arabia and Qatar outstrip Russia in oil

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<sup>26</sup>Stronski, Paul and Himes, Annie. Russia's game in the Balkans, Carnegie Endowment for International Peace, 06/02/2019. <https://carnegie.org/2019/02/06/russia-s-game-in-balkans-pub-78235>.

<sup>27</sup>Gateway House. Russia returns to Africa – Analysis, Eurasia Review, 18/06/2019. [www.eurasiareview.com/18062019-russia-returns-toafrica-analysis/](http://www.eurasiareview.com/18062019-russia-returns-toafrica-analysis/)



production and gas exports, respectively. Moscow has an interest in improving ties with a region that has 50% of the world's oil and gas reserves and is a significant opponent in supplying Europe and Asia's main markets with energy. Further afield, Russia intends to export natural gas to India and China, two valuable Asian markets. Future shipments of Russian gas from Siberia to China through the Power of Siberia<sup>28</sup> pipeline, for which agreements have been reached, and construction is ongoing, would guarantee Russia's position on the fast-growing Chinese market<sup>29</sup> and offer much-needed revenue diversification. On the other hand, China's LNG<sup>30</sup> imports will grow quickly, mirroring a worldwide trend in gas trading. In addition, Russia and OPEC have been working together to assist stabilize oil markets and control output based on market demand since 2017. At a bilateral discussion on the margins of the G20 Summit in Osaka, Vladimir Putin and Mohamed Bin Salman agreed to extend the production decrease.

There was an OPEC meeting on July 1, 2021, and an OPEC+ meeting the next day, July 2. Both Russia and Saudi Arabia are major players in the oil industry, and their agreement in Osaka came before the OPEC meeting. This shift is typical of Russian energy strategy, which seeks to take advantage of global markets. The Trump administration has great hopes for the liquefied natural gas (LNG) industry, which is seeing tremendous expansion and is a key factor in the worldwide gas trade.

Some experts claim that gas pipelines will be obsolete if LNG exports take off. Actually, talks have been set up between the EU and the US to prepare for higher LNG imports from the US into Europe..<sup>31</sup>The United States is growing its LNG export ports while also boosting its liquefaction capacity. In turn, the EU is developing its LNG infrastructure<sup>32</sup> in collaboration with the US to diversify its gas imports. As a result, LNG terminals are being built near key European

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<sup>28</sup>Gazprom. Power of Siberia. [www.gazprom.com/projects/power-of-siberia/](http://www.gazprom.com/projects/power-of-siberia/)

<sup>29</sup>Razlomalin, Ilya; Sushin, Ilya and Waterlander, Otto. The road to China: an opportunity for Russian gas to play out, McKinsey & Company, November 2018. [www.mckinsey.com/industries/oil-and-gas/our-insights/the-road-to-china-an-opportunity-for-russian-gas-to-play-out?reload](http://www.mckinsey.com/industries/oil-and-gas/our-insights/the-road-to-china-an-opportunity-for-russian-gas-to-play-out?reload).

<sup>30</sup>Reuters. China's LNG imports could reach 110 bln cubic meters by 2025: CNPC, 03/04/2019. [www.reuters.com/article/us-shanghai-lng-conference-cnpc/chinas-lng-imports-could-reach-110-bln-cubic-meters-by-2025-cnpc-idUSKCN1RF0UG](http://www.reuters.com/article/us-shanghai-lng-conference-cnpc/chinas-lng-imports-could-reach-110-bln-cubic-meters-by-2025-cnpc-idUSKCN1RF0UG).

<sup>31</sup>European Commission. EU-U.S. Joint Statement: Liquefied Natural Gas (LNG) imports from the U.S. continue to rise up by 181%, 08/03/2019. [http://europa.eu/rapid/press-release\\_IP-19-1531\\_en.htm](http://europa.eu/rapid/press-release_IP-19-1531_en.htm).

<sup>32</sup>[https://ec.europa.eu/energy/sites/ener/files/eu-us\\_lng\\_trade\\_folder.pdf](https://ec.europa.eu/energy/sites/ener/files/eu-us_lng_trade_folder.pdf).

markets. Rosneft's CEO has lately expressed his displeasure with these events<sup>33</sup>: Many analysts are quick to point fingers at Russia, claiming that the country is using energy as a political tool, but the reality is that the United States is also a major user of energy as a political weapon. The global energy market ecosystem suffers when sanctions are enacted or even threatened.<sup>34</sup> Another significant issue is Russia's economy, which is heavily reliant on oil: in 2018, oil and gas exports accounted for 59 percent of overall exports by value, according to the World Bank. The European Parliament<sup>35</sup> stated in 2018 that the energy sector's lack of innovation had grown increasingly apparent: in 2016, Gazprom and Rosneft, for example, spent 0.095 percent and 0.02 percent of their sales on R&D, accordingly. Consequently, Russia is dependent on Western partners for technology transfers, which is unhelpful given that prospective projects have been put on hold due to EU and US sanctions. Another risk arises from the overemphasis on the energy sector over economic growth, as it leads to 'a one-dimensional economy focused on what comes out of the earth rather than what comes out of people's brains,' as William Burns<sup>36</sup> put it recently. It is obvious that the Kremlin would face new challenges if Russia attempted to diversify its actual economy away from its current heavy reliance on the energy sector, given that the state institutions responsible for the energy sector are much more powerful than those responsible for the economy as a whole. According to a research by the Carnegie Moscow Center, 'economic diversification in oil exporting countries is a serious challenge.'<sup>37</sup> The success of an expansion strategy is heavily dependent on the actualization of appropriate financial strategies. However, most governments are conservative, which means that when oil

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<sup>33</sup>Reuters. Russia's Sechin accuses U.S. of using energy as a political weapon, The Moscow Times, 06/06/2019. [www.themoscowtimes.com/2019/06/06/russias-sechin-accuses-us-of-using-energy-as-a-political-weapon-a65913](http://www.themoscowtimes.com/2019/06/06/russias-sechin-accuses-us-of-using-energy-as-a-political-weapon-a65913).

<sup>34</sup>Russell, Martin. Seven economic challenges for Russia. Breaking out of stagnation?, In-Depth Analysis European Parliamentary Research Service, July 2018 [www.europarl.europa.eu/RegData/etudes/IDAN/2018/625138/EPRS\\_IDA\(2018\)625138\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2018/625138/EPRS_IDA(2018)625138_EN.pdf)

<sup>35</sup>Fallows, James. Bill Burns: 'Chaos serves Putin's interest,' The Atlantic, 09/03/2019. [www.theatlantic.com/ideas/archive/2019/03/jamesfallows-bill-burns-international-relations/584383/?utm\\_campaign=the-atlantic&utm\\_term=2019-03-09T11%3A00%3A04&utm\\_content=edit-promo&utm\\_source=twitter&utm\\_medium=social](http://www.theatlantic.com/ideas/archive/2019/03/jamesfallows-bill-burns-international-relations/584383/?utm_campaign=the-atlantic&utm_term=2019-03-09T11%3A00%3A04&utm_content=edit-promo&utm_source=twitter&utm_medium=social).

<sup>36</sup>Movchan, Andrey; Zotin, Alexander and Grigoryev, Vladimir. Managing the resource curse: strategies of oil-dependent economies in the modern era, Carnegie Moscow Center, 30/03/2017.

<sup>37</sup> Falls, James. Bill Burns: 'Chaos serves Putin's interest,' The Atlantic, 09/03/2019. [www.theatlantic.com/ideas/archive/2019/03/jamesfallows-bill-burns-international-relations/584383/?utm\\_campaign=the-atlantic&utm\\_term=2019-03-09T11%3A00%3A04&utm\\_content=edit-promo&utm\\_source=twitter&utm\\_medium=social](http://www.theatlantic.com/ideas/archive/2019/03/jamesfallows-bill-burns-international-relations/584383/?utm_campaign=the-atlantic&utm_term=2019-03-09T11%3A00%3A04&utm_content=edit-promo&utm_source=twitter&utm_medium=social)

prices drop, the country's economic structure may be maintained without causing civil upheaval as long as the government is approachable. As Hadfield puts it, 'states now seek energy security in the same manner that they want military or economic security.' This highlights the growing importance of energy resources to national and international security strategy.<sup>38</sup> Wenger contends that 'producers and consumers can no longer segregate their energy policies from their foreign and security policies' because of the intertwined nature of energy and foreign policy.<sup>39</sup> It is the purpose of energy security to secure enough, dependable energy supply at reasonable prices in methods that do not threaten important national values and goals, as outlined by Yergin in his notion of energy security for countries and consumers..<sup>40</sup> Because of its potential to shape consumers' attitudes and priorities, energy resources have been dubbed 'energy weapons' by their suppliers, who use them to exert pressure on countries that exploit their supplies in pursuit of political ends..<sup>41</sup> Energy resources have been used for foreign policy purposes since since the Organization of Arab Petroleum Exporting Countries (OAPEC) placed an oil embargo on countries-consumers that supported Israel in the Arab-Israeli war in 1973. According to Goldman, in 1984, then-President Ronald Reagan of the United States vetoed construction of a natural gas pipeline connecting the Soviet Union and Germany on the grounds that the Soviet Union could use its energy resources against Western European nations to achieve its foreign policy objectives.<sup>42</sup> Russia's post-Soviet attempts to influence the domestic and foreign policies of countries-consumers by means of energy resources were an effort to achieve Russian foreign policy aims.

Former US VP Richard Cheney (2006) claims that these issues have 'become weapons of coercion or blackmail' due to attempts to manipulate supply or gain control over transportation. Science reviews have mainly remained descriptive case studies, avoiding any in-depth examination, despite the growing importance of energy resources in foreign policy. However,

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<sup>38</sup>Amelia Hadfield, *Energy and Foreign Policy: EU – Russia Energy Dynamics*, in *Foreign Policy: Theories Actors, Cases*, eds. Steve Smith, Amelia Hadfield, and Tim Dune (Oxford: Oxford University Press, 2008), 323.

<sup>39</sup>Andreas Wenger, *Russia's energy power: Implications for Europe and for transatlantic cooperation*, in *Russian Energy Power and Foreign Relations*, eds. Jeronim Perovic, Robert W. Ortung, and Andreas Wenger (Routledge, 2009), 226.

<sup>40</sup>Daniel Yergin, *Energy security in the 1990s*, *Foreign Affairs*, 67 (1) (1988): 111.

<sup>41</sup>Karen S. Stegen, *Deconstructing the energy weapon: Russia's threat to Europe as case study*, *Energy Policy* 39 (2011): 6505-13, DOI: 10.1016/j.enpol.2011.07.051

<sup>42</sup>Marshall I. Goldman, *Petrostate: Putin, Power, and the New Russia* (Oxford University Press, 2010), 48.

experts agree that there is a dearth of systematic research and thorough studies on energy resources in international relations.<sup>43</sup> Shaffer is a researcher who investigated the role of energy resources in Russian and post-Soviet foreign policy by looking at the stability of natural gas supplies and the relationship between the two..<sup>44</sup> Robert R. Larsson tried to classify Russia's energy resources in terms of their impact on nations and consumers.<sup>45</sup> His categorization, however, is inadequate and lacks precision. In-depth analyses of post-Soviet energy relations and ties to foreign policy were offered by researchers such as Pirani, Stern, Yafimava, and others. In contrast, the emphasis of these books is on descriptive analysis..<sup>46</sup> Perovic, Orttung, and Wenger compiled a collection of papers on energy policy in Russia (2009). The studies contained some fascinating data and analysis, but they all suffered from the same flaw: they were too detailed..<sup>47</sup> According to Balmaceda, Russia's energy strategy toward Ukraine, Belarus, and Lithuania during the 1990s is thoroughly analysed. But she uses a resource-rents approach to support her arguments that the three nations' internal factors influence their energy strategies and global political linkages..<sup>48</sup> Depending on the context, energy resources may serve as either an aim or a tool of foreign politics. Foreign and national security policy plans, remarks, and actions of government officials may provide light on these varying goals. Energy resources are the focus of free trade and the objects of power in international relations due to their strategic importance, which has ramifications for whole civilizations..<sup>49</sup> National power, which includes energy resources, is a component of international power that may be used to exert influence on other countries and the international system as a whole..<sup>50</sup> Geographical and technological limitations, financial resources, and governmental policy views all contribute to a country's relative strength in the energy sector.

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<sup>43</sup>Michael A. Levi, *Energy Security: An Agenda for Research* (Council on Foreign Relations, 2010), 5.

<sup>44</sup>Brenda Shaffer, *Natural gas supply stability and foreign policy*, *Energy Policy* 56 (2013): 114-25, DOI: 10.1016/j.enpol.2012.11.035

<sup>45</sup>Robert L. Larsson, *Russia's Energy Policy: Security Dimensions and Russia's Reliability as an Energy Supplier* (FOI, 2006), 177.

<sup>46</sup>Simon Pirani, ed., *Russian and CIS Gas Markets and Their Impact on Europe* (Oxford University Press, 2009).

<sup>47</sup>Katja Yafimava, *The Transit Dimension of EU Energy Security. Russian Gas Transit Across Ukraine, Belarus, and Moldova* (Oxford University Press, 2011).

<sup>48</sup>Jeronim Perovic, Robert W. Orttung, and Andreas Wenger, eds., *Russian Energy Power and Foreign Relations*

<sup>49</sup>Margarita M. Balmaceda, *Politics of Energy Dependency: Ukraine, Belarus and Lithuania between Domestic Oligarchs and Russian Pressure* (University of Toronto Press, 2013)

<sup>50</sup>Bobo Lo, *Vladimir Putin and the Evolution of Russian Foreign Policy* (Blackwell Publishing, 2003), 67.

- The state must have energy resources on its borders;
- The state has to be capable of extracting them in a cost-effective manner utilizing existing technology;
- A state's accountable policymakers must have the legislative will to utilize and export resources.<sup>51</sup>

Because of this inevitability, nations are classified as either consumers or providers. Countries may go from being providers to becoming importers and vice versa if their geographical, technical, and financial environments shift.<sup>52</sup> Such dualism assumes that energy resources are the primary focus of foreign policy and that countries must use commerce to project their economic might in order to acquire them. In addition to the flow of energy, there is the potential for the exchange of political, financial, aggressive, and technical cooperation. On the other hand, a country may resort to coercion, extortion, or even military action in an attempt to get resources, all of which are methods of power that are often seen as unethical by the providers. As military tools are replaced by other instruments, energy resources take on a greater role in foreign policy. ‘Many governments, particularly large ones, find it more costly to attain their goals by deploying military force than was true in prior centuries,’ says Nye.<sup>53</sup>

Maintaining a strict dichotomy between ‘nation's customers’ and ‘nation's suppliers’ oversimplifies the dynamic between these two players in the global energy system and obscures the true complexity of the relationships between suppliers and customers, which includes other facets of the international system's interaction. The realist paradigm holds that states always seek to increase their influence over other international actors..<sup>54</sup> To strengthen their grip on international system concerns and the system itself, it is assumed that supplying states will want to extend their oversight over energy resources and infrastructure outside their borders. Energy resources and infrastructure are becoming foreign policy priorities for nations that are energy providers. In the energy sector, nations that provide energy have a far higher advantage over

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<sup>51</sup>Hans J. Morgenthau, *Politics among Nations. The Struggle for Power and Peace* (New York: Alfred A. Knopf, 1948)

<sup>52</sup>Jeffrey W. Taliaferro, and Steven E. Lobell, Conclusion: The State of Neoclassical Realism, in *Neoclassical Realism, the State and, Foreign Policy*, eds. Norrin M. Ripsman, Jeffrey W. Taliaferro, and Steven E. Lobell (Cambridge University Press, 2009), 280-281.

<sup>53</sup>China from net oil exporter in the 1990's became net oil importer, the same happened to Indonesia in 2000's, while US has an opportunity to become net oil exporter.

<sup>54</sup>Robert O. Keohane, Joseph S. Nye, *Power and interdependence: world politics in transition* (Boston: Little, Brown, 1977), 8-10

those that consume energy, enabling the former to spread their influence much more readily than the latter. The geo-energetic system may be shaped and transformed in new ways when control over resource extraction, production, and transportation infrastructure is expanded. As political power has centralised, it has been less complicated to use energy instruments in international politics. Thus, there are two types of energy-related power in the international system. The first is the concept of power as money, which describes the exchange of one kind of power for another. The second is the use of power as a framework and structure that leads other actors in the international system to act within the parameters imposed by the dominant state in the global or regional energy system.

Both nation-consumers and nation-suppliers have made it a part of their foreign policy to manage their energy resources and the infrastructure around them. Therefore, it is crucial to reveal how energy resources or infrastructure became instruments of statecraft. There are two types of power in international relations and foreign policy, according to the theory of neoclassical realism: national power and state power..<sup>55</sup> It's important to separate national and state power right off the bat since the latter is a product of the former but not directly proportional to the former. How powerful a country is on a national or comparative scale in the energy industry determines its position in global or regional geo-energetic systems. National power in the energy sector is comprised of energy resources utilised by national or private enterprises inside a country's boundaries, as well as infrastructure controlled by national or private corporations. This does not, however, mean that any country's energy resources can be turned into global capacity.

There is little doubt that a country's national strength is a major element in determining its influence and goals within the international system..<sup>56</sup> A state is not bound to implement international norms whose tendencies are established by national power dynamics, since foreign policy is wholly controlled by the opinions of the responsible decision-makers of the state..<sup>57</sup> Only their actions reveal the intricacies of their opinions, and these views are only publicly disclosed in the form of remarks and methods. State power represents the limited influence a state has on national power and the energy industry. 'State power,' as described by Zakaria, is

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<sup>55</sup>Thomas J. Christensen, *Useful Adversaries: Grand Strategy, Domestic Mobilization, and Sino-American Conflict, 1947-1958* (Princeton University Press, 1996), 22-5.

<sup>56</sup>Fareed Zakaria, *From Wealth to Power: The Unusual Origins of America's World Role* (Princeton University Press, 1998), 35-41.

<sup>57</sup>Hill, *The Changing Politics of Foreign Policy*, 136

‘the amount of national authority that the government may extract for its objectives,’ and ‘indicates the ease with which central decision-makers may achieve their aims.’<sup>58</sup> The state has restricted access to national energy resources. So, it can't use it to its full potential to fulfil its foreign policy goals. The Russian government controls one of the largest national and relative energy sectors in the world, but it isn't enough to accomplish its foreign policy goals alone. Statistical Review of World Energy 2013 by BP reports that in 2012, Russia accounted for 12.8% of worldwide oil production, 17.6% of global natural gas production, and 18.2% of the world's known coal reserves.

Russia accounted for 5.2% of the world's oil production in 2012, 17.6% of the world's natural gas production, and 18.2% of the world's coal production. To the extent that the Russian government has access to national power, it is the maximum fraction of national power that can be translated into international capabilities. A state may get access to national power in the energy sector via a variety of mechanisms, including legal and regulatory functions, ownership of national energy companies, and partnership with private energy enterprises. Regulation of the legal system and the management of the execution of legal regulation are both shaped by the aims of domestic and international policies enacted by responsible decision makers. As part of their responsibility, national energy firms must ensure that both domestic and foreign policy objectives are satisfied. The government is able to influence the activities of private companies via the force of law and by the imposition of regulations. A state may increase its authority and access to national power if it lacks the resources to achieve its domestic and foreign policy objectives. There are two methods to expand government power: directly and indirectly.

Direct mobilisation occurs when the state takes direct control of an industry ‘through planning, nationalisation, and other means.’<sup>59</sup> When resources and energy infrastructure from private energy businesses are transferred to national energy corporations or when private industry regulation is increased, this is an example of direct mobilisation. Russia's governmental power in the energy sector has been increased by legislative and regulatory duties and increased state control and law enforcement agencies in an effort to improve national energy enterprises. From 2000 to 2006, the Russian government actively sought to preserve and then expand its monopoly

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<sup>58</sup>Gideon Rose, Neoclassical Realism and Theories of Foreign Policy, *World Politics*, Vol. 51, No. 1, Oct. (1998): 144-72.

<sup>59</sup>Statistical Review of World Energy, July 2013, BP, [http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical\\_review\\_of\\_world\\_energy\\_2013.pdf](http://www.bp.com/content/dam/bp/pdf/statistical-review/statistical_review_of_world_energy_2013.pdf).

in the shipping and transportation of goods. Russia's rejection of the Energy Charter Treaty and the Transit Protocol in 2001 prevented competition to Transneft's (паншет) transit monopoly and may have led to the development of other pipelines..<sup>60</sup> Gazprom's (апом) monopoly on gas exports was established by law in 2006, thus ending competition from other companies that could previously guarantee gas transportation and export through pipelines..<sup>61</sup> Finally, in 2008, investments were made by multinational corporations. Direct mobilisation occurs when a state takes direct control of an industry via measures like planning and nationalisation. When resources and energy infrastructure from private energy businesses are transferred to national energy corporations or private enterprises are subject to stricter control, direct mobilisation occurs.

Russia's governmental power in the energy sector has been increased by legislative and regulatory duties and increased state control and law enforcement agencies in an effort to improve national energy enterprises. From 2000 to 2006, the Russian government actively sought to preserve and then expand its monopoly in the shipping and transportation of goods. Russia did not sign the Energy Charter Treaty or the Transit Protocol in 2001, which may have led to the development of competing pipelines and the eventual demise of Transneft's (паншет) monopoly in the transit industry. In 2006, the government authorised Gazprom's (апом) monopoly on gas exports, thereby ending the capacity of competing companies to provide the safe and secure pipeline transportation of gas for export.

2008 was the year when foreign companies began investing again. A nation's capacity to use national power in foreign policy is enhanced by indirect mobilisation. The private sector is indirectly mobilised when the relationships between public authorities and private energy enterprises are strengthened, creating an environment in which private energy corporations act in accordance with state interests and politics, so becoming 'state ambassadors.'<sup>62</sup> However,

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<sup>60</sup>Michael Mastanduno, David A. Lake, and John G. Ikenberry, Toward a Realist Theory of State Action, *International Studies Quarterly*, Vol. 33, No. 4, Dec (1989): 457-7

<sup>61</sup>Экспорт газа и внутренние госпоставки должны остаться за Газпромом [Natural gas export and domestic natural gas supply will remain after Gazprom], Newsru.com, 6 April 2001, <http://newsru.com/finance/06apr2001/kutovoy.html>.

<sup>62</sup>Федеральный закон Российской Федерации от 18 июля 2006 г. N 117-ФЗ Об экспорте газа [Federal law of Russian Federation since 18 July 2006, N 117-FZ On gas export], Rg.ru, 20 July 2006, <http://www.rg.ru/2006/07/20/gaz-export-dok.html>.



employing energy resources as foreign policy instruments requires intricate collaboration between the public and commercial sectors, making indirect mobilisation less successful than direct mobilisation..<sup>63</sup> The government's role is to facilitate the expansion or maintenance of private energy corporations by providing them with incentives that give them an edge over rivals who do not want to further the state's interests. Convincing private companies to act in the interests of the state is thus more difficult, time-consuming, and costly than it formerly was.

mobilisation mediated by another To demonstrate the state's energy industry, we may look to Lukoil, which adopted a strategy of adaptation that included blurring the lines between corporate and national interests so that the government wouldn't take any action against it or restrict its operations..<sup>64</sup> The necessity for indirect mobilisation in Russia diminished as the authority of the state grew with the expansion of national corporations. Foreign policy instruments refer to the coordinated use of a state's resources for international purposes.

Using the reasoning of neoclassical realism, the energy sector is transformed from a national to a state monopoly..<sup>65</sup> Foreign policy instruments are actions and decisions made by a nation in the energy sector with the goal of influencing another country's foreign policy. According to Dahl's standard definition of power relations, 'A has power over B to the degree that it can induce B to do something that B would not otherwise do,' suggesting that energy resources may be used to coerce a country-consumer to do something..<sup>66</sup>

Energy resources may be used to get consumers to adopt policies preferred by producers. Compelling instruments (which aim to force someone not to do something) and sway instruments (which aim to influence someone's behaviour) are the two types of energy devices employed in foreign policy (trying to persuade someone not to do something). A study found that compel instruments are employed as sticks, and that there are likely five distinct sorts of compel instruments based on the nature of the effect they have on a country's consumer market. Larrison's work on Russian energy strategy toward Belarus and Ukraine from 2000–2015, and sometimes other Post-Soviet states, is supplemented by the use of Hill's universal pyramid model

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<sup>63</sup>Isabel Grost, Lukoil: Russia's Largest Oil Company (Rice University, 2007), [http://bakerinstitute.org/media/files/page/993b42c4/noc\\_lukoil\\_gorst.pdf](http://bakerinstitute.org/media/files/page/993b42c4/noc_lukoil_gorst.pdf).

<sup>64</sup>Hill, *The Changing Politics of Foreign Policy*, 148-49.

<sup>65</sup>Zakaria, *From Wealth to Power: The Unusual Origins of America's World Role*, 9.

<sup>66</sup>Jeffrey W. Taliaferro, Neoclassical realism and resources extraction, in *Neoclassical Realism, the State and, Foreign Policy*, eds. Norrin M. Ripsman, Jeffrey W. Taliaferro, and Steven E. Lobell (Cambridge University Press, 2009), 210-14.

of foreign policy tools.<sup>67</sup> As a result, we can standardise the many forms of energy sources and the procedures by which they are acquired and used. Different types of instruments are also covered, starting with those used to coerce a performer's participation. The first kind of instrument is the threat to reduce energy and resource availability. Supply cuts or reductions were often threatened before they actually occurred, typically in the case of natural gas or oil. Natural gas or oil supply interruptions were a real possibility for Belarus in 2002, 2003, 2010, and 2011. Natural gas cuts were predicted for Ukraine in 2005, 2008–2010, 2013, and 2014; oil cuts were warned in 2008. Restrictions on natural gas deliveries to Belarus began in 2002, were lifted in 2004, and were tightened once again in June 2010. Moldova lost its gas supplies for 16 days in 2006.

For two months in 1990, Lithuania was left without access to its oil supplies. In 2006, 2009, 2014, and 2015, Ukraine had a shutdown in its natural gas supply, and in 1999–2000, the country's oil supply was cut off.<sup>68</sup> The second kind of tool is the potential for, and subsequent increase in, the cost of energy resources. It is easier to threaten price rises or increases when a national client pays less than regional customers. Armenia has been subsidising its gas prices, while Belarus has been receiving cheaper prices. The subsidy payments to Ukraine lasted until 2009, whereas those to Georgia lasted only until 2006. When such a tool is subsidised and its price is lowered, it becomes much simpler to advocate for its usage.

Price increases are limited by the provisions of agreements, such as the method for calculating the price and any applicable reductions..<sup>69</sup> Before major energy problems with Belarus and Ukraine, Russia promised to increase natural gas prices. Belarus was threatened in 2003, 2007, 2009, and 2010. Ukraine was threatened with a spike in gas prices between 2005 and 2008. Between 2006 and 2008, the cost of natural gas surged in Armenia, Georgia, and Ukraine. Gas prices were first increased in Belarus in 2007 and then in Ukraine in 2009. Gazprom increased gas prices for Ukraine after the takeover of Crimea in March 2014, breaking an agreement on gas price reductions made in 2010 in exchange for the leasing of a Black Sea naval station in Crimea. The third kind of tool consists of threats to reduce energy resource transit and actual cutbacks in transit. If Ukraine did not sell 50% of the shares in the company that owned the key pipeline

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<sup>67</sup>Robert Dahl, *The Concept of Power*, *Behavioral Science*, 2:3, July (1957): 201–15

<sup>68</sup>Robert Dahl, *The Concept of Power*, *Behavioral Science*, 2:3, July (1957): 201–15

<sup>69</sup>Hill, *The Changing Politics of Foreign Policy*, 134–37.

system, Russia threatened to prohibit gas transit across Ukraine in 2002. As the South Stream project was being created in 2010, Russia made similar threats. The flow of natural gas via Moldova and Ukraine was cut off in 2006 and 2009, respectively, while the flow of oil and the transit of oil through Ukraine has been limited since 2012. The quantity of gas and oil shipped through Ukraine has decreased consistently since 2005. The fourth kind of tool is the threat or actual implementation of an increase in export duties. In 2009, there were rumblings that Belarus would increase the levy it charges for exporting oil.

To coerce Ukraine into adopting certain foreign policy decisions, such as joining the Customs Union, Russia increased oil export taxes to the nation in 1995.<sup>70</sup> Russia raised export tariffs on oil to Belarus in 2007.<sup>71</sup> The fifth and sixth categories of strategies include requests for payment and threats to cover debts. When pursuing a debtor for repayment, it is common practice to first resort to threats. If a nation-consumer is owing money and to what extent a nation-supplier is ready to assume such duties determines whether a threat or demand for debt settlement is made. Russia's acceptance of debt at varying degrees is shown by the country's dealings with Belarus, Moldova, and Ukraine. Russia's willingness to overlook Belarusian defaults has varied over time in response to shifts in its energy and international relations priorities.

Russia was more lenient with Belarusian responsibilities for energy resources before 2006. However, Russia was sometimes compelled to fulfil these duties (in 2002). In 2006, President Putin signed an order allowing for changes in commercial, economic, and fiscal policy toward Belarus, including a decrease in aid for Belarus and an expansion of a market approach in economic connections.<sup>72</sup> Although Moscow did not object to Transnistria's gas payments, it did object to Moldova's. In June of 2005, Gazprom demanded payment on an outstanding obligation related to the removal of gas from Ukrainian storage facilities in the autumn of 2004. It's important to note that this issue was not brought up until after the Orange Revolution, after it had festered for well over a year without being addressed. Gazprom demanded repayment of debts after the October 2007 Ukrainian parliamentary elections, when it became evident that Yulia

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<sup>70</sup>Until the mid-year of 2014 the price of gas supplied for Lithuania was by 20 % higher on average than for other countries of the region which enjoyed discounts, but this was the result of price setting in the agreements.

<sup>71</sup>Margarita M. Balmacaeda, Gas, Oil and the Linkages between Domestic and Foreign Policies: The Case of Ukraine, *Europe-Asia Studies*, Vol. 50, No. 2 (1998): 257-86.

<sup>72</sup>Agreement between the Government of the Russian Federation and the Government of the Republic of Belarus on measures to regulate trade and economic cooperation in the field of oil petroleum products, Ministry of Foreign Affairs of Russian Federation, [http://mid.ru/BDOMP/spd\\_md.nsf/0/08A786A687F6EA5544257C3C003D353A](http://mid.ru/BDOMP/spd_md.nsf/0/08A786A687F6EA5544257C3C003D353A)

Tymoshenko would form the government. Gazprom has been demanding payment from Ukraine for debts accrued owing to increased gas supply from Central Asia since January 2008, even though Ukraine was blissfully ignorant of the shift in natural gas composition at the time. The gas war that broke out in 2009 had its roots in the demands made of Ukraine in 2008 and the commitments that country had to other countries. It was reasonable to cut off gas deliveries because of concerns that Ukraine would delay payment of its commitments for the whole year 2009. In 2010, Belarus's gas supply was cut off temporarily because the country was unable to pay its gas bills. Ukraine's signature of the DCFTA (Deep and Comprehensive Free Trade Area) and the Association Agreements with the EU was delayed in November 2013 because Gazprom and the Russian government requested payment for outstanding natural gas bills owed by Ukraine. But when Ukraine said no, Russia changed its mind. After Ukraine missed an advance payment in July 2015, Gazprom shut off the country's natural gas supply..<sup>73</sup> The last three acknowledged instruments are based on the nature of the interactions between a supplier and a client.

Reduced or halted transportation may only be threatened against a consumer nation that is also a transit nation. The exporters' and consumers' respective energy trade situations determine the feasibility of higher export tariff threats and their implementation. Having exemptions from paying export tariffs for specified countries and then deciding to revoke those exemptions for political rather than financial reasons might be used as a coercive weapon. However, if other countries in the area are granted tariff exemptions, this might be used as a foreign policy weapon to raise energy resource costs for one specific country. Since rational decision-makers are permitted to define the circumstances that control the use of energy instruments in Russia's ties with post-Soviet nations, their use is selective. For example, in 2006, gas sales were suspended to Ukraine because of a lack of agreement, but in 2007, gas was sent to Belarus even though no agreement was in place.

Judgment calls' random understanding of when, what, and how to use them impedes the formation and building of a theory that specifies which the nation-supplier utilises energy instruments and when they are used. Using less severe devices at first may have fewer negative

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<sup>73</sup>Кремль готовит аншлюс Лукашенко: высокие цены на газ должны заставить Белоруссию войти в РФ, [Kremlin is preparing anschluss for Lukashenka: high prices for gas should force Belarus to join Russian Federation], Newsru.com, 12 May 2006, <http://newsru.com/russia/12may2006/belgas.html>.

effects on the country that uses them, thus this seems like a logical strategy. However, competent decision-makers do not always work their way up from the tools with the least severe implications. The only factors that should be considered when selecting an instrument are those evaluated and decided upon by knowledgeable decision-makers. The following five categories of sway instruments are identified based on their effect on a nation-consumer in prior study.

The first kind of tool makes the bold assertion that it can reduce the price of and demand for a certain resource. The price of natural gas was reduced in 2010 after Ukraine reached an agreement to keep the Black Sea Fleet stationed in Sevastopol for another five years. To sustain its military engagement in Ukraine and maintain its ability to project power across a larger geographic territory, Russia lowered natural gas prices. Since Russia seized Crimea, the discount has been revoked. After selling 50% of its Beltransgaz shares in 2006, Belarus lowered gas prices that year. When Belarus finally joined the Customs Union in 2010, they were able to maintain their oil price cut. Belarus's decision to join the Eurasian Economic Union in 2012 led to a decrease in gas prices. After Ukraine declined to join the European Union's Comprehensive and Deep Free Trade Area and Association Agreements, Russia offered substantial discounts on natural gas.<sup>74</sup> Russia gave discounts to Ukraine and Belarus in exchange for their cooperation.

Plans to enhance and broaden public transit fall under the second heading. Once Gazprom bought Beltransgaz, gas transportation via Belarus improved significantly. Gazprom promised increased gas transit via Ukraine in exchange for the sale of 50% of Naftogaz's shares, which control the country's key pipelines. The third classification consists of proposals and reductions in export tariffs. Russia did not begin charging export tariffs on oil supplied to Belarus until 2007. This was despite the fact that Belarus had violated the terms of the bilateral agreement by not remitting a portion of the collected export taxes to Russia's budget. Prior to entering the Customs Union, Belarus profited from duty-free exports. The deferral or cancellation of a debt is the fourth kind. Russia did not insist that Ukraine pay its gas bills during the 2004 Ukrainian presidential election campaign. Ahead of the legislative elections in 2007, it backed Prime Minister Victor Yanukovich without suggesting that Ukraine pay off its gas debts.

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<sup>74</sup>Russia halts gas supplies to Ukraine after talks breakdown, BBC, 1 July 2015, <http://www.bbc.com/news/world-europe-33341322>

Gazprom put up with Transnistria's debts for quite some time, but it wouldn't stand for Moldova's. Finally, suggestions for boosting availability of resources are provided. In 2010, Russia proposed a deal wherein Gazprom would acquire 50% of Naftogaz in return for increased gas supplies to Ukraine. While this technique may be effective, it is restricted since nation-customers typically import the quantity of energy resources they need. Costing is an essential and widely applicable method since nations-customers buy energy resources from countries-suppliers who provide the greatest pricing.

The extent to which the aforementioned methods may be used is dependent on the hidden power of the nation-supplier over the nations-customers. ‘ This dormant power manifests as a consequence of the customer's reliance on the nation-supplier, which represents a distinct geo-energetic zone. Having complete say over production and distribution means you have tremendous untapped power. Latent power is the potential for a nation-supplier to influence foreign policy decisions made by nation-customers via the employment of energy instruments. Russia controls many land routes between Central Asia and Europe, and it is developing initiatives that will make it more difficult for alternative suppliers to sell their goods in Europe..<sup>75</sup>

The most important element for nations as customers is market concentration, which influences the effectiveness of energy tools.

Potential untapped power varies, but only as a result of changes in country-consumer demand. Conversely, their suppliers, the nations, have an impact on how they put their power to use. Suppliers' ability to deploy energy instruments is hampered by the premature employment of coercive measures, which encourages nation-customers to fight dominance and reinforce their energy barriers. Because of these influence mechanisms, we will not be encouraging governments or consumers to build obstacles. Market forces will drive the growth of the nation-customer energy sector in the absence of energy instruments in a given geo-energetic area. The rising cost of natural gas in Lithuania and other Baltic States due to their dependence on a single source, Russia, has led to frequent outages and price spikes.

To address these issues, the Baltic States prioritised local and renewable resources in starting projects to increase supply diversity and decrease reliance on foreign suppliers of natural gas.

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<sup>75</sup>Украина добилась снижения цены на российский газ в полтора раза [Ukraine has reached an agreement to decrease Russian gas price for 1.5 times], Newsru.com, 17 December 2013, <http://www.newsru.com/russia/17dec2013/vstrecha.html>.

Thus, Russia is constrained in its capacity to use energy as a foreign policy instrument against the Baltic States. Both the country using the energy instruments and the country using them would be affected by their use. These outcomes might either be intended and expected or completely unintended and surprising. Any means of coercion or influence used by a government must ensure that the recipient country achieves its foreign policy objectives, both those the country set out to achieve and those that were expected to result from those actions. Foreign policy tools, whatever their details, must affect the following in countries:<sup>76</sup> Domestic policy processes; foreign policy behaviour; economic and military capabilities.

Similar to sanctions, energy weapons designed to compel would have unintended repercussions for national consumers and motivate states to alter their domestic and foreign policies. Mastanduno argues that political and social pressure may lead to the replacement of responsible decision-makers, which can lead to changes in domestic and foreign policy..<sup>77</sup> Russia's foreign policy towards Ukraine has heavily included the use of coercive instruments. The Ukrainian government's position on transferring control of the country's natural gas transit infrastructure to Gazprom has prompted a rethinking of the country's domestic policies. In order to reach this objective, Moscow reduced gas and oil transportation, raised natural gas prices, and cut off gas supply and transit.

Russia utilised coercive techniques, such as cutting off gas supply in 2006, in an attempt to create a favourable atmosphere in Ukraine for the transfer of accountable decision-makers. Shortly before the presidential elections in early 2010, President Viktor Yuschenko's popularity plummeted due to the cutoff of gas supply and issues in energy relations in 2009. Viktor Yanukovich and his Party of Regions benefited from a fall in gas prices and a debt payback deadline was pushed out to 2004 thanks to a combination of sway methods used to elect and create competent decision-makers oriented toward Russia in executive offices. '

It's a contradiction that influence methods that appear to have a favourable effect on countries' consumers really end up hurting them in the long run. Though initially beneficial, the increased power of a country's provider might have unintended long-term consequences for customers who use sway tools. Baldwin argues that not all influence is immediately apparent [in a country-

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<sup>76</sup>George E. Shambaugh IV, *Dominance, Dependence, and Political Power: Tethering Technology in the 1980s and Today*, *International Studies Quarterly*, 40, (1996): 559-88

<sup>77</sup>Michael Mastanduno, *Economic Statecraft*, in *Foreign Policy: Theories Actors, Cases*, eds. Steve Smith, Amelia Hadfield, and Tim Dune (Oxford: Oxford University Press, 2008), 174–75.

consumer] via changes in policy, and that instruments may also be successful when they gradually weaken the resistance and permit sway..<sup>78</sup> By raising the possibility of utilising coercive tactics and the sensitivity to their use, sway instruments increase the vulnerability of countries and consumers. When sway instruments are reduced, compel instruments may be used instead, which means people in the country as a whole may start using them less often. The current scenario in Belarus is a perfect illustration of this kind of issue. Russia supports Alexander Lukashenko's regime, which is dependent on the continued availability of the country's oil resources in order to remain in power. Contrarily, cheap pricing for resources are crucial to the country's economic competitiveness. It has been 20 years since Brzezinski made the statement that 'Russian economic support was translated into political subjugation in Belarus.'

Because of its reliance on Russian energy subsidies, Belarus has lost the ability to make substantial changes to its foreign policy, which would threaten the stability of the government. Armenia is not dissimilar in that it has come to depend on Russian security guarantees and cheaper energy supply to fuel economic growth. Since entering the Customs Union and the Eurasian Economic Union, Armenia has lost its capacity to pursue independent domestic and foreign policies.

The experience of the Baltic states demonstrates that, while abandoning compel instruments initially causes economic recession (rising energy prices from 1991 to 2009), it also establishes market conditions and decreases market concentration in the geo-energetic space, paving the way for economic transformation and diversification. A nation-supplier that employs coercive instruments may risk backlash from its client nations, prompting it to abandon or weaken its use of the tools altogether. Whether or if a nation-supplier would resort to threats or force is unknown:<sup>79</sup>

1. Due to having a reduced competitive edge, a nation against whom such tools are employed will not search out alternative markets for energy resources or expand the exploitation of its own resources;
2. The instruments will not have a negative impact.

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<sup>78</sup>Michael Mastanduno, *Economic Statecraft*, in *Foreign Policy: Theories Actors, Cases*, eds. Steve Smith, Amelia Hadfield, and Tim Dune (Oxford: Oxford University Press, 2008), 176.

<sup>79</sup>David A. Baldwin, *Economic Statecraft* (Princeton University Press, 1985), 132–3.



### 3. Will not create a counter-coalition

These unfavourable results were a direct outcome of Russia's use of coercive tactics. These unintended consequences were not always triggered by the aforementioned methods, and the backlash did not always come from the countries that were subjected to the coercive tactics. Since 2005, Russia has considerably increased the price of natural gas for the Baltic States and repeatedly cut off or reduced natural gas supplies to Belarus and Ukraine. ' In response to oil supply disruptions in 1990 and 1992, Lithuania constructed the Bting oil terminal..<sup>80</sup> Tbilisi began importing natural gas from Azerbaijan in 2005 when Georgia's natural gas sources were cut off and prices were raised. A spike in natural gas costs in 2009-2010 encouraged Kiev to increase domestic coal output, according to the Ukrainian Ministry of Energy and Coal Industry. The quantity of coal mined in Ukraine increased by 56.83 percent between 2009 and 2012. With the need to diversify energy supplies and cut down on Russian natural gas imports, coal emerged as a competitive option. Russia's reputation as a trustworthy supplier was severely damaged by the 2006 and 2009 natural gas transportation interruptions across Ukraine..<sup>81</sup> To counter Russian Gazprom and other threats to the EU's energy market and infrastructure, the EU has beefed up its defences. Because of this, the recently enacted Third Energy Package restricts the operations of Russian energy companies and their ability to invest in the European Union..<sup>82</sup>

As a result of the blackouts, the European Union (EU) developed a single energy strategy by strengthening links between its members, including the Baltic Energy Market Interconnection Plan and the Energy Union project. It also pushed for EU-outsider collaboration and funding for projects of mutual interest..<sup>83</sup> Since 2009, the EU member states have increased energy cooperation with Ukraine and furthered coordination under the EU's Energy Union initiative. There is a possibility that this is the beginnings of a consumer alliance aimed at countering Russia. Because only a greater number of examples will enable the most frequent energy instruments to be recognised, scholars need to think about the need for a more exact

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<sup>80</sup>Michael Mastanduno, *Economic Statecraft*, in *Foreign Policy: Theories Actors, Cases*, eds. Steve Smith, Amelia Hadfield, and Tim Dune (Oxford: Oxford University Press, 2008), 176-78.

<sup>81</sup>Oil is imported from Russia but the terminal provides import alternatives. It became extremely important when supply via Druzhba II pipeline stopped after spill off in 2006, and has not been renewed.

<sup>82</sup>Brenda Shaffer, *Energy Politics* (University of Pennsylvania Press, 2009), 44

<sup>83</sup>Andrei V. Belyi, 'Reciprocity as a factor of the energy investment regimes in the EU–Russia energy relations, *Journal of World Energy Law & Business*, Vol. 2, No. 2, (2009), 117-28.

categorization of these tools. Finally, there is a need for more research on the definition and idea of energy instrument efficacy. Considering the current international climate, it is important to investigate why certain supplier nations, like Russia, make more use of energy instruments in their foreign policies than others, which see energy resources as trade components rather than foreign policy tools. Russia's suppliers are a good example of those from other nations to look at for comparison. New methods for analysing energy resources for use in foreign policy might emerge from investigating the aforementioned questions.

## **1.6 RELATED STUDY**

The literature study is divided into four sections, covering topics such as the Dutch illness, rent seeking in Russia, the effect of the oil and natural gas sector on the Russian economy, and related topics. The Crucial Role of Trade with Other Countries in Keeping the Economy Afloat, Russian hydrocarbon resources and their impact on Europe.

### **Dutch Disease**

According to Dorrance and Leeson (1997), an economy is made up of both traded (like the energy sector) and non-traded items (for example service sector). Those that are traded on international markets have prices set by those markets, whereas goods that are not traded have their own prices in their home markets. The oil industry's growth has increased the country's ability to bring in foreign revenue. When foreign money floods into a country, the local currency rises in value as a result. The cost of exportable items produced in the country will rise as a result of the currency's appreciation.

Increases in the prices of locally produced goods are the result of an appreciating domestic currency rate, as stated by Corden (1984). On the international market, the price of these goods is higher than it would be if they were manufactured in other nations. Because of this increase in prices, less competitive nations will be in the global market. The manufacturing sector suffers the most from the increased cost of locally produced items due to this decline in competitiveness. These items cost more than similar ones sold elsewhere. When a country's exports fall, it causes a ripple effect across the manufacturing industry. The manufacturing industry responded to the falling demand for their wares by laying off large numbers of workers. Because of these widespread firings, the job market is suffering. This decline in domestic output also contributes to a fall in GDP. Natural resource industries, especially hydrocarbon extraction, continue to provide revenue, according to Katinka (2007). As a result, wages in this field have risen, pushing

tax rates upwards. One of the main causes of inflation is the government's expenditure, which rises when taxes are high. Inflation is more prevalent in areas that are not actively traded. Overall productivity and GDP shrink over the long run. This causes a country's industrial sector to decline over time..

### **Rent Seeking in Russia**

Many authors, including Chakraborty and Dabla-Norris (2005), stress the importance of a country's preexisting institutions in shaping the political and economic outcomes of the discovery of significant amounts of natural resources. To this end, it is instructive to take a moment to catalogue some of the specific elements of Russia's institutional context that might influence the results of our investigation. To begin, the region is very 'rent-rich' due to its status as an economy in transition, which is true regardless of the country's natural resource wealth. The economic inefficiencies left over from the Soviet system or brought about by insufficient changes have resulted in 'transition rents' that may be very lucrative. Second, Russia began the era after the fall of the Soviet Union with a big state bureaucracy but, paradoxically, an extraordinarily weak state. Whenever the state is weak, private actors have more of an incentive to focus on rent-seeking than than creation. The state's ability to use force is disproportionate to its other strengths as an organisation. In Russia, the political institutions that are most suited for coercive action tend to be the weakest, while those tasked with regulating and restraining the state's use of coercive power tend to be the strongest. The incentives to seek rents rather than provide goods are therefore strengthened. Last but not least, the three principal penalties against anti-social governance - political accountability, social capital, and the rule of law - are all in limited supply.

Resource richness tends to produce incentives for rent-seeking, according to Auty (2004), who claims that natural resource dependency is linked to weak governance. It's possible that in resource-rich economies, both public and private actors may prioritise the capture of resource rents over the production of new wealth and the establishment of institutions tailored toward rent-seeking over entrepreneurialism. Because struggles over few resources are counterproductive to economic growth, they tend to depress productivity. To add fuel to the fire, struggles for influence over resource rents are more likely to be pursued via political channels, and might even be the driving force behind armed conflict. Since said before, the resource

sector's intrinsic characteristics may matter here, as more concentrated rents are associated with more polarisation and more intense, drawn-out control battles.

According to Shafer (1994), countries that rely heavily on an export sector dominated by a large number of small firms often create 'specialised tax agencies to tap the huge, concentrated revenue streams such sectors produce, and specialised agencies to monitor, regulate, and promote the activities of these few critical firms.' They also don't 'create the mechanisms to tax, oversee, regulate, or encourage other industries.' One other set of debates regarding the effect of resource riches on government focuses on the question of what state leaders do with resource rents once they have control over them.

Because resource rents enable state actors to pursue politically justified but economically wasteful aims, Robinson et al. (2002) argue that resource-dependent development leads to poor performance. For our purposes, we may leave aside the issue of economic efficiency, but the political uses to which rents are put do have an impact on the structure of the state and the political order. As said before, rulers would naturally want to increase their authority by accumulating such rents. Instable politicians are more likely to aggressively appropriate and manipulate resource rents in ways that would be politically irrational if their time horizons were longer, because the rate at which they discount future extraction will reflect in part their assessment of the likelihood that they will stay in power.

Evidence suggests that leaders' use of rents as a patronage resource often results in politically driven expansion of the state, shown in the fast increase of the bureaucracy, as pointed out by Robinson et al. (2002). Unfortunately, it's quite improbable that the expansion of the bureaucracy, which is mostly fuelled by rent, will be able to absorb all of the unemployed people who are now looking for work.

Therefore, resource rents are emphasised by Auty (1994, 2004), Mahon (1992), and others to support a rising secondary urban economy that relies on subsidies and/or protections. A strong social constituency with a vested interest in the status quo is certain to emerge over time as a result of the expansion of a secondary sector that depends on protection and/or subsidies (whether implicit or explicit). As a result, many analyses of Latin America's experience with import-substitution industrialization conclude that the recipients of subsidies and protection were a key source of opposition to change..

## **Importance of hydrocarbon industry for Russian Economy**

Russia's outsized clout on the world stage may be directly attributed to the hydrocarbons it exports. This trust in Russia is known as 'petro-confidence' according to Brugato (2007). Krastev (2007) argues that Russia's political and economic systems would collapse without its dependence on hydrocarbons. Russia's main exports are hydrocarbons to other countries. As a result of rising demand throughout the world, this industry has risen to the forefront of Russia's exports. Russia's manufacturing sector, on the other hand, has never been able to compete with worldwide items due to the high cost of making locally manufactured goods. After the fall of the Soviet Union, this was a devastating blow to the country's industrial sector.

According to Tompson (2005), the hydrocarbon energy industry is crucial to the success of the Russian economy. With regards to the country's political climate, this sector has been a rock of stability. Energy was the only industry that retained its reliability and value throughout the privatisation period. In that era, Russia's sole long-term resource was its hydrocarbons. During the turbulent transition from a centrally planned economy to a market one, this source of political and economic power provided a measure of stability in the energy sector. Because of the country's reliance on a single energy source, political competition for influence over the country's energy reserves has contributed to the decline of Russia's economy. Russian domestic politics became a combative zero-sum game, especially during the Putin era.

Gilbert (2009) claims that a philosophical change occurred during Putin's rule, with the Kremlin using its hydrocarbon energy exports to Europe as a bargaining chip in international discussions. There are many nations that rely on hydrocarbon resources, therefore this also gave Russia the ability to operate as an energy powerhouse. Many in Russia's political elite believe that the European Union's reliance on Russia for energy imports has given the Kremlin undue influence and prestige abroad.

Since Gazprom, Rosneft, and Transneft are all wholly controlled by the Russian government, Vladimir Putin is able to oversee every step of the production process, from exploration to refining to distribution, for Russia's hydrocarbon energy resources, as noted by Brugato (2007). Due to the disproportionately high level of government involvement in the energy industry compared to that of most other fields, it is also able to be politicised in this way. The Russian government views politicalization as essential since the dedication of publicly held firms is distinct from the profit-maximizing character of privately owned businesses. Many influential

Russian politicians have seen their worldwide clout grow as a direct result of their government's tight grip over the country's energy market. Understanding the distorted and politicised character of Russia's hydrocarbon industry necessitates, among other things, a consideration of the response that the political sphere has in energy resources. Following the dissolution of the Soviet Union, natural resources such as hydrocarbons have been Russia's principal source of domestic power, as reported by Sakwa (2009).

This is primarily attributable to the inherent worth and inelastic demand of energy resources, in contrast to the greater complexity and greater quality variation of produced items. This is because there will always be a need for some kind of energy somewhere in the world. Despite substantial political and economic instability in Russia, the country's hydrocarbon resources remained in high demand. As a result, even during the economic turmoil The Kremlin and a large number of Russians who would later become billionaires quickly realised that the energy industry was the safest option in Russia. In the instance of Russia, where liberalisation and market reforms were taking place, political and economic power shrank to become one-dimensional because of the country's reliance on a single source of stability and security. This fuels rivalries for control of the world's energy supplies. Because of inefficient administration, corruption flourished in the Kremlin and quickly became the norm in Russia. The impacts of hydrocarbons on the Russian domestic economy have been the subject of substantial quantitative research.

Several steps have been identified by Tabata (2011) and Kuboniwa (2010) toward developing a model of the far-reaching consequences of the Russian hydrocarbon sector, with special attention paid to the ripple effects felt throughout the country's other domestic sectors, such as manufacturing, and the Russian economy as a whole.

Numerous studies, including those by Rautava (2004), Gaddy and Ickes (2010), and others, have provided strong evidence in favour of the hypothesis that studying changes in the global price of oil provides a full explanation for Russia's international and domestic economic cycle. However, all of this numerical work has important political implications. Scholarly research shows that the hydrocarbon industry is crucial to Russia's economy and government. Several political scientists have studied the politics of Russian energy, and they all believe that the Soviet Union's collapse was the first domino in the sequence of events that led to the present political and economic reality surrounding Russia's energy resources. Researchers in the field of political science,

including Li-Chen Sim (2008), Peter Rutland (2009), and Thane Gustafson (2012), have spent a great deal of time analysing the privatisation policies implemented by the Yeltsin government. These tactics have laid the groundwork for the present economic hierarchy, especially in the oil industry.

Collectively, these scholars have shown how fraudulent privatisation practises in Russia have helped concentrate economic power in the hands of a small number of Russians. These scholars share a same line of thinking on the chain of events that brought Vladimir Putin to power in Russia and the part played by Boris Yeltsin in Putin's eventual election as president. Scholars are mostly in agreement with the general timeline of events between the beginning of privatisation and Vladimir Putin's ascension to power in Russia..

### **1.6.2 Importance of International Trade In Sustaining The Economy**

Hydrocarbons are mostly supplied to Europe by Russia, as stated by Stulberg (2012). Russia's approach to its pipeline politics, particularly when discussing the pipelines passing through Europe, is strongly ideologically informed by the notion of realism. Pipelines transporting oil and gas are seen differently by realists and neoliberals, with the former seeing them as vital tools of competitive nationalism and the latter viewing them as mechanisms that encourage collaboration and assist create mutual benefits. When looking at Russia, it is clear that the realist viewpoint is more helpful for navigating the politics of pipelines and the international trade of other hydrocarbon collaterals.

According to Smith (2008), Russia's dependence on the global oil market becomes clear when contrasted to other hydrocarbon exporting states, notably oil exporting nations. As oil exports provide the bulk of Russia's annual revenue, the country's ruble is highly sensitive to fluctuations in the oil market. It's also predicted that if oil prices dropped globally, Russia's budget deficit would grow, leading to a depreciation of the country's ruble.

According to Leonard and Popescu (2007), anytime there is a comment about gas cutoffs, Gazprom is utilised as a foreign policy tool by the Kremlin because of the close relationship between the two. While tensions were high between Ukraine and Belarus, this issue came to the forefront. Russia's pipeline politics over the last several decades have been motivated by a desire to secure its share of the world energy market and to keep it as independent as possible from other energy exporting nations.

Abdela (2012) thinks that it is crucial for Russia to keep up its consistent sales in the marketplaces of countries like Europe and China and to also participate in international initiatives, which will benefit Russia by lowering the rivalry for Russia's hydrocarbon on the world market. It is also pointed out that Russia does not always choose economically viable projects. Thus, in the case of the hydrocarbon business, it is seen important to take into consideration economic interest first, and subsequently political interests.

According to Dobrynskaya (2009), the historical expansion of Russia's hydrocarbon sector throughout the Soviet period and the strong demand for energy resources from different eastern European nations are the primary reasons why Russia's main pipelines are aimed toward Europe. There is a wide range of perspectives on Russia and its hydrocarbon energy resources and the politics surrounding them among the transit countries through which many of these pipelines go. Russia's troubled ties with its neighbours are the result of its dependence on a number of nations since its pipelines go through their territories. Putin's government has long been concerned about Russia's reliance on politically unfavourable bordering states. To reduce this dependence, Russia has undertaken huge infrastructure projects that avoid these countries. Consider the South Stream and Nord Stream pipelines as two examples. By constructing these pipelines, Russia will be able to more directly access Central and Western Europe, sidestepping the Ukraine, Belarus, Poland, and the Baltic area. Many of these initiatives have extremely flimsy economic justifications, yet they are very useful for the politically independent nation they serve..

### **1.6.3 Influence of Russia's hydrocarbon sector on Europe**

According to Correlje and Van Der Linde (2006), Russia's push into Central and Eastern Europe between 2004 and 2007 has significantly increased Europe's reliance on Russian hydrocarbons. The realisation of this truth has spurred many discussions about Europe's energy future. Hydrocarbon supplies to certain European countries fell during the 2005–2006 winter, when Russia and Ukraine were at odds over gas pricing and unpaid bills. As a result, European countries were more receptive to Putin's 'pipeline diplomacy' and 'energy blackmails blackmailing' as part of Russia's foreign strategy. It may have been harmful to Europe's ability to maintain a continuous supply of hydrocarbon supplies. Due to a shortage of domestic energy resources, notably hydrocarbons, several European countries have entered into multilateral treaties with Russia. Further, Russia understands it can utilise its oil wealth to attain strength, which is crucial in maintaining a delicate diplomatic and military equilibrium.



Europe, according to Belyi's (2009) analysis, has trouble keeping its member nations working together. Although the neo-mercantilist and asymmetrical reliance depictions of Russia's connection with Europe are common, they fall short of fully capturing the precarious state of Russia's economy and government. As a result of several infrastructure limitations, Europe is Russia's major export market, and the country's economic and political stability are highly dependent on the momentum of continuing sales of hydrocarbon resources. Russia remains dependent on European customers despite efforts to diversify its market. So, although it's obvious that Europe needs Russian gas and oil to satisfy its energy demands, the Russian economy and government are also dependent on the money the energy corporations are generating in Europe to thrive. The EU's disproportionate reliance on Russian energy supplies is often highlighted in one-sided accounts of the geopolitics between Russia and Europe. However, the underlying nature of Europe and Russia's connection is more complex than a superficial study would imply.

### **1.7 HYPOTHESIS OF THE STUDY**

1. Though there exist few symptoms of 'Dutch Disease' but the established industries sector acted as a potential buffer, protecting Russia from de-industrialisation which is associated with this disease.
2. Abundant energy resources, however has led to rent seeking behaviour, corruption and decrease in accountability of government. There is a unique link between Russia's dependency on hydrocarbon sector, domestic politics and international relations. This rentier behaviour is facilitated by increasing state control, through nationalisation of most of the companies involved in the hydrocarbon sector.
3. Russia is trying to diversify its energy exports by establishing pipelines beyond Europe and notably with China in order to reduce its dependence on Europe, especially due to the difference over Crimea and imposition of sanction on Russia by the European Union

### **1.8 RESEARCH QUESTIONS**

1. How have the laws promulgated by Russia with respect to energy politics impacted its relations with the European Union?
2. Is Russia's economy experiencing issues related to the 'resource curse'?
3. How has the volatility of hydrocarbon prices impacted Russia's economy?

4. What are the compelling reasons driving Russia towards the diversification of its energy market

## **SCOPE OF THE STUDY**

The proposed research aims to study how the abundance of hydrocarbon resources has shaped the economy and politics of Russia. The research aims to understand the implications of hydrocarbon resources in the development of various sectors apart from the energy in Russia and examine the symptoms of Dutch disease as seen in many resource centric countries. The research seeks to examine the importance of hydrocarbon resources in Russia's economy, and shaping of Russia's foreign policy, energy co - dependence among Russia and European countries and the impending issue of resource curse in Russia.

The rationale behind choosing these elements is due to their vital role in shaping the economic and political aspects of Russia.

This thesis, by taking all these dimensions together, seeks to bridge the literature gap pertaining complex dependence structure between Russia and the EU, and adds to the existing academic analysis on the effects of hydrocarbon resources have had on Russian economic performance and political development.

The period chosen for the study starts at the dawn of the new millennium, where Vladimir Putin took charge at the helm of affairs from Yeltsin, bringing along an agenda for change that has led the country to the direction it is moving towards years later. From the year 1998 Russia saw an appreciation in its hydrocarbon resources as the international price of these resources increased and hence it's economy started recovering from the crisis of the last decade. This period (1998 to 2018) covers three of the four post-soviet transformation which are linked to hydrocarbon resources.

## **1.10 CHAPTERSITATION**

Russia's natural resource endowment is impressive by all standards. This thesis sets out to examine the effects of oil and natural gas on Russian economic and political development since the collapse of the Soviet Union by means of analyzing economic data and major domestic and international political events. The following chapters are separated by topic in order to provide an organized and structured assessment of Russian development.

### **Chapter 1- Introduction**

This chapter discusses basic Russian energy sources, provides a survey of the existing literature on Russian energy resources, and explains the historical context for the subsequent analysis.

### **Chapter 2 -Russian Economy and Energy Resources**

This chapter focuses on the distortive effects that oil and natural gas have on Russian international trade and economic growth. It finds that Russian trade severely underperforms without energy exports, and that the Russian economy is essentially driven by the success of major energy companies. This chapter also discusses how Russia has escaped being trapped in ‘Dutch Disease’ despite growing energy income.

### **Chapter 3 Domestic Energy Resource Politics**

This chapter concentrates on the intricacies of domestic Russian hydrocarbon energy politics. This chapter talks about how the Kremlin, particularly under Vladimir Putin, has been determined to maintain control either directly or indirectly over Russia’s hydrocarbon resources, resulting in rent seeking behaviour on the part of the state.

### **Chapter 4 Russia and International Pipeline Politics**

This chapter discusses how there have been geopolitics around energy pipelines. While the west seeks to bypass Russia in terms of supplies to Europe, Russia is creating pipeline infrastructure to retain its control over post-soviet energy resources and supplies.

### **Chapter 5- Energy as a factor in Russia’s Foreign Policy**

This chapter will broadly deal with the energy being a critical factor in driving Russia’s foreign policy with Europe and also with the key global actors, notably China. The opportunities and challenges in this regard will be elaborately dealt with.

### **Chapter 6- Conclusion**

This chapter will briefly summarise the findings of this study based on the spelt out research questions. It will also test the stated hypothesis on the basis of the findings of the study. EU and other energy dependent countries will be discussed namely China within the larger context of global energy politics.

## CHAPTER 2

### RUSSIAN ECONOMY AND ENERGY SOURCES

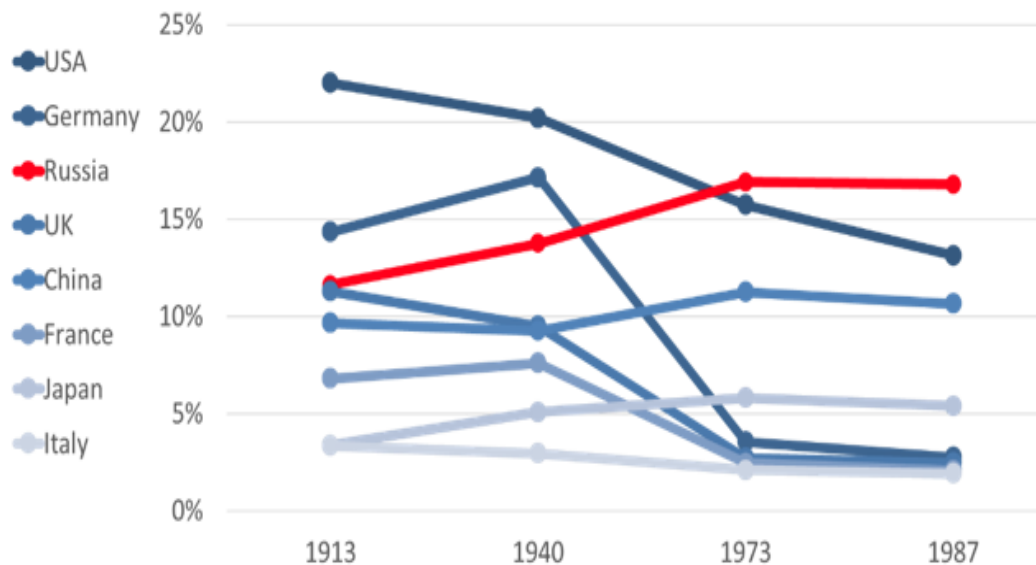
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#### 2.1 RUSSIAN ECONOMY DURING SOVIET UNION

The Soviet Union was once called "Upper Volta with rockets" in the 1980s.<sup>84</sup> The history and culture of the country now known as Burkina Faso were unfairly disparaged. It was also unfair to the Soviet Union, a country that was orders of magnitude larger and richer. However, there was some truth to it: the Soviet Union's military capabilities were out of proportion to its economic size.

Figure 1 shows the great powers on a standard measure developed by political scientists to capture 'the ability of a nation to exercise and resist influence' in the world. By the 1970s, on that measure, the Soviet Union became the world's leading power. Yet its economy produced less than half of the real GDP of the US, despite a population of similar size, spread across a much larger territory.

**Figure 1** Great powers in the international system, 1913 to 1987 (selected years), by the composite index of national capability



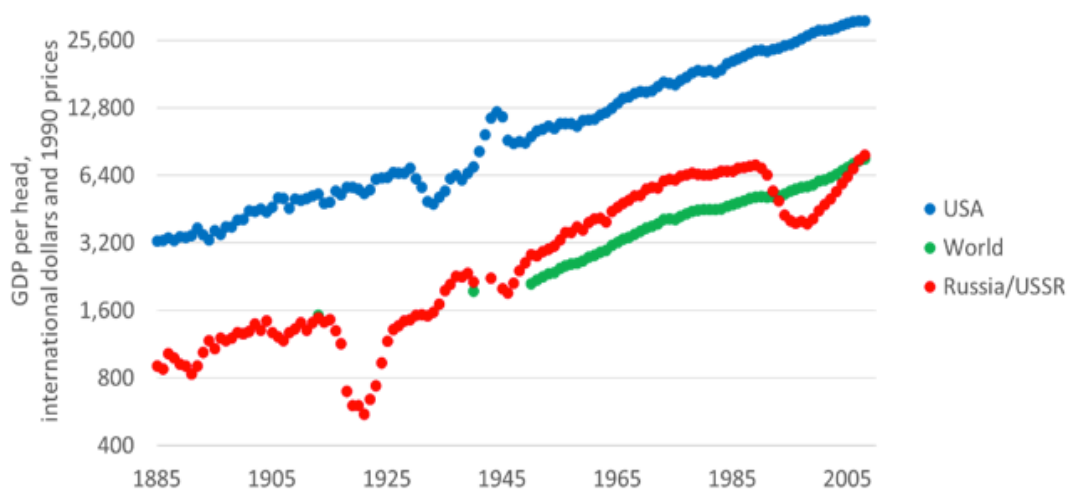
<sup>84</sup> The phrase was coined in 1987, apparently, by Xan Smiley, then Moscow correspondent of *The Daily Telegraph*; see <http://www.russialist.org/archives/3059.html##6> (accessed on 28 September 2017).

**Source:** The National Material Capabilities (ver. 4.0) dataset, described by Singer et al (1972)<sup>85</sup>, and available at <http://www.correlatesofwar.org/> (accessed 7 January 2016).

**Notes:** The composite index of national capability combines six measures of a country's relative weight in the international system at each point in time: total population, urban population, iron and steel production, energy consumption, military personnel, and military expenditure. Austria-Hungary is omitted, having disappeared in 1918.

**Figure 2** compares the Soviet Union's economic outcomes in real output per head. In 1913, by global standards, Russia was an average economy – far behind the US, although far ahead of Upper Volta. A century later, at the beginning of the global financial crisis in 2008, Russia was again an average economy.

**Figure 2** Real GDP per head, 1885 to 2008: the US and Russia/the Soviet Union compared with the world (international dollars and 1990 prices)



**Sources:** US and world from Angus Maddison at <http://www.ggd.net/maddison>; Russia (Russian Empire to 1913, then USSR, followed by former USSR) from Markevich and Harrison (2011).<sup>86</sup>

In the meanwhile, a lot happened. The Bolshevik revolution, which will be 100 years old on November 7, 2017, was followed by a Venezuela-style disaster. Following that, the economy rebounded, returned to the global mean, and remained there for decades. However, with

<sup>85</sup> Singer, J D, S Bremer, and J Stuckey (1972), 'Capability Distribution, Uncertainty, and Major Power War, 1820-1965', in B Russett (ed.), *Peace, War, and Numbers*, Beverly Hills: Sage, pp. 19-48.

<sup>86</sup> Markevich, A, and M Harrison (2011), 'Great War, Civil War, and Recovery: Russia's National Income, 1913 to 1928', *Journal of Economic History* 71(3): 672-703.

retrospect, we can see that the Soviet system's primary function was to raise output levels through continual mobilization. The underlying productivity growth rate was not increased, and the Soviet economy never converged up to American norms. The Soviet power-to-productivity imbalance was a red flag. Every country has a comparative advantage, as we educate our students. The Soviet economy's comparative advantage was in the production of the world's means of power. This represented the views of the Bolshevik revolutionaries who came to power, as well as the policies and institutions they established (Harrison 2017a).<sup>87</sup> The Bolsheviks loved and adopted two economic models, one German and the other American, from the beginning:

Walther Rathenau and Erich Ludendorff created the German model of a sophisticated war economy in 1915 and 1916. There was mass mobilization for mass conflict and mass sacrifice under the war economy, with supplies rationed at fixed prices.

Standardized commodities, mass-produced under centralized, hierarchical management was the American model, which was adopted by Henry Ford and championed by Frederick Winslow Taylor.

These two models combined provided major principles of the so-called "Soviet-type economy" presented in western textbooks. Between 1917 and 1934, Soviet economic institutions were established (Davies 1994).<sup>88</sup> During this time, there was a lot of political and social conflict, as well as a lot of U-turns that changed the scope of market organization and consumer choice. The U-turns lend some credibility to the notion that the Soviet economy could have progressed in a variety of ways. After all, 'varieties of communism' still exist today, from China to Cuba to North Korea.

Despite the differences, Soviet policies remained remarkably consistent after 1917. The most obvious was a single-party dictatorship with a centralized power structure. The dictators shared attitudes about how to effectively advance their perceived self-interest. They considered the world as inherently hostile, and their country as a fortress under siege from foes and spies. They prepared for war when they weren't at war. They created an authoritarian state's power to choose and direct workers, secure supply chains, and channel and filter information in the economy.

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<sup>87</sup> Harrison, M (2017a), 'The Soviet Economy, 1917-1991: Its Life and Afterlife,' *The Independent Review* 22(2): 199-206

<sup>88</sup> Davies, R W, M Harrison, O Khlevniuk, and S G Wheatcroft (in preparation), *The Industrialisation of Soviet Russia, vol. 7. The Soviet Economy and the Approach of War, 1937-1939*. Basingstoke: Palgrave.

This was a one-way process that started in 1917 and remained in the background despite policy changes (Harrison 2017b).<sup>89</sup>Beyond the Soviet Union's boundaries, the rulers of neighboring states subverted them, eventually installing communist regimes on the majority of them. After securing their neighbors as supporters, they invaded them several times under the guise of "defending the revolution's conquests." Their aggressive behavior consistently produced evidence that supported their opinions.

In the home economy, Soviet policies drastically altered resource allocation, stifling consumption in order to fund industrial and military enterprises. One effect was the creation of a massive military industry dedicated to the mass production of weapons. This complex was substantially put down in the 1930s, according to conventional branches. When World War II broke out, the Soviet Union had already surpassed Germany as one of the world's top two military suppliers (Davies et al. in preparation). During and after the war, new branches for nuclear weapons, space missiles, and radio electronics were added.

## **2.2 RUSSIA'S DISINTEGRATION AND RUSSIA ECONOMIC TRANSITION**

Following the disintegration of the Soviet Union, Russia's first decade of transition from a centrally planned to a market economy was disastrous: nominal GDP fell from USD 516 billion in 1990 to USD 196 billion in 1999, a drop of almost 60%. During the 1990s, the Soviet government moved to privatize several Russian companies in an attempt to solve economic upheaval and follow IMF recommendations. The energy and defense sectors, however, were notable outliers.

The Russian ruble's depreciation in 1998, following the financial crisis known as the ruble crisis, combined with an uninterrupted upward trend in oil prices from 1999 to 2008 propelled the Russian economy, which was heavily reliant on its energy sector exports, to grow at an annual average rate of 7%. Russia was one of the worst-affected economies during the global economic crisis of 2008-2009, with the economy contracting 7.8% in 2009 as oil prices fell and foreign credit dried up. The economy shrank at its fastest pace since 1994, although there was no long-term damage as a result of the government and the Central Bank's proactive and timely responses to ring fence important sections of the economy, particularly the banking sector, from the crisis'

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<sup>89</sup> Harrison, M (2017b), 'Foundations of the Soviet Command Economy, 1917 to 1941,' in S Pons and S Smith (eds), *The Cambridge History of Communism, vol. 1: World Revolution and Socialism in One Country*, Cambridge: Cambridge University Press, pp. 327-347

impacts. As a result, Russia's economy began to recover again in 2010, 2011, and 2012, increasing by 4.5 percent, 4.3 percent, and 3.4 percent, respectively, before dropping to 1.3 percent in 2013 and 0.6 percent in 2014. In 2014; the Russian economy was hit by two significant shocks, just averting recession with 0.6 percent growth. The dramatic drop in oil prices in the third and fourth quarters of 2014 was the first shock, revealing Russia's significant reliance on global commodity cycles. Crude oil prices ended 2014 at less than USD 60 per barrel, after ranging within a narrow band near USD 105 per barrel from 2011 to 2013.

The second shock came in the form of economic sanctions imposed as a result of geopolitical tensions, which dampened investor interest in Russian investments. Capital flight and soaring inflation have exacerbated Russia's economic troubles, with the GDP falling at its fastest rate since 2009, 3.7 percent in 2015. The recession is expected to finish in 2017, according to forecasts.<sup>90</sup> Since August 2015, when it peaked at 15.8%, inflation has been rapidly declining. Central Bank lending rates have been cut in tandem with the decrease in inflation. Russian bonds and stocks are outperforming other developing market bonds and equities, and a minor rise in oil prices has boosted economic morale.

Given that the price of Urals oil is expected to average USD 38 per barrel in 2016, the Central Bank anticipates the economy to decrease by 0.3 percent to 0.7 percent this year, which is lower than the Bank's earlier forecast of 1.3 percent to 1.5 percent contraction. The Bank estimates that the economy will grow at a rate of 1.1 percent to 1.4 percent in 2017, assuming that oil prices in the Urals average USD 40 per barrel. Previously, the Bank predicted that the price of Urals oil would average USD 35 per barrel in 2017 and that economic growth would range between minus 0.5 percent and plus 0.5 percent.<sup>91</sup>

Following the collapse of the Russian economy in 2015, analysts polled by FocusEconomics expect the economy to continue shrinking in 2016, albeit at a slower pace. Russia's GDP will shrink 0.7 percent in 2016, according to FocusEconomics Consensus Projection panelists, up 0.1 percentage points from last month's forecast. The economy is expected to grow 1.3 percent in 2017, according to the panel. Russia's current account consistently shows trade surpluses, owing mostly to commodity exports such as crude oil and natural gas. Russia's average current account

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<sup>90</sup> <https://www.focus-economics.com/countries/russia>

<sup>91</sup> <https://www.focus-economics.com/countries/russia>



surplus was USD 66.8 billion from 2010 to 2014, with a high of USD 98.8 billion in 2011. Falling oil prices caused a substantial terms-of-trade shock in Russia's balance of payments in the fourth quarter of 2014, which was somewhat offset by a decline in imports. Simultaneously, in 2014, geopolitical uncertainty and corresponding sanctions resulted in substantial capital outflows, worsening Russia's balance of payments. Capital outflows from the private sector rose from USD 60.7 billion in 2013 to USD 130.5 billion in 2014. During the same time period, the Russian Federation's capital and financial accounts went from a USD 45.4 billion deficit to a USD 146 billion deficit (2.2 percent and 7.8 percent of GDP, respectively). In 2021, Russia's economy contracted at its fastest rate since 2009, as a mix of external factors—such as a drop in oil prices and international sanctions—combined with structural flaws took a toll on growth.

In the full year of 2015, the GDP shrank by 3.7 percent, compared to the meager increase of the previous year. However, the Russian economy contracted at its slowest pace since the recession began in late 2014 in the second quarter of 2016<sup>7</sup>. GDP declined 0.6 percent annually in Q2, which was higher than the 1.2 percent decline seen in Q1. Despite the fact that industrial production fell at the sharpest rate in eight months in September, it is predicted to grow somewhat in 2016 after suffering the biggest drop in six years in 2015.

Crude oil, petroleum products, and natural gas make for about 58 percent of total exports, iron and steel for 4%, and other mining-related exports such as gems and precious metals for about 2.5 percent. Europe accounts for more than 60% of global exports, whereas Asia accounts for around 30% of total exports. Russia's overall shipments to the United States, Africa, and Latin America are less than 5% of total shipments.

Food and ground transportation are Russia's most important imports, accounting for 13% and 12% of overall imports, respectively. Pharmaceuticals, textiles & footwear, plastics, and optical instruments are among the other major imports. Exports peaked at USD 527 billion in 2012, while imports peaked at USD 341 billion in 2013.

Russian exports totaled USD 25.0 billion in August 2015, a 39.7% decrease year over year. This was the tenth contraction at a double-digit rate in a row. Imports reached USD 16.5 billion, down 34.7 percent from the previous year.

Russia's trade surplus is quickly shrinking. Russia's trade surplus shrank to USD 4.4 billion in August this year, compared to USD 8.8 billion in the same month last year and USD 16.2 billion

the year before. The 12-month rolling surplus shrank to USD 99.5 billion in August, the smallest accumulated surplus in almost a decade. The decline in the trade surplus continues to reflect the sudden decline in Russian exports over the last few years. Oil prices have recently steadied after a period of increased volatility, particularly since the OPEC Conference's extraordinary meeting in Algiers in the latter week of September, which finished with a vow to freeze oil output at between 32.5 and 33.0 million barrels per day. Most members are expected to honor the agreement at OPEC's official meeting in November, where non-OPEC oil exporters are also encouraged to sign on the dotted line, according to analysts.

The re-establishment of OPEC's pricing leadership caused global oil prices, particularly Urals oil, to skyrocket. The price of Urals oil settled at USD 46.3 a barrel on September 30th, up 4.6 percent from the end of August. Urals oil has also recovered from its lows earlier this year, with a year-to-date gain of 31.8 percent. In accordance with the Russian Constitution and Federal Law, the Central Bank of Russia (Bank Rossii) has several responsibilities, including maintaining the value and stability of the ruble, overseeing Russian financial institutions (including acting as a lender of last resort), managing Russia's foreign reserves and foreign exchange, and setting short-term interest rates, which is one of the bank's main instruments of monetary policy implementation.

Low oil prices and sanctions shocks to the Russian economy caused the ruble to lose 46% of its value versus the US dollar in 2014, necessitating Bank Rossii initiatives targeted at financial system stabilization. To combat runaway inflation caused by the weakening ruble, Bank Rossii boosted its benchmark interest rate by 650 basis points to a high 17 percent in December 2014. (core inflation reached 11.2 percent in December 2014, year-on-year). Bank Rossii spent USD 27.2 billion on interventions to stabilize the ruble in October 2014 and USD 11.9 billion in December of the same year.

Over the course of 2015, Russia's Central Bank gradually cut interest rates, starting the year at 17.00 percent and down to 11.00 percent by July. Interest rates were held unchanged for over a year before being dropped by 50 basis points to 10.50 percent in June 2016. The Central Bank indicated that authorities were more confident about the evolution of inflation and noted the positive results of a drop in inflation expectations and decreased inflation risks against the backdrop of their slowly but steadily recovering economy in making the decision to cut interest rates. Inflation has dropped significantly since then, prompting the Bank of England to lower

interest rates from 10.50 percent to 10.00 percent in September 2016. Authorities did say, however, that "the current value of the key rate needs to be maintained through end-2016, with further probable reduction in 2017 Q1-Q2" to ensure a long-term drop in inflation. In light of its decision, the Bank remains convinced that, with a still somewhat restrictive monetary policy, inflation would fall to 4.5 percent in Q3 2017 and then to 4.0 percent by the end of the year. The bank also stated that additional monetary easing will be delayed until the first or second quarters of 2017. Bank Rossii unpegged the ruble from a dual-currency (US dollar and euro) basket band on November 10, 2014, putting an end to two decades of exchange rate regulations and transitioning Russia to a free-float exchange rate system. The Central Bank also ceased its regular ruble interventions, but stated that it would continue to intervene in support of the Russian currency if financial stability was threatened.<sup>92</sup>

The Central Bank chose to continue interfering in the foreign exchange market as the ruble continued to plummet against the dollar due to declining oil prices and increased investor concern, costing the Central Bank hundreds of millions of dollars per day. After several years of an exchange rate of around 30 RUB per USD, the ruble's value began to fall in early 2014, as the country was hit hard by lackluster economic development, significant geopolitical risks following the annexation of Crimea, and the outbreak of conflict in Ukraine. The ruble's value could not resist gravity and began a fast decline against the US dollar with the collapse of oil prices at the end of 2014, with the currency bottoming out at 68.5 RUB per USD on December 16.

The Russian currency has been on a roller coaster ride throughout 2015. The country's currency has been pushed down by high volatility and large variations in oil prices. The foreign exchange market was volatile at the start of 2015, but by the conclusion of the first half of the year, the Russian currency had settled into a range of 50 to 60 RUB per USD. At the start of the second half of the year, there was another bout of high volatility, with the Russian currency closing the trading day at 70.9 RUB per USD, which was even lower than the aforementioned low point of the December 2014 ruble crash and a new all-time low.

The significant dip in August was mostly due to declining oil prices and growing concerns about the worldwide economic impact of the shockwave generated by China's stock market crash. The ruble ended 2015 with a value of 72.9 RUB per USD, down 30% from the end of 2014. The price

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<sup>92</sup> <https://www.focus-economics.com/countries/russia>

of oil, which, together with gas, is Russia's principal commodity export, drives the Russian ruble's fluctuations. On January 21, 2016, the ruble plummeted to an all-time low of 82.4 RUB per USD, as oil prices tumbled to levels not seen in over a decade. Since January 2016, it has steadily stabilized between 60 and 70 RUB per USD as the economy has strengthened and oil prices have crept back up. Oil prices have had a long and symbiotic relationship with Russia's political economy. In the 1970s and 1980s, the Soviet Union began to become a major hydrocarbon exporter. Oil prices, on the other hand, fell sharply in 1986, contributing to the Soviet economy's collapse and the severe difficulties experienced during the transformation crisis following the start of market reforms. Throughout practically the entire decade of the 1990s, oil prices stayed low.

They dropped to as low as \$8 a barrel in August 1998, averaging only \$12 per barrel. Oil prices began to rebound in 1999, and their annual growth rate jumped to 12%–15% in 2003. Those prosperous years were cut short by the global financial crisis of 2008 and 2009, which resulted in a two-thirds drop in oil prices. They remained at their peak levels (\$110–115 per barrel) from 2011 until the first half of 2014, but then began a new and severe decline, first to \$50, then to \$30–40 per barrel. This period of low oil prices, according to international authorities (EIA, 2016)<sup>93</sup>, could last a few years.

In the 1980s and 1990s, Russia experienced a series of significant historical events, the consequences of which continue to shape the country's development. Rather than economic changes in Russia, the collapse of the Soviet system began with political liberalization. The Comecon, practically quickly after the unified Soviet market disintegrated as a result of the USSR's political disintegration.

This resulted in a sharp drop in demand for Russian businesses' basic investment goods, which, combined with the liquidation of a large portion of the military-industrial complex, brought the economy to a halt, resulting in the loss of a slew of industries, including strategic ones like civil aircraft engineering, civil electronics, and light industry. The lack of consumer goods and services increased as the economy opened up and limitations on entrepreneurial activities for businesses and individuals were lifted, depreciating labor income and, to a greater extent, household savings. This generated a negative social and political backdrop, distorting

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<sup>93</sup> (2016). Short-term energy and summer fuels outlook (Release date: April 12). Washington, DC: U.S. Energy Information Administration EIA.

perceptions of market shifts and preventing the required reforms from being implemented. The early 1990s privatization plan soon generated a class of ‘new entrepreneurs,’ but it also led in a bad public perception and strong anti-market prejudices among significant socioeconomic groups. Capitalism (and the market economy as a whole) has never been associated with fairness. The most fundamental social reforms of the 1990s failed as household income fell. Finally, new circumstances arose that established the paternalist model of the social realm as a steadfast institution. With a market economy based on private property on the one hand, and a social sphere dependent on state-backed guarantees and access to social services supplied by state and municipal institutions on the other, economic and social dualism emerged in Russia. The paternalist model's ‘multi-shot’ strategy, or the supply of social goods regardless of need, is a key feature.

While the initial economic losses from this ‘blind redistribution’ were fairly insignificant (1990s to early 2000s), since the mid-2000s, when the middle class accounted for over a third of the population and two-thirds of pay-as-you-go pensions began to be paid to citizens who remained employed, the paternalist model has proven to be unsustainable for the economy. The mediocre quality of social products is the other side of this issue (insufficient support for single, unemployed retired persons and families with children, the low quality of most educational institutions).<sup>94</sup>

The state, under pressure in order to increase ever-increasing funding for social programs, raised the burden on economically active people through taxes and customs duties, as well as ‘coercive charity.’ As the economy grew, this forced a large number of entrepreneurs into the ‘shadows,’ increasing the use of informal contracts and labor relations. The informal sector's size can be estimated based on its employment share: it has expanded by 1.5 times in the last 15 years, and now accounts for between 25% and 30% of total employment.

Positive processes, on the other hand, accompanied this. The fast-growing middle class was born as a result of the open economy, broad professional education coverage, and political freedom. Its share of the overall population has expanded from 15% to 40% since 2000. The low, flat tax rate for people, which removed psychological hurdles stopping them from growing their income and economic (labor or entrepreneurial) activities, was one of the most important measures that

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<sup>94</sup> Focus economics(2022), ‘Russia economic outlook,’ available at <https://www.focus-economics.com/countries/russia>

aided the emergence of the middle class. Nearly the whole economy was established on the concepts of private enterprise by the end of the 1990s. However, two ‘birthmarks’ of Russian capitalism emerged in the first ten years: speculative business and offshore capitalism. The majority of firm revenue did not originate from technological advancements or new technology investments. Its sources were either natural or political rent (artificial monopoly) or reselling cheaply obtained assets, especially throughout the 1990s. This style of capitalism is known as speculative capitalism (with reservations). During the 1990s, the law enforcement system's ineffectiveness posed increased commercial hazards.

Offshore capitalism arose as a result of this circumstance, with new owners regularly transferring both legal titles and transactions to foreign countries. With limited resources, Yeltsin's government assumed the position of a liberal player that was only allowed to set the ‘rules of the game,’ but was compelled to form coalitions with private players to carry out its goals. Individual parts of the executive and legislative branches were subject to oligarchical control in both the federal and local administrations. Two aspects distinguished the oligarchy of 1990s Russia (‘buy you a bit of the state’). First, its objectives were short-term in nature, with control over ‘state elements’ focused at securing or defending specific assets or obtaining special legal protection for a specific firm. Second, a large portion of oligarchical business was relocated out of Russia. This precluded the oligarchs from establishing a permanent political foothold in Russia or gaining stable social support, even from the expanding middle class and, more importantly, small and medium companies.

Based on the prevailing situation, oligarchs formed coalitions with specific government officials. Vladimir Putin, who was elected president in 2000, had to deal with all of these issues. On the one hand, they simplified customs procedures and implemented a low, flat income tax rate to stimulate private ventures by both businessmen and employed labor. The legal protections for property and transactions have also enhanced. On the other side, resources had to be concentrated in the hands of the state after being stolen from private entities who competed with it in order to consolidate the state's role. The oligarchs lost political power first, then electronic mass media as a crucial tool for influencing public opinion, and eventually assets based on the right to manage natural rent.<sup>95</sup> A decision was made in favor of the actual re-nationalization of

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<sup>95</sup> <https://economictimes.indiatimes.com/news/international/world-news/meet-russias-oligarchs-a-group-of-men-who-wont-be-toppling-putin-anytime-soon/articleshow/90176426.cms?from=mdr>

essential fuel and energy assets in the first part of the 2000s. The sector's resources and revenues were redirected to the state (to the federal budget and state-controlled companies). Three goals were met as a result of this:

- Re-establish the role of executive branch institutions, particularly law enforcement. By the end of Putin's first term, the federal government was no longer required to make agreements with anyone on domestic matters (this does not mean that the authorities stopped advising example, the Public Chamber was established in 2006 and was initially made up of people who were largely independent of the state); increase funding for social programs and public-sector employee wages to a required minimum; and establish government reserves against foreign debt.
- The era from 1999 to 2012 is often referred to as a 'recovery growth' period. It was, nevertheless, based in part on old structures and institutions.

This recovery was based on long-term increases in raw hydrocarbon export prices, which generated \$2.2 trillion in export profits for Russia between 2003 and 2012. The massive export income streaming into the economy fueled the quick rise in effective demand for goods and services among households, the expansion of state-funded sectors (education, health-care), and the production of investment products and services during that time. Russia's budget grew more stable as oil prices rose, improving the country's credit ratings and allowing Russian firms and banks access to global finance markets.

Oil and gas earnings would have been greatly allocated in favor of private firms and mostly gone from Russia in the 'oligarchical' scenario; salaries and household incomes would be 20% to 30% lower than they are now; and economic rivalry would be more effective. A higher cultural and technological degree of production and management quality should have been expected. Russian producers' pricing and technological competitiveness would have been stronger if there had been effective demand for their products outside of Russia (internal demand would have been lower than in the 'Putin' scenario). At the same time, Russia's economic integration (as measured by the share of international trade and financial activities in GDP) could not have been greater than its actual integration. The substitution of domestic items with imports would have been lower due to decreased effective demand from households.<sup>96</sup> In terms of the amount of competition in

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<sup>96</sup> <https://economictimes.indiatimes.com/news/international/world-news/meet-russias-oligarchs-a-group-of-men-who-wont-be-toppling-putin-anytime-soon/articleshow/90176426.cms?from=mdr>

the economy and the share of efficient enterprises, the current scenario lags far behind. In every other way, though, it proves to be more appealing. The policy pursued during Putin's first and second terms, as well as Dmitry Medvedev's presidency, yielded remarkable results: labor productivity, per capita income, and living standards far exceeded Soviet levels; the gap between Russia and the most developed countries narrowed in terms of production and social technology; and a large middle class arose, laying the groundwork for a new stage of economic and social development. Households would have been far poorer under the 'oligarchical' scenario, with the middle class accounting for no more than 25% of the population. Other structural defects in the 1990s social and economic system, on the other hand, were retained and even became permanent institutions in the 2000s.

To begin with, the state's paternalism in controlling the social sphere persisted, having been passed down from the Soviet era, and even gained a new lease on life. While personal responsibility and personal finance mechanisms exist in theory, they are organized in such a way that potential consumers of social goods have little say over their deposits. All contributions to social security funds are tied to employees, but they are made by the employer, and recipients regard them as free products given by the government. Households expect the government to ensure and improve the quality of their social services. These expectations serve as the foundation for social groupings' electoral demands. Attempts at reform that call for a higher level of citizen accountability are being thwarted by political mechanisms. Along with constitutionally mandated social goods, state and local governments began to de facto co-finance housing maintenance and repair.

As the general government budget rose, the middle class became more interested in the newly restored compulsory financial security of social goods. The widespread replication of 'state social paternalism' has detrimental social and economic consequences. Russia currently lacks a system for mobilizing private funds to finance social goods, much alone a tool for capitalizing individual household savings. Offshore capitalism, on the other hand, has been retained. Unlike in other nations, where attempts to relocate to a foreign jurisdiction are laden with tax issues, in Russia, substantial business risks remain a primary motivator. As a type of insurance, assets are frequently removed.

At the same time, businesspeople seeking to withdraw funds from the country seek out tax havens and countries with the simplest business registration requirements. The employment of



foreign jurisdictions to mitigate risks is common in economies and political systems that are less developed than Russia's. Because the risk of losing property remains considerable, Russian businesspeople have begun to select projects and transactions that give high risk-adjusted profits. Finally, the rate of inflation remains high (exceeding 10 percent annually in 13 of the past 15 years). These three variables are prompting Russian businesspeople to demand excessive return requirements. While the commonly accepted amount of predicted yearly returns to launch a new project in industrialized economies is between 10% and 12%, the psychological barrier in Russia would demand returns closer to 20% or even 30%. Natural rent (natural monopolies) and artificial monopolies in which the state is not attempting to restrict the monopoly are both reliable sources of high returns (e.g., by regulating prices). Innovative enterprises that create wholly new types of items also have large returns (and a high risk of losses). Additionally, a medium-term (several years) market imbalance, typical of the early stages of market development with insufficient regulation and substantial information asymmetry, can result in extremely high profits.

### **Energy and its types**

Energy is the capacity of a physical system to perform work. Energy exists in several forms such as heat, kinetic or mechanical energy, light, potential energy, electrical, or other forms. Energy is the ability to do work. Energy sources could be classified as Renewable and Non-renewable.

### **Renewable Energy**

Renewable energy is derived from natural processes that are replenished constantly such as solar, wind, ocean, hydropower, biomass, geothermal resources, and biofuels and hydrogen.

### **Solar Energy**

Sun is the primary source of energy. Sunlight is a clean, renewable source of energy. It is a sustainable resource, meaning it doesn't run out, but can be maintained because the sun shines almost every day. Coal or gas is not sustainable or renewable: once they are gone, there is none left. More and more people want to use clean, renewable energy such as solar, wind, geothermal steam and others. It is called '**Green Power**'. It lights our houses by day, dries our clothes and agricultural produce, and keeps us warm and lots more. Its potential is however much larger

### **Wind Energy**

Wind is the natural movement of air across the land or sea. The wind when used to turn the blades of a wind mill turns the shaft to which they are attached. This movement of shaft through

a pump or generator produces electricity. The Potential for wind power generation for grid interaction has been estimated at about 3, 02,251 MW (MW taking sites having wind power density greater than 200 W/sq. m at 80 m hub-height with 2% land availability in potential areas for setting up wind farms @ 9 MW/sq. km. India now has the 4<sup>th</sup> largest wind power installed capacity in the world which has reached 39990.10 MW (as on Oct, 2021). Private agencies own 95 % of the wind farms in India.

### **Biomass and Biofuels**

The plants fix solar energy through the process of photosynthesis to produce biomass. This biomass passes through various cycles producing different forms of energy sources. For example, fodder for animals that in turn produce dung, agricultural waste for cooking, etc. The current availability of biomass in India is estimated at about 500 million MT per annum, with an estimated surplus biomass availability of about 120 – 150 million metric tones per annum covering agricultural and forestry residues. This corresponds to a potential of about 18,000 MW. An additional 9200.50 MWp power was generated through bagasse based cogeneration in the country's Sugar mills.

### **Water and geothermal**

#### **Water**

The flowing water and the tides in the sea are sources of energy. India is endowed with large hydropower potential of 1,45,320 MW. Heavy investments are made on large projects. In recent years, hydel energy (through mini and small hydel power plants) is also used to reach power to remote villages which are un-electrified. The estimated potential of Small Hydro Power is about 15,000 MW in the country. As on Oct. 2021, the installed capacity of Small hydro projects (upto 3MW) amounts to 4821.81 MW.

#### **Geothermal energy**

Geothermal Energy is heat stored in earth crust and being used for electric generation and also for direct heat application. Geothermal literally means heat generated by earth. Various resource assessment carried out by agencies established the potential 10600 MWth /1000MWe spread over 340 hot springs across seven Geothermal provinces/11 states.

The availability of geothermal power is most environment-friendly power, round the year 24x7 basis, not affected by the severity of climate during 6 to 7 winter months like hydro and like dependence on sun in solar PV.

- **Nonrenewable energy**

Nonrenewable energy is derived from sources that will deplete or be depleted in our lifetimes—or even in many lifetimes. Coal, petroleum, and natural gas are the most common nonrenewable energy sources. In fossil fuels, carbon is the most abundant element. As a result, the Carboniferous Period (about 360-300 million years ago) is named after the time when fossil fuels were formed. All fossil fuels are made in the same way. Earth had a diverse terrain hundreds of millions of years ago, even before the dinosaurs. It was surrounded by swampy forests and large, shallow oceans. In these ancient wetlands, plants, algae, and plankton flourished. They absorbed sunlight and used it to produce energy via photosynthesis. The organisms drifted to the bottom of the sea or lake when they died. When plants and animals died, they had energy stored in them. The dead plants were crushed under the bottom over time. On top of them, rocks and other material piled up, causing extreme heat and pressure underground.

Plant and animal carcasses eventually transformed into fossil fuels in this ecosystem (coal, natural gas, and petroleum). There are large underground pockets (referred to as reservoirs) of these non-renewable energy sources all throughout the planet today. Advantages and Drawbacks Fossil fuels are an important energy source. Extracting them is relatively affordable. They can also be stored, piped, or shipped to any location on the planet. Burning fossil fuels, on the other hand, is bad for the environment. When coal and oil are burned, particulates are released into the air, water, and land. Some of these particles are captured and stored, but the majority is released into the atmosphere. Burning fossil fuels also disrupts Earth's 'carbon budget,' which maintains a balance of carbon in the ocean, on land, and in the atmosphere.

When fuel is combusted (heated), carbon dioxide is released into the atmosphere. The 'greenhouse effect' is a mechanism in which carbon dioxide traps heat in the Earth's atmosphere. The greenhouse effect is required for life on Earth, but it is contingent on a balanced carbon budget. For millions of years, the carbon in fossil fuels has been sequestered, or stored, underground. Earth's carbon budget is out of balance as a result of extracting this stored carbon from the earth and releasing it into the atmosphere.

Temperatures are rising faster than organisms can adapt as a result of this. Coal is a rock that is black or brownish in color. Coal is used to generate energy. Coal is rated according to the amount of 'carbonization' it has undergone. Carbonization is the transformation of ancient organisms into coal. Approximately 3 meters (10 feet) of solid vegetation was crushed into.3

meters (1 foot) of coal! The lowest rank of coal is peat. It has been carbonized the least amount of times. It is a vital source of energy in places like Scotland, Ireland, and Finland. The highest grade of coal is anthracite. Anthracite is found in areas of the world where massive earth movements, such as the building of mountain ranges, have occurred. The Appalachian Mountains, located in the eastern United States, are abundant in anthracite. Coal is mined from the earth and burned for energy. Underground and surface mining are the two methods for extracting coal.<sup>97</sup> Underground mining is employed when coal is found deep beneath the Earth's surface, up to 300 meters (1,000 feet) below the surface—deeper than most of the Great Lakes! Miners descend a mineshaft in an elevator. They operate heavy machinery that extracts coal from the subsurface and transports it to the surface. Cutting coal can generate hazardous gases, making this task hazardous.

The gases have the potential to produce explosions or make it difficult for miners to breathe. When the coal is found relatively close to the earth's surface, surface mining is performed. Companies must first clean the area before they can access the coal. They remove the trees and the dirt. The coal can then be more easily extracted from the earth. During this process, entire habitats are destroyed. Coal generates around half of the electricity in the United States. Our lights, refrigerators, dishwashers, and most other devices we plug in are all powered by it. When coal is burned, 'byproducts' are produced, which are likewise valuable. The byproducts are used to create cement, polymers, roadways, and a variety of other items. Coal is a dependable energy source.

We can count on it to provide fuel and electricity day and night, summer and winter, sunshine or rain. Coal use is also hazardous. Mining is one of the most hazardous occupations on the planet. Coal miners are exposed to hazardous dust and risk cave-ins and explosions while on the job. When coal is burned, various hazardous gases and pollutants are released into the atmosphere. Coal mining can also cause the ground to cave in, resulting in underground fires that can last for decades. Petroleum is a type of fossil fuel that is liquid at room temperature. It's also known as crude oil or oil. Underground rock formations encase petroleum. Oil bubbles up from the ground in some locations. Big pools of heavy oil rise up through the ground in the LaBrea Tar Pits in Los Angeles, California. The tar has preserved the remains of animals that were trapped there thousands of years ago! The majority of the world's oil is still buried deep

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<sup>97</sup> <https://education.nationalgeographic.org/resource/non-renewable-energy>

underground. To get to the oil, we have to drill through the ground. Some of the deposits are on land, while others are beneath the ocean's surface. Oil firms may extract petroleum 24 hours a day, seven days a week, 365 days a year once they start drilling with a 'drill rig.' Many effective oil sites are capable of producing oil for up to 30 years. They can sometimes generate oil for significantly longer periods of time. Companies dig offshore when oil is discovered beneath the ocean floor. They need to construct an oil platform. Oil platforms are among the world's largest man-made constructions! Oil must be refined once it has been drilled. Apart from carbon, oil contains a variety of compounds, and refining the oil removes some of these substances. We utilize oil for a variety of purposes. Gasoline is made from around half of the world's petroleum. The rest can be processed and used in liquid products like nail polish and rubbing alcohol, as well as solid products like water pipes, shoes, crayons, roofing, vitamin capsules, and a variety of other things. Advantages and Drawbacks Drilling for oil has some advantages.

Extracting it is relatively affordable. It also provides the local community with a consistent and stable supply of energy and money. Thousands of conveniences are provided by oil. It comes in the form of gasoline, which is a portable source of energy that allows us to travel. Petroleum is also included in a variety of products that we rely on. Gasoline, on the other hand, is damaging to the environment. Hazardous gases and pollutants are released into the air we breathe. It's also possible that an oil spill will occur. If the drilling apparatus fails, the oil in the well can burst and pour onto the ocean or the surrounding land. Oil spills, particularly offshore spills, are environmental disasters. Because oil floats in water, it can fool fish into believing its food and destroy birds' plumage. Another fossil fuel that is trapped underground in reservoirs is natural gas. Methane makes up the majority of it.

Methane is a gas that you may have smelled previously. In landfills, decomposing materials release methane, which has a rotten egg odor. Natural gas reserves are calculated in millions, billions, or trillions of cubic meters underground. Natural gas is discovered in deposits a few hundred meters underground, and firms have to drill straight down to bring it out. Natural gas, on the other hand, does not form in large open pockets. Natural gas is trapped in multi-kilometer-long rock formations. Some corporations utilize a technique known as 'hydraulic fracturing,' or fracking, to extract natural gas. Hydraulic refers to how they work with water, and fracturing refers to how they 'break apart.' The subterranean rocks are torn apart by high-pressure water. This allows natural gas trapped in rock formations to escape. They can send acid down the well

to dissolve the rock if it is too hard. They can even prop open the rock with tiny pieces of glass or sand to let the gas out. Natural gas is used to heat and cook our home. Electricity can also be generated by burning natural gas. Natural gas is used to power our houses' lights, televisions, air conditioners, and kitchen appliances. Liquid natural gas is created by converting natural gas into a liquid state (LNG). LNG is far more environmentally friendly than any other fossil fuel. Natural gas in liquid form takes up much less area than natural gas in gaseous form. The quantity of natural gas that would fill a large beach ball as a liquid would fill a ping-pong ball! LNG is easily stored and can be used for a variety of purposes. LNG has the potential to be a gasoline substitute. Natural gas is a 'cleaner' fossil fuel than oil or coal, and it is very affordable to obtain. When natural gas is consumed, it produces solely carbon dioxide and water vapor (the same gases that we exhale!).

This is a better option than burning coal. Natural gas extraction, on the other hand, might have negative consequences for the environment. Mini-earthquakes can be caused by fracturing rocks. High-pressure water and chemicals driven underground have the potential to spill into adjacent water sources. Drinking and bathing water sources can become contaminated and dangerous. Other sources of non-renewable energy Fossil fuels are the most common nonrenewable energy source on the planet. Others, however, exist. Nuclear Power Nuclear power is typically regarded as a nonrenewable energy source. Nuclear energy is a renewable energy source in and of it; however the materials used in nuclear power plants are not. Nuclear energy harnesses the enormous energy stored in an atom's nucleus, or core. Nuclear energy is obtained by splitting the nucleus of an atom, a process known as nuclear fission.

Nuclear power plants are complicated machinery that produces electricity by controlling nuclear fission. Uranium is the most common material used in nuclear power reactors. Despite the fact that uranium may be found in rocks all over the world, nuclear power plants typically use U-235, a highly uncommon kind of uranium. Uranium is a finite resource that cannot be replenished. Nuclear power is a widely used method of generating electricity all over the world. Nuclear power stations do not harm the environment or produce greenhouse gas emissions. They can be built in both rural and urban regions, and they do not harm the environment. Nuclear energy, on the other hand, is difficult to obtain.

Nuclear power plants are extremely difficult to construct and operate. Many localities lack the scientists and engineers necessary to create a safe and dependable nuclear energy program.

Nuclear power also generates radioactive waste. Exposure to radioactive waste can cause severe burns and increase the risk of cancer, blood disorders, and bone degeneration in those who are exposed to it. Energy from Biomass Biomass energy, which is a renewable energy source, can also be used to generate non-renewable energy. Biomass energy is derived from the energy contained in plants. Biomass energy is based on biomass feed stocks, which are plants that are processed and burned in order to generate electricity. Crops like corn and soy, as well as wood, can be used as biomass feed stocks. Biomass energy becomes a non-renewable energy source if humans do not replant biomass feed stocks as quickly as they use them.<sup>98</sup>Russia is a major oil and natural gas producer and exporter.

Given its significant oil and natural gas production, Russia's economy is fueled by energy exports. In 2016, oil and natural gas revenues made up 36% of Russia's federal budget revenue.<sup>99</sup>With average liquids output of 11.2 million barrels per day (b/d), Russia was the world's largest producer of crude oil, including lease condensate, and the third-largest producer of petroleum and other liquids (after Saudi Arabia and the United States) in 2016. In 2016, Russia was the second-largest producer of dry natural gas (after the United States), with an estimated output of 21 Trillion Cubic Feet (TCF).

In terms of energy, Russia and Europe are mutually reliant. Russia supplies both oil and natural gas, and Europe relies on it. Russia supplied more than a third of crude oil imports to the Organization for Economic Cooperation and Development (OECD) countries in 2016. In 2016, Russia supplied more than 70% of natural gas imports to those countries.<sup>100</sup>Russia's oil and natural gas exports, as well as the revenues generated by such exports, are reliant on Europe. In 2016, OECD Europe received approximately 60% of Russia's crude oil exports and more than 75% of Russia's natural gas exports.<sup>101</sup> In 2016, Russia was the world's fourth-largest nuclear power generator, with the fifth-largest installed nuclear capacity. As of October 2017, Russia

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<sup>98</sup> National Geographic, 'Non-renewable energy,' available at <https://education.nationalgeographic.org/resource/non-renewable-energy>

<sup>99</sup> Ministry of Finance of the Russian Federation, [Annual report on execution of the federal budget](#), (updated April 28, 2017).

<sup>100</sup> EIA estimates based [Global Trade Tracker](#) (subscription)

<sup>101</sup> <https://www.eia.gov/international/analysis/country/RUS>

was second only to China in terms of nuclear reactors under development, with seven reactors under construction.<sup>102</sup>

In 2016, Russia consumed 26.74 quadrillion British thermal units (Btu) of energy, the majority of which was natural gas, according to the BP Statistical Review (52 percent). Russia's consumption of petroleum and coal was 22 percent and 13 percent, respectively.<sup>103</sup> Sanctions and low oil prices have stifled foreign investment in Russia's upstream, particularly in the Arctic offshore and shale projects, and made project financing more onerous. In reaction to the Russian government's actions and policies in Ukraine, the United States imposed progressively stricter sanctions on Russia in 2014 through a series of executive orders.<sup>104</sup> The sanctions, among other things, hampered Russian enterprises' access to US capital markets, focusing on four Russian energy corporations: Novatek, Rosneft, Gazprom Neft, and Transneft. Exports of commodities, services, or technology to Russia in support of deep water, Arctic offshore, or shale projects were also forbidden.<sup>105</sup>

The European Union imposed similar sanctions; however, they differed in significant ways.<sup>106</sup> The United States approved new legislation in August 2017 that codified existing sanctions against Russia. This bill also expanded the prohibition on providing technology in support of new deep water, the Arctic offshore, or shale projects to include ventures anywhere in the world if a person or company already subject to sanctions owns 33% or more of the project. The bill also allows the President of the United States to impose additional sanctions on individuals or businesses that support energy export pipelines, but it does not obligate him to do so.<sup>107</sup>

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<sup>102</sup> International Atomic Energy Association, [Power Reactor Information Service](#), updated October 1, 2017.

<sup>103</sup> [BP Statistical Review of World Energy 2017 — Underpinning data](#) (accessed July 5, 2017)

<sup>104</sup> The United States first announced limited sanctions in March 2014. Additional US sanctions, including broader economic sanctions, were announced over the course of the year, through September 2014. For additional details see U.S. Department of State, [Ukraine and Russia Sanctions](#).

<sup>105</sup> 'Announcement of Expanded Treasury Sanctions...' <http://www.treasury.gov/press-center/press-releases/Pages/jl2629.aspx>, (accessed April 13, 2015).

<sup>106</sup> The European Union (EU) first announced limited sanctions in March 2014, and first announced broader economic sanctions in July 2014. For additional details see European Union, [EU sanctions against Russia over Ukraine crisis](#).

<sup>107</sup> [Countering America's Adversaries Through Sanctions Act, Title II—Sanctions with Respect to the Russian Federation and Combating Terrorism and Illicit Financing](#), (2017).



Following the sanctions, virtually all Western companies' involvement in the Arctic offshore and shale projects came to a halt. In recent years, the Russian government has granted special tax rates or holidays to promote investment in difficult-to-develop resources such as the Arctic offshore and low-permeability reservoirs, including shale reservoirs. Many multinational corporations have formed collaborations with Russian firms to seek Arctic and shale resources, attracted by the tax incentives and potentially large resources. ExxonMobil, Shell, BP, and Statoil have also secured shale exploration deals with Russian organizations. In 2012 and 2013, ExxonMobil, Eni, Statoil, and China National Petroleum Company (CNPC) teamed up with Rosneft to explore Arctic reserves.<sup>108</sup> Despite the March 2014 penalties, Total and Lukoil agreed to explore shale resources together in May. On the other hand, Total declined to participate in September 2014, when additional sanctions were issued later that year. Without the assistance of Western oil firms, Arctic offshore and shale resources are unlikely to be developed. These restrictions, however, will have a minimal immediate impact on Russian production because these resources are not projected to start producing for another 5 to 10 years at the earliest. These restrictions have had the immediate consequence of halting large-scale investments in these resources that Western companies had anticipated.

Oil prices fell by more than half in the first half of 2014, from an average Brent crude oil price of \$109/barrel (b) in the first half of 2014 to an average of less than \$50/b in January, as the US and the European Union imposed sanctions. The sanctions and the drop in oil prices have strained the Russian economy, making it more difficult for Russian energy companies to fund new projects, particularly those with greater costs, such as deep water, Arctic offshore, and shale. Lower oil prices have reduced Russian state revenues from oil and natural gas industries, causing the state's budget deficit to widen. As a result, the Russian government has undertaken or suggested various revenue-generating measures. Over the last few years, the Russian government has modified the mineral extraction tax and hydrocarbon export taxes multiple times.

The most recent adjustments and proposals for future changes have all favored increasing the taxes paid by oil and gas firms. In addition to taxes, the Russian government receives dividends from oil and gas businesses in which the government owns a stake. In April 2016, the Russian government ordered state-controlled enterprises to pay out a minimum of 50% of 2015 net

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<sup>108</sup> Henderson, James and Julia Loe, 'The Prospects and Challenges for Arctic Oil Development,' Oxford Institute for Energy Studies, (November 2014), p. 34.

profits in dividends, about double the dividend ordinarily paid out.<sup>109</sup> Both the tax and dividend increases have been criticised by oil corporations, who claim that they take funds away from capital expenditure initiatives. Rosneft negotiated a smaller dividend payout in 2016 based on similar grounds, although the company aims to pay out 50% of 2017 income as dividends.<sup>110</sup> The Russian government declared in January 2016 that it would sell some of its shares in several Russian enterprises, including Bashneft and Rosneft. Bashneft was one of Russia's top ten oil companies. The government sold its 50.08 percent controlling stake in Bashneft to Rosneft for \$5.3 billion in October 2016. The Russian government then announced in December 2016 that it had sold a 19.5 percent interest in Rosneft for \$11 billion. Glencore (a commodity trader) and the Qatar Investment Authority (QIA - sovereign Qatar's wealth fund) split the share equally. Glencore and QIA sold a 14.16 percent share in Rosneft to CEFC China Energy for \$9.1 billion in September 2017, keeping a 0.5 percent and 4.7 percent stake in the company, respectively. The Russian government owns a majority stake in Rosneft.

Increasing the price of oil and natural gas is another approach to boost revenue. To stabilize the oil market, the Organization of Petroleum Exporting Countries (OPEC), Russia, and several other oil-producing countries agreed to reduce output from January to June 2016. Russia agreed to cut output by 300,000 barrels per day (b/d) compared to October 2016 levels, with the complete reduction expected by the end of April 2017. OPEC and Russia have largely adhered to their agreed-upon production limits, and OPEC and non-OPEC countries met in May 2017 and decided to prolong output restrictions until March 2018.

West Siberia and the Urals-Volga regions produce the majority of Russia's oil. Production from East Siberia, Russia's the Far East, and the Russian Arctic, on the other hand, has been increasing.

According to the Oil and Gas Journal, Russia's proven oil reserves were 80 billion barrels in January 2017.<sup>111</sup> The majority of Russia's reserves lie in West Siberia, between the Ural Mountains and the Central Siberian Plateau, as well as the Urals-Volga region, which stretches all the way to the Caspian Sea.

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<sup>109</sup>Gazprom Bank, '50% dividend payout threshold approved for state-controlled companies,' (April 20, 2016).

<sup>110</sup>*Nefte Compass*, 'Rosneft to Hike Dividends at Kremlin's Request,' (June 29, 2017), p. 8.

<sup>111</sup>*Oil & Gas Journal*, 'Worldwide Look at Reserves and Production,' (December 5, 2016), p. 22.

Russia produced an estimated 11.24 million barrels per day of petroleum and other liquids in 2016, with 10.55 million barrels per day of crude oil and lease condensate consumed. In 2016, Russia exported more than 7 million barrels per day, with roughly 5.3 million barrels per day of crude oil and the rest in products and other liquids.

### **Sector organization**

Domestic enterprises control the majority of Russia's oil output. After the Soviet Union fell apart, Russia commercialized its oil industry. In the late 1990s, privately owned enterprises pushed the sector's growth, and several foreign oil companies attempted to enter the Russian market with varied degrees of success. The Russian oil industry has gradually condensed into fewer enterprises with greater governmental control. TNK-BP, a 50-50 joint venture and one of the country's biggest oil producers, was formed in 2003 when BP invested in the Tyumen Oil Company (TNK). The TNK-BP partnership was dissolved in 2012 and 2013, and the state-controlled Rosneft bought practically all of TNK-assets BP's.<sup>112</sup> Following the liquidation of Yukos assets, which Rosneft had acquired, Rosneft became Russia's leading oil producer in the preceding decade. Rosneft expanded its share of Russian oil output in 2016 when it bought a 50.8 percent controlling stake in Bashneft, the country's sixth-largest producer, from the Russian government. In 2016, the top five Russian oil companies (including Rosneft and Bashneft) accounted for more than 80% of total Russian oil production.<sup>113</sup> The oil industry involves several ministries. The Ministry of Natural Resources and Environment issues field licenses, supervises license agreement compliance, and imposes fines for environmental infractions. The Ministry of Energy is in charge of formulating and implementing overall energy policies. Hydrocarbon taxes are the responsibility of the Finance Ministry, while the Federal Antimonopoly Service regulates tariffs.

The Minerals Extraction Tax (MET) and the export tax are Russia's two main hydrocarbon taxes. Crude oil and petroleum products have different export taxes. To promote investment in refining infrastructure, Russia altered product export taxes in 2011 so that all export taxes were lower than the crude oil export tax. In recent years, the government has also granted special MET rates

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<sup>112</sup> BP, Working in Russia, (accessed August 4, 2016).

<sup>113</sup> Eastern Bloc Research, 'Oil production, mn tons,' *Russian Energy Monthly*, Vol XXX No. 11, (January 2017), p. 8. Note, the Eastern Bloc Research figures may include crude, condensate, and NGL.

or MET holidays for hard-to-develop resources such as the Arctic offshore and low-permeability reservoirs, such as shale reservoirs. The value of these previously agreed-upon MET discounts for challenging resources has increased due to recent changes in the MET rate.

Hydrocarbon tax rates altered once more on January 1, 2015. The 2015 tax manoeuvre is the name given to these moves. Previously, the export tax was roughly double that of the MET. For 2015, this tax strategy raised the MET and cut export taxes, with additional modifications planned for 2016 and 2017 to raise the MET and lower export taxes even more. The MET hikes were intended to roughly balance the reductions in export taxes, resulting in revenue neutrality, with no increase or decrease in overall taxes on the energy industry.<sup>114</sup> On January 1, 2016, the MET increased in compliance with a previously enacted tax maneuver. However, the Russian government passed a new law in late 2015 that postponed the corresponding reduction in export taxes. The MET on natural gas produced by Gazprom in 2016 was also significantly increased due to this rule. Several suggestions to increase taxes on the oil and natural gas business were made in 2016 and 2017 to close persistent federal budget deficits. The Finance Ministry intends to test a new tax structure in certain small fields beginning January 1, 2018. The new tax would be based on earnings rather than values, as is presently the case with the MET and export taxes. The profits-based tax might eventually replace the current tax structure, but the Finance Ministry's current suggestions are being met with considerable resistance.

### **Refinery sector**

According to the Oil and Gas Journal, Russia had more than 30 oil refineries with a total crude oil distillation capacity of 5.1 million b/d as of January 1, 2017.<sup>115</sup> Rosneft, Russia's largest refinery operator owns nine of the country's major refineries.<sup>116</sup> With four main refineries, Lukoil is Russia's second-largest refinery operator.<sup>117</sup> Many of Russia's refineries are older, simpler refineries that produce a huge amount of mazut, a low-quality fuel oil. Recent tax reforms have boosted the export levy on mazut and other heavy oil products to the same level as crude oil, further weakening less-complex refineries' already narrow profit margins. As refinery

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<sup>114</sup> Henderson, James, 'Key Determinants for the Future of Russian Oil Production and Exports,' Oxford Institute for Energy Studies, (April 2015), pp. 36-48.

<sup>115</sup> *Oil & Gas Journal*, 'Worldwide Refining Survey,' (December 5, 2016).

<sup>116</sup> Rosneft, Refining, (accessed September 9, 2017).

<sup>117</sup> Lukoil, Oil Refining, (accessed September 11, 2017).

improvements continued and firms reduced utilisation at less-complex refineries, Mazut production and exports fell dramatically in 2016.

### **Oil exports**

Russia exported more than 5 million barrels per day of crude oil and condensate in 2016. The Netherlands, Germany, Poland, and Belarus received the vast majority of Russian exports (70 percent).<sup>118</sup> Oil and natural gas industries contributed over 36% of Russia's federal budget revenue in 2016.<sup>119</sup> Although Russia is reliant on European consumption, Europe is also reliant on Russian oil production, with Russia accounting for more than a third of crude oil imports into OECD Europe.<sup>120</sup> In 2016, Asia and Oceania accounted for 26% of Russian crude oil exports, with China taking a larger share of total Russian exports. In 2016, Russia surpassed Saudi Arabia as China's leading crude oil supplier.<sup>121</sup>

Growing exports to independent refiners in China, sometimes known as teapot refiners, have contributed to the increase in Russian crude oil exports to China. Russian (Eastern Siberia Pacific Ocean - ESPO) crude oil does not have to travel to reach Chinese ports as Middle Eastern crude oil. Because of the shorter distance, Russian crude oil may be supplied in smaller volumes and more flexibility, making it more appealing to independent refiners. Transneft, Russia's pipeline company has a near-monopoly on its pipeline network, and most of Russia's crude oil exports must pass through it to reach neighboring nations or Russian ports for export. Smaller exports are delivered by rail and on vessels that load at terminals that are owned and operated independently. Russia also exports a significant amount of oil products. According to Eastern Bloc Research, Russia exported 1.3 million barrels per day of fuel oil and 990,000 barrels per day of diesel in 2016. During the same year, it exported smaller amounts of gasoline (120,000 b/d)<sup>122</sup> and liquefied petroleum gas (75,000 b/d).<sup>123</sup>

### **Natural gas**

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<sup>118</sup> Russian export statistics and partner country import statistics, Global Trade Tracker, (subscription).

<sup>119</sup> Ministry of Finance of the Russian Federation, Annual report on execution of the federal budget, (updated March 22, 2016).

<sup>120</sup> EIA estimate based on Global Trade Tracker, (subscription).

<sup>121</sup> Russian export statistics and partner country import statistics, Global Trade Tracker, (subscription).

<sup>122</sup> Eastern Bloc Research, 'Oil products trade, 2015, 2016,' Russian Energy Monthly, Volume XXX No. 12 (February 2017), p. 22.

<sup>123</sup> Clipper Data (accessed September 12, 2017).

Russia has the world's most significant natural gas reserves and is the world's second-largest dry natural gas producer. Although production from other companies has been expanding, the state-owned Gazprom dominates the country's upstream natural gas sector. According to the Oil and Gas Journal, Russia had the world's highest natural gas reserves as of January 1, 2017, with 1,688 Trillion Cubic Feet (TCF).<sup>124</sup> Russia's proven natural gas reserves account for around a quarter of the world's total reserves. The majority of these deposits are found in West Siberia's enormous natural gas fields. The Yamal–Nenets region of West Siberia is home to five of Gazprom's main active fields (Yamburg, Urengoy, Medvezhye, Zapolyarnoye, and Bovanenkovo), which collectively account for around one-third of Russia's total natural gas reserves. Gazprom, Russia's state-owned natural gas company dominates the upstream natural gas sector, producing around two-thirds of the country's total natural gas output in 2016.<sup>125</sup> While independent and oil firm producers have grown significantly, upstream options for independent producers and other businesses, including Russian oil majors, remain limited. Gazprom's dominant upstream position is further strengthened by its legal monopoly on pipeline gas exports.

### **Natural gas exports**

Nearly 90% of Russia's 7.5 Tcf of natural gas exports were piped to European clients in 2016, with the majority of these quantities going to Germany, Turkey, Italy, Belarus, and the United Kingdom.<sup>126</sup> The remaining was mostly shipped to Asia as LNG. Ukraine was Russia's third-largest natural gas importer in 2013, importing 0.8 Tcf from Russia.<sup>127</sup> Ukraine imported 0.4 trillion cubic feet of natural gas in 2016, none of which came from Russia.<sup>128</sup> Ukraine has reduced the volume of natural gas it buys from Russia and increased the volume it buys from its western neighbours due to a pricing and payment disagreement and wider tensions between the two countries. Ukraine, on the other hand, continues to serve as a transit country for pipeline natural gas exports from Russia to Western Europe, and much of the natural gas Ukraine purchases from Western Europe originates in Russia.

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<sup>124</sup> *Oil & Gas Journal*, 'Worldwide Look at Reserves and Production,' (December 5, 2016), p. 22.

<sup>125</sup> Eastern Bloc Research, 'Our Predictions: Gas Production, BCM,' *Russian Energy Monthly*, Vol XXXI No. 2, (April 2017), p. 13.

<sup>126</sup> Russian export statistics and partner country import statistics, Global Trade Tracker, (subscription).

<sup>127</sup> Russian export statistics and partner country import statistics, Global Trade Tracker, (subscription).

<sup>128</sup> Naftogaz of Ukraine, '2016 results: Ukraine procured all imported gas from Europe,' (February 3, 2017).

Natural gas export revenues accounted for almost 13% of Russia's overall export profits in 2015<sup>129</sup>. Although not as substantial as Russia's crude oil and other liquids export revenues, Russia nevertheless relies on Europe as a market for its natural gas. Similarly, Europe's natural gas supply is reliant on Russian supplies. Natural gas imports from Russia accounted for almost one-third of natural gas consumption in OECD Europe in 2015 and 2016.<sup>130</sup> Furthermore, Russia supplies practically all of the natural gas to various European countries, including Finland, the Baltics, and much of Southeast Europe.<sup>131</sup> Natural gas consumption in OECD Europe has been flat to dropping since the mid-2000s, pushing Russia to seek to Asia and LNG to diversify its natural gas exports. Sanctions imposed by the United States and the European Union (EU) in 2014 accelerated Russia's shift to the east, with Russia completing two pipeline deals with China in 2014 covering exports that may exceed 2.4 Tcf per year.

### **Liquefied natural gas**

Sakhalin LNG is Russia's only operational large-scale liquefied natural gas (LNG) export facility as of September 2017. This facility has been in operation since 2009, with the majority of the LNG sold under long-term supply agreements to Japanese and South Korean clients. Sakhalin LNG shipped 10.9 million metric tonnes (mt) of LNG (about 500 Bcf of natural gas) in 2016, with Japan accounting for 65%, South Korea for 23%, Taiwan for 10%, and China for 5%. (3 percent ).<sup>132</sup>

Russia changed its Gas Exports Law in 2013 to allow Novatek and Rosneft to export LNG, ending Gazprom's monopoly on all-natural gas exports. Yamal LNG is a project that started development in 2013 and is controlled by a consortium led by Novatek, which holds a 50.1 percent stake. Total and CNPC both own 20% of the project, while the Silk Road Fund (a Chinese government-run investment fund) owns the remaining 9.9%. By the end of 2017, the first of three liquefaction trains should be operational.

The three trains will each have a capacity of 5.5 million tonnes of LNG per year and will use natural gas from the South Tambeykoye natural gas and condensate field on the Yamal

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<sup>129</sup> EIA estimate based on data from UN Comtrade Database, (accessed September 12, 2017).

<sup>130</sup> EIA estimate based on data from BP Statistical Review of World Energy 2017 — Underpinning data (accessed July 5, 2017); Gazprom Export, Delivery statistics; and Cedigaz Statistical Database.

<sup>131</sup> EIA (2017), 'Russia Overview,' available at <https://www.eia.gov/international/analysis/country/RUS>

<sup>132</sup> Russian export statistics and partner country import statistics, Global Trade Tracker, (subscription).

Peninsula's northeast.<sup>133</sup> A number of other LNG terminal ideas in Russia are in varying stages of development .<sup>134</sup> Yamal LNG has ordered the construction of up to 16 ice-class vessels to deliver LNG from its arctic location. The ice-class tankers will transport cargoes west from the Yamal peninsula directly to Asian LNG markets for most of the year, transiting the Arctic Ocean and the Bering Strait. During the winter, when the direct route is impassable due to ice, cargoes will be transported west from the Yamal peninsula to Europe by ice-class tankers. The LNG will be loaded onto standard LNG ships in Europe and transported to Asia via the Suez Canal. Russian enterprises are also interested in establishing a network of small- and mid-scale LNG liquefaction facilities to meet remote natural gas demand and LNG transportation needs in Russia and nearby territories. There are already a few small-scale liquefaction plants in Russia with a combined capacity of less than 0.1 million metric tonnes of LNG per year. More than a dozen more small- and mid-scale facilities are planned or under development, with more than 5 million metric tons total annual capacity.<sup>135</sup>

As an alternate supplier to the Persian Gulf's unstable governments, Russia may well break into some global oil markets. Natural gas, on the other hand, is Russia's energy future. Continued Middle East problems, as well as growing concerns about pollution and global climate change, would surely draw attention to Russia's massive deposits of cheaper, cleaner natural gas in the coming decade. On the other hand, Russia's success in international gas markets is far from certain. It will be contingent on significant increases in production, foreign and local infrastructure expenditures, and the emergence of fully functional gas markets in Asia. For decades, gas and oil have been the lifeline of the Soviet and now Russian economies. About half of Russia's export revenues come from energy. "Every dollar increase in the price of a barrel of petroleum translates into around \$1.5-\$2.0 billion in additional yearly export profits." Energy exports accounted for over 90% of Russia's GDP growth between 1999 and 2000. Because of

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<sup>133</sup>Yamal LNG, About the project, (accessed September 6, 2017).

<sup>134</sup>azprom, Sakhalin II, Shtokmanovskoye field, LNG regasification terminal in Kaliningrad Region, and Baltic LNG; Shell, Sakhalin-2 – An Overview; Yamal LNG, About the Project; Pechora LNG, LNG Plant; Rosneft, Gas Strategy; Reuters, 'Novatek says some Arctic LNG-2 output would go to spot market,'(June 17, 2016); and Reuters, 'Russia's Gazprom delays Baltic, Sakhalin LNG projects,' (March 13, 2017).

<sup>135</sup> Henderson, James, 'Russian LNG: Progress and delay in 2017,' Oxford Institute for Energy Studies (March 2017), pp. 16–17 and International Gas Union, '.2012 – 2015 Triennium Work Report: Small Scale LNG,' (June 2015), p. 56.



rising oil prices, the economy achieved its best three-year performance since 1966-69 at the end of 2001.

During the 1990s, Russia's oil industry suffered a severe decline. Domestic oil demand fell by more than 40% from 1990 to 1995 as the economy deteriorated sharply, resulting in a domestic market oversupply. Capacity constraints in the country's pipeline system limited the countries lucrative oil exports. Russian oil production fell practically in half between 1988 and 1998, from 11 million to roughly 6 Million Barrels Per Day (MBD). Drilling and investment both dropped sharply. The unpredictability of the economic climate drove away international investors interested in the Russian oil industry. Russian oil appeared to be a money-losing proposition. The sector was revived by the August 1998 financial crisis in Russia, the devaluation of the ruble, and the subsequent though the unrelated rise in oil prices. The devaluation reduced Russian energy producers' input costs dramatically, while considerably higher oil prices increased profits even without additional investments or production increases.<sup>136</sup> Oil firms increased production and broadened their international reach in 2001. Russian corporations are drilling for oil in Algeria, Sudan, and Libya. LUK oil acquired a chain of gas stations along a stretch of the American East Coast in 2000 to refine crude oil to boost its position in the US. LUK oil bought refineries in Ukraine, Romania, and Bulgaria, while YUKOS acquired a controlling position in Transpetrol, a Slovak crude pipeline operator. The Putin government considerably improved the investment climate for overseas operators by implementing new regulatory instruments and setting tax rates in 2001.

Exxon Mobil announced a five-year \$4 billion investment in Sakhalin, Russia's energy-rich island in the North Pacific, in October 2001, making it Russia's largest single foreign investment to date. By the end of 2001, Russia had established itself as a serious worldwide player in the energy sector. New export pipeline extensions had been constructed, and a new Russian oil terminal on the Gulf of Finland was operational. Russia and the European Union have reached an ambitious agreement on long-term energy cooperation to boost Russia's oil supplies to its neighbor. The European Union already purchases more than half of Russia's total oil exports, accounting for around a quarter of the country's overall oil consumption.

### **Russian Oil Restrictions**

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<sup>136</sup>Fiona Hill (2002), 'Russia: The 21<sup>st</sup> Century's energy superpower,' available at <https://www.brookings.edu/articles/russia-the-21st-century-energy-superpower/>

Despite its recent progress, Russia will never displace OPEC as the world's leading oil producer. It will never equal OPEC's oil reserves in the long run. Russia is third in oil output, behind Saudi Arabia and the United States, with little over 7 million barrels per day. It comes second in terms of exports, with around 4 mbd, behind Saudi Arabia, close to 7 mbd. However, it ranks eighth in proved oil reserves, with only 5% compared to the OPEC countries' combined 77 percent. Because of OPEC's large reserve base, the International Energy Agency projects that gains in global production is predominantly from OPEC countries in the Middle East from 2010 to 20. The fact that Russia's recent oil industry expansion was caused by rises in oil prices rather than production is evidence of the country's reserve limits. Russia has yet to return production to the 11 million barrels per day high it reached before the fall of the Soviet Union. And, because of its high production costs and limited reserves, Russia will not expand its production capacity much further. Saudi Arabia spends a little more than \$5 to produce a barrel of oil; Russia spends twice as much. If the global recession and weakening global demand drive down oil prices, Russian oil corporations could easily find themselves in the same situation as in the 1990s. Oil is too unpredictable a commodity for Russia to stake its entire future.<sup>137</sup>

### **Turning up the gas**

Several people in Russia's energy complex believe this, and many Russian oil corporations are increasing their gas operations. Russia has significantly more gas reserves than any other country. Russia is what Saudi Arabia is to oil in terms of natural gas. Russia has much more confirmed world reserves than Iran (15%), Qatar (7%), Saudi Arabia and the United Arab Emirates (4%), and the United States and Algeria (2%) (3 percent). Gazprom, Russia's massive gas firm, has a quarter of the world's gas reserves, controls 90% of Russian output, and is the country's top hard currency earner. Its tax payments account for around a quarter of all federal tax revenues.

Natural gas is becoming more important, even though oil remains the world's most important fuel source. It already accounts for around 23% of global energy consumption and may shortly supplant coal (a little over 24% of global energy consumption). Gas has gone from a local commodity to an international company due to the increased use of liquefied natural gas and advancements in pipeline technology.

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<sup>137</sup>Fiona Hill (2002), 'Russia: The 21<sup>st</sup> Century's energy superpower,' available at <https://www.brookings.edu/articles/russia-the-21st-century-energy-superpower/>

Natural gas is the fastest expanding energy source in the European Union, thanks to environmental concerns and huge local reserves. Gas contributes 22% of EU energy consumption (oil accounts for 44%), and Russia has long been the EU's primary supplier. The EU purchases 62 percent of Russia's total gas exports, accounting for 20% of the EU's entire gas consumption. Russia has also been Turkey's main supplier since 1997, accounting for over 70% of the country's gas imports. Over the next 20 years, the Russian government plans to double exports to Turkey and Europe.

European gas corporations, such as Germany's Wintershall and Ruhrgas and Italy's ENI, invested heavily in Russia's industry during the 1990s. ENI and Gazprom are working together on the Blue Stream project, an underwater pipeline that will transmit Russian gas to Turkey across the Black Sea. Gazprom also plans to build a massive trans-European pipeline from its Yamal peninsula in northwest Siberia to Germany and a bypass pipeline around Ukraine to prevent siphoning and illegal gas sales from the existing line. It also plans to enlist Finland to construct another pipeline across the Baltic Sea from northern Russia to Germany. With record-high export sales of \$14.5 billion and net profits of \$3.3 billion at the end of 2001, Gazprom and Russian gas appeared to have a bright future. Northeast Asia has also emerged as a promising market. The region presently consumes around 20% of global energy and might account for a third of global energy demand in the next 20 years.

China, Japan, and South Korea would prefer to match that need by increasing their gas usage to reduce pollution and dependence on Middle East oil. China is particularly eager to transition from coal to gas to reduce coal's significant environmental impact. Gazprom of Russia appears to be ready to tap into Asian demand. Northeast Asia is served by three primary gas-bearing regions: Yakutiya in Eastern Siberia, Kovytko near Lake Baikal, and Sakhalin Island. Gazprom recently signed agreements to form joint ventures with three of China's major corporations.

### **2.3 THE CASPIAN BASIN AND RUSSIAN ENERGY GEOPOLITICS**

Russia's foreign policy has naturally been influenced by the importance of energy to the Russian economy and Russia's role as a significant oil and gas exporter. This was nowhere more visible in the 1990s than in the Caspian Basin, where vast oil and gas discoveries and increased interest and investment from US and international energy companies led to sharp differences between Russia and the US.

Russia's Caspian oil reserves are smaller than Azerbaijan, Kazakhstan, and Turkmenistan, three other former Soviet regional entities. During the 1990s, Russia and the three smaller countries fought over how to divide the Caspian Sea treasures and where new export pipeline lines should be built. For the better part of a decade, Russia attempted to maintain the old Soviet-era legal structure, which prohibited the partition of Caspian resources. It also fought tooth and nail against US-backed efforts to break its monopoly on existing pipelines and move Caspian oil to Turkey via the Caucasus.

The Russian government became more open to the delimitation of the Caspian Sea after the finding of bigger oil reserves than expected in the Russian portion of the Caspian and the unexpected surge in international oil prices. As Russian oil corporations grew in size, became worldwide participants, and sought new export markets, they urged for cooperation rather than hostility in developing the Caspian Basin. In October 2001, a new pipeline connecting Kazakhstan's Chevron-led consortium with Russia's port of Novorossiisk commenced full service. After years of opposition, LUKoil and YUKOS expressed interest in the US government's pet project, the Baku-Tbilisi-Ceyhan pipeline from Azerbaijan's fields, near the end of 2001. However, Russia and the United States remain at odds on other global oil problems, particularly Russian energy corporations' interests in Iraq. Once sanctions are lifted, LUKoil has a multibillion-dollar contract in Iraq to repair large oil resources. Iraq transferred rights to oil resources previously controlled by the French to Russia and Russian oil corporations in August 2001.

Disagreements over Iraq, US military deployments in Central Asia to support the Afghan campaign, discussions about Afghanistan's postwar reconstruction, and the media revival of a 1997 plan by an international consortium led by Unocal to build a gas pipeline from Turkmenistan to India via Afghanistan and Pakistan have all heightened the sense of regional competition.<sup>138</sup> In the Caspian, oil was the storyline of the 1990s, but if the attention moves to Central Asia, gas will be the storyline of the next decade. With the most confirmed deposits in Turkmenistan, Kazakhstan, and Uzbekistan, the Caspian is developing as a key new worldwide supply of gas. Iran is theoretically a Caspian state with exports and higher ambitions in regional

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<sup>138</sup>Fiona Hill (2002), 'Russia: The 21<sup>st</sup> Century's energy superpower,' available at <https://www.brookings.edu/articles/russia-the-21st-century-energy-superpower/>

markets, second only to Russia in gas reserves. If they work together, Russia and Iran are likely to control and direct Central Asian gas flows.

Russia controls Central Asian gas production and exports significantly more than Caspian oil. All existing pipeline routes pass via Russia, and Western energy companies have had little success in Central Asian gas production in Caspian oil. Russia and Iran will most likely dominate South Asia. Iran has agreed to act as a transit country for Turkmenistan's gas and has held extensive talks with Pakistan and India about exporting its gas. If required, Iran's projected pipelines will traverse Afghanistan and Pakistan to access the Indian market (with a pipeline under the Persian Gulf). Gazprom is extensively involved in developing Iranian gas and has its plans for a southern pipeline. Indeed, Gazprom outlined three primary markets for the corporation in its public statement of priorities for 2002: Europe, Northeast Asia, and South Asia.

### **An Emerging Energy Power, but Not yet 'Super'**

The economic situation is less favorable, even though geopolitics appears to benefit Russia's advantage in global gas markets. Gazprom's goals of concurrently penetrating three markets are unlikely to realize very soon, and it will require major foreign investment to maintain even its current exports.

Gazprom's output has decreased in recent years despite its vast reserves as the Western Siberian gas fields, which account for 75% of the current supply, have depleted. Despite improved export revenue and net profit in 2001, Gazprom's exports fell 4% short of its 2001 projections and decreased 3% over 2000 volumes. High prices, not output, have boosted Gazprom's revenues, as they do with oil. Gazprom also has an estimated \$11-\$13 billion in debt, and it has failed to improve its existing infrastructure over the last decade. There has only been one large new gas field brought online.

Industry analysts doubt Gazprom's ability to increase exports to Europe and build new pipelines and fulfill long-term contracts with Northeast Asian countries. According to them, Gazprom will need to keep control of Central Asian gas sources to supply European demand and require significant foreign investment to complete projects in Asia. To date, Gazprom's approach has been to export Russian gas to Western Europe's hard-currency markets, leaving Turkmenistan to supply former Soviet governments like Ukraine, which have fallen behind on their energy

payments to Russia. As regional states seek to build new markets and export routes, this policy will be difficult to maintain. There will be more disputes between Central Asian countries and Russia in the future.

Other suppliers in Northeast Asia compete with Gazprom, such as Australia, Bangladesh, Indonesia, and Malaysia. Even if it can supply the gas, demand in the short term is unknown. To allow energy markets to expand, Japan, China, and South Korea still require significant liberalisation and domestic infrastructural improvements. Japan is amidst a financial crisis and lacks a domestic natural gas pipeline network. Although South Korea has an extensive gas infrastructure, its market is too small to warrant the construction of overland pipelines from Russia through China and North Korea. China lacks the infrastructure to support large-scale home gas consumption and still requires transportation and distribution networks. While Russia is a significant player in global oil markets, particularly in Europe, it will never compete with or displace the Middle East and other OPEC nations in the long run. Gas is the future resource because of changes in global energy consumption and increased efforts to find alternatives to both oil and coal. Russia's gas reserves are enormous and, as of yet, unexplored. Russia has a unique reach due to its geopolitical location straddling Europe and Asia, with gas reserves stretching from west to east Siberia and the island of Sakhalin. Russia will meet rising natural gas demand thanks to major foreign investment, improved production, and the development of pipelines and other infrastructure. It will most certainly begin tapping into Asian markets in the coming decade, having already made significant inroads into European gas supply. Russia is on the verge of becoming a major energy player. In the coming years, it may become an energy superpower.<sup>139</sup>

### **Oil Price and its impact on Russia's economy**

Americans cheered a sharp drop in the price of oil and gas in the second half of 2014. For a country that imports much of its oil and whose residents consider gasoline to be a key monthly expense, cheap oil has a comparable effect as a tax decrease. In Russia, however, a drop in the price of oil has a quite different impact. Net importers benefit from a declining oil price. Some countries benefit economically when oil prices fall and suffer economically when they increase, while others experience the opposite. When oil prices are low, countries that gain from it tend to

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<sup>139</sup> Fiona Hill (2002), 'Russia: The 21<sup>st</sup> Century's energy superpower,' available at <https://www.brookings.edu/articles/russia-the-21st-century-energy-superpower/>

be net importers, meaning they buy more than they export. When performing more buying than selling, low prices are favored. Most countries that gain directly from cheap oil are developed countries with significant energy demands.

The United States, for example, exports a negligible amount of oil relative to what it imports, even though Americans use more oil than anyone else. As a result, the United States economy benefits from low-cost oil and gas. Lower import costs help the government budget, while Americans have more purchasing power since they spend less of their disposable income at the gas pump.

### **But Net exporters suffer when oil price drops**

The price of oil and the state of Russia's economy are fundamentally opposed. Russia suffers heavily when oil prices fall. Oil and gas account for more than 60% of Russia's exports and produce more than 30% of the country's GDP (GDP). The 2014 oil price fall had an immediate and severe impact on Russia's economy. The Russian ruble lost 59 percent of its value against the US dollar between June and December 2014. Along with neighboring Ukraine, Russia had the lowest Purchasing Power Parity (PPP) relative to the United States of any country in the world at the start of 2015. PPP declines reduce living standards by making products purchased in the home currency more expensive than they should be. Furthermore, lower pump prices benefit Russia less economically than the United States, because Russians consume far less oil and gas than Americans. Only around a third of Russia's oil production is kept for home consumption, with the rest being exported.

As observed in 2014, oil prices impact Russia's imports. Because Russia is a net importer of items like soybeans and rubber, the rapid rise in import prices caused by the collapsing ruble caused massive inflation, which the Russian government attempted to combat by raising interest rates to as high as 17%. As the United States discovered in the early 1980s, a quick and considerable interest rate hike can trigger a deep recession. For policymakers in any country,

fending against the simultaneous risks of fast economic contraction and rampant inflation is a risky proposition; for Russia, it is an unfortunate reality when oil prices fall.<sup>140</sup>

## **2.4 THE 5 BIGGEST RUSSIAN NATURAL GAS COMPANIES**

The natural gas industry is a vital aspect of Russia's economy. The energy sector is a staple of the investment world, accounting for around 60% of Russia's GDP in 2017 and 36% of its income in 2016.

Because it possesses some of the world's greatest known reserves, the country has some of its largest international oil and gas businesses.

Five of the largest Russian oil and gas companies, which assist in driving both Russia's and the world's economies, are listed here.

### **Gazprom**

Gazprom is the largest natural gas corporation in the world. It is a 75% government-owned corporation that focuses on geological exploration in Russia and natural gas and other hydrocarbon production, transmission, storage, processing, and marketing. The objective of Gazprom is to offer an effective and well-balanced gas supply to Russian customers, as well as to implement long-term gas contracts that export natural gas from Russia to other nations. It will have the world's greatest natural gas reserves by 2020.

### **Novatek**

Novatek is Russia's largest independent natural gas producer, as well as the country's second-largest natural gas producer behind Gazprom. The company is involved in natural gas and liquid hydrocarbon exploration, production, and processing.

As of the end of the year, Novatek had approximately 16,265 million BOE of proved natural gas reserves.

### **Rosneft**

Rosneft is Russia's petroleum industry's overall leader and one of the world's largest publicly traded oil and gas corporations. The corporation searches for, extracts, and manufactures

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Greg Depersio (2019), 'How does the price of oil affect Russia's economy?,' available at <https://www.investopedia.com/ask/answers/030315/how-does-price-oil-affect-russias-economy.asp>



petroleum products and petrochemicals and natural gas exploration and production. The Russian government's List of Strategic Enterprises and Organizations includes Rosneft.

### **Lukoil**

PJSC Lukoil Oil Company is a Russian company that was once government-controlled but is now the country's largest private company and the second-largest overall company, after Gazprom, as of 2020.

Exploration and production of petroleum products and natural gas are the company's primary operations. Lukoil is a prominent player in the energy business worldwide, specializing in (and found for) exploration and production in western Siberia, where the majority of the company's oil and gas deposits are situated.

### **Surgutneftegas**

Surgutneftegas is a Russian oil and gas corporation that was founded through the merger of several former state-owned firms. Petroleum, natural gas, and petroleum products are its primary interests, as are worldwide exports, particularly to Belarus. It employs more than 100,000 people and generated \$24.7 billion in revenue in 2020, making it Russia's sixth-largest corporation.<sup>141</sup>

## **2.5 DUTCH DISEASE**

The Dutch disease is a demand-side impediment with substantial supply-side consequences. Because it entails a rise in the exchange rate, the Dutch disease hinders investment even when businesses completely control the technology. Conventional economics tends to view economic growth solely in supply, focusing on education, a broader enhancement of human capital, scientific and technological advancement, innovation, and investments in machinery that raise worker productivity. However, as Keynes and Kalecki have proved, demand is not always created by supply, and as a result, it can become a major roadblock to economic growth. The massive human resource unemployment that exists in almost all developing countries with poor development rates proves beyond a shadow of a doubt that the major issue is frequently on the demand side rather than the supply side. Consumption, investments, public expenditure, and trade surplus contribute to demand.

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<sup>141</sup> Evan Tarver (2020), 'The five biggest Russian natural gas companies,' available at <https://www.investopedia.com/articles/markets/082615/5-biggest-russian-natural-gas-companies.asp#citation-6>

Still, investments and exports are the most important because they can be increased without incurring the costs of reduced savings, as with consumption, or the costs of fiscal imbalance, as with public expenditure.<sup>142</sup> They directly represent demand when commercial transactions are in a positive balance, but they also support demand's key variable, investments, which operate on both the supply and demand sides. As a result, exports are critical in addressing demand deficiency or unemployment issues.

When a country is still poor, that is, when it has not finished the Industrial Revolution and lacks investment capacity and a class of entrepreneurs and middle-class professionals to conduct investments, it will remain impoverished, and the problem will most likely be on the supply side. When it has already passed through this stage, usually due to profiting from its natural resources to begin a capitalist export activity, and has become a medium-income country, the main impediment to economic development will usually be on the supply side. There will be a chronic shortage of lucrative investment opportunities in sectors producing tradables. The main cause will be exchange rate overvaluation that affected the country. On the other hand, this inclination is thought to be primarily induced by the Dutch disease. The Dutch disease is a market failure caused by the availability of cheap and abundant natural resources that can be used to manufacture commodities that are compatible with a higher exchange rate than the one required to make other tradable sectors competitive. Because they can be profitable at a rate that is incompatible with the rate that other goods using the best technology available worldwide require, the respective commodities cause the exchange rate to appreciate because they can be profitable at a rate that is incompatible with the rate that other goods using the best technology available worldwide require. Resources are inexpensive because they provide Ricardian rents for the country; in other words, their costs and associated prices are lower than those on the international market, which are decided by the less efficient marginal producer admitted to this market. However, Dutch disease is not the main cause of the general trend toward exchange rate overvaluation in developing economies.

This trend, which impedes or stops countries from industrialising and growing, is caused by a number of variables, some of which are market forces and others which are the result of plans

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<sup>142</sup> there are two equilibrium exchange rates: the current equilibrium exchange rate, that balances intertemporally the country's current account, and is, therefore, the rate the market tends to determine, and the industrial equilibrium exchange rate, that enables industrial sectors using state-of-the-art technology; the Dutch disease occurs when those two equilibriums present conflicting values;

offered by affluent countries: the proposal of a financial deepening, that is, raising interest rates in developing countries to attract foreign capital; the exchange rate populism adopted by irresponsible politicians; the ever-present temptation of using exchange rate appreciation to control inflation; and the growth with foreign savings policy. The higher profitability of investments in developing countries is a structural condition related to a lack of capital; exchange rate populism is the polar opposite of fiscal populism: whereas fiscal populism involves the state organisation or apparatus spending more than it collects, resulting in chronic and irresponsible public deficits, exchange rate populism involves the nation-state or country spending more than it collects, resulting in chronic current account deficits;<sup>143</sup> the rise in the interest rate in the name of a financial deepening', the use of exchange rate anchors to control inflation, and particularly the growth with foreign savings policy are conventional orthodoxy policies repeatedly recommended to developing countries.<sup>144</sup>

The curse of natural resources, also known as the Dutch disease, is a chronic overvaluation of a country's exchange rate caused by its exploitation of abundant and cheap resources whose commercial production is consistent with an exchange rate that is clearly below the average exchange rate, allowing for tradable economic sectors to use cutting-edge technology. De-industrialization is a structural phenomenon, as Corden and Neary (1982)<sup>145</sup> have pointed out. Some authors (Baland and François, 2000<sup>146</sup>; Sachs and Warner, 1999 and 2001<sup>147</sup>; Torvik, 2002<sup>148</sup>; Larsen, 2004<sup>149</sup>) distinguish between Dutch disease and the curse of natural resources: whereas Dutch disease is a market failure, the curse of natural resources is a corruption or rent-

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<sup>143</sup> the more serious the Dutch disease is in a country, the more difficult will be its neutralization, and the lower the probability for this country to industrialize and grow;

<sup>144</sup> the resources from the tax created to neutralize the Dutch disease should not be invested in the country (unless they are used in order to stabilize the prices of commodities on which it will be imposed) but invested in an international financial fund so that the inflow of resources does not entail the revaluation of the local currency;

<sup>145</sup>Corden, W. M. and Neary, J. P. (1982) 'Booming sector and de-industrialization in a small open economy' .Economic Journal, 92(368): 825-848.

<sup>146</sup>Baland, Jean-Marie and Francois, Patrick (2000) 'Rent-seeking and resource booms' . Journal of Development Economics, 61: 527-542.

<sup>147</sup> Sachs, J. D. and A. M. Warner (1999) 'The big push, natural resource booms and growth' .Journal of Development Economics, 59: 43-76

(2001) 'The curse of natural resources' . European Economic Review, 45: 827-838.

<sup>148</sup>Torvik, R. (2001) 'Learning by doing and the Dutch disease' .European Economic Review, 45: 285-306.

<sup>149</sup> Larsen, Erling R. (2004) 'Escaping the resource curse and the Dutch disease. When and why Norway caught up with and forged ahead of its neighbors' . Statistics Norway, Research Department, Discussion Paper 377, May.

seeking problem that arises from the abundance of such resources in countries with a backward society and weak institutions. Although corruption is a problem in all countries, it is particularly acute in poor countries with abundant natural resources.

Because the Dutch disease is consistent with the intertemporal equilibrium of foreign accounts, it can have long-term detrimental consequences. It is a market failure because the sector that produces natural resource-intensive items has a negative externality<sup>8</sup> on the economy's other sectors, preventing them from flourishing despite the deployment of cutting-edge technology. It's a market failure when there's a disparity between the exchange rate that balances the current account (the market rate) and the exchange rate that allows efficient and technologically sophisticated economic sectors to function (which is the rate that economics predicts that efficient industries will be viable in competitive markets). The market will only be able to play its role in successfully allocating resources and fostering investment and innovation once the Dutch disease has been eradicated.

The Dutch disease is a long-standing issue, but it was only recognized in the 1960s in the Netherlands when economists discovered that the discovery and export of natural gas were appreciating the exchange rate and threatening to ruin the country's entire manufacturing industry. The first scholarly research on the subject was first published in the 1980s (Corden and Neary, 1982; Corden, 1984). There remains a scarcity of and insufficient literature on the issue. To achieve this, a sector that uses a country's natural resources must be significantly more productive than similar sectors in other countries, resulting in Ricardian rents (i.e., its market price should be determined on the international market by the less efficient producer the margin) or monopoly power. The market failure caused by Ricardian rents connected with the production and export of a limited number of goods generated with those natural resources is known as Dutch disease. Corden and Neary (1982) assumed a three-sector economy, two of which were related to tradable (the booming sector or natural resources sector, the lagging sector or manufacturing industry), and a third non-tradable sector. In a review of the research on Dutch sickness, Sachs and Warner (2001) explain it as a wealth shock in the natural resources sector causing excess demand in the non-tradable sector, resulting in a change in relative prices. The change in relative prices favouring non-tradable defines the appreciated exchange rate. Those three sectors are present in the model. Still, the emphasis is placed directly on the exchange rate, and the change in relative prices that causes it to appreciate is related to the Ricardian nature of

the rents that occur in the sector that uses cheap resources, not only natural resources but also labor itself.

Whereas in Ricardo's model, Ricardian rents benefit only the owners of the most productive lands, in the case of Dutch disease, they benefit, in the short run, the country's consumers who buy relatively cheaper tradables. Whereas in the classical model, the economy tends to stagnate, there will be quasi-stagnation of the country as a whole in the case of Dutch diseases. Unlike Ricardo's model, the overvaluation generated by Ricardian rents turned in Dutch disease can be offset. There is no difference in productivity among local producers, only in the country's productivity about the international price (that is, in the average productivity of local producers compared to other countries). There will be Ricardian rents among the producers if there is a difference in productivity. The exchange rate tends to settle on favoring the most inefficient local producer.

Even commodities made with cutting-edge technology are not commercially feasible in a competitive market when Dutch disease exists. If, all other elements of competitiveness being equal, an advanced technology company establish itself in a disease-affected country, it will only be viable if its productivity is higher than that of other competing countries, to the same or higher degree than the disease's appreciation. This fact leads to the conclusion that in countries suffering from Dutch disease, there are two equilibrium exchange rates: the current equilibrium exchange rate, which balances a country's current account inter-temporally and is thus also the market rate, the rate at which the market will converge; and the industrial equilibrium exchange rate, which allows the country to produce tradables without the need for duties and subsidies (it's the exchange rate that permits enterprises adopting cutting-edge technology to be profitable or competitive on average. The difference or connection between the two equilibrium rates is always imagined in nominal terms in this work; there is no need to discuss a real exchange rate because the main element is the difference or relationship between the two equilibrium rates. However, one must distinguish the nominal exchange rate from the effective-effective exchange rate, which is defined not only as the average exchange rate that results from taking into account the import duties and export subsidies that the goods are subject to (which would have only one adjective "effective"), but also as the average exchange rate that results from taking into account the import duties and export subsidies that the goods are subject to.

Although the presence of cheap labour does not result in Ricardian rents, it does have a similar effect to the presence of cheap natural resources. Inexpensive labour is a source of Dutch disease since the wage spread in developing nations is much wider than in developed countries. This circumstance is frequently prevalent because the wage gap between engineers and blue-collar employees in developing countries is wider. The industries that rely primarily on low-priced labour have a lower marginal cost than those more technologically advanced. As a result, the exchange rate tends to converge on a level that makes exporting items made using low-wage labour profitable.

When this happens, and because the wages of highly skilled workers and managers are disproportionately higher, goods made with more advanced technology and more expensive labour will suffer economically. Because more advanced companies use more skilled personnel, wages must be higher in those industries. Suppose the wage gap between an unskilled worker and an engineer, for example, was 3 to 4 times what it is in rich countries. In that case, the country could create all types of things with inexpensive labour with no technical or administrative obstacles. However, if this wage differential is larger, say 10 to 12 times, compared to 3 to 4 times in rich countries, as is usually the case, the extended Dutch disease will exist and become a serious impediment to economic growth, because industries with higher technological content will require a higher exchange rate than the current market-determined equilibrium exchange rate. The broader idea of Dutch disease is not the only one. Still, it is unquestionably one of the main reasons dynamic Asian countries keep their exchange rates low and avoid appreciation. Without regulating its exchange rate, China, for example, would never export the more sophisticated commodities that it does. By doing so, it maintains the exchange rate at the necessary level, namely, the industrial equilibrium exchange rate, which allows its advanced manufacturing industries to remain economically viable. The symptoms of the Dutch disease are as follows:

1. A quick appreciation of the domestic currency resulted from increased export revenues and, as a result, currency demand.
2. An increase in the economy's actual wages. The resource sector's increased profitability due to rising resource prices drives wages up. If workers are sufficiently mobile between sectors, their migration to the resource sector puts upward pressure on salaries in other areas, restoring equilibrium.

3. An increase in the service industry. Windfall export revenues boost national income, which in turn boosts service demand.
4. A reduction in industrial output. Because the natural resource sector offers higher rents and returns on investment, increased productivity in the resource sector drives labour and investments away from the manufacturing sector.

In addition, the growing services sector drains non-resource tradable sector factors of production. All of this leads to more significant production costs (e.g. wages). Furthermore, the strengthening of the domestic currency raises the cost of manufactured goods, making them less competitive in both domestic and international markets.

These factors contribute to poorer industrial profitability and a slower (or even negative) growth rate. As a result of the de-industrialization process (shifting manufacturing to the resource sector), the economy has become overly reliant on the resource sector, potentially limiting growth potential.

This can be viewed as a "normal" economic specialization and the adaption of a natural economy. However, it may have a detrimental impact on overall economic growth and employment. Furthermore, in the long run, a lack of economic diversity may contribute to economic vulnerability and volatility and a heavy reliance on global resource prices. Last but not least, natural resources are finite.<sup>150</sup>

### **Dutch disease in Russian region**

The impact of Russia's oil and gas abundance on long-term economic performance and institutional development is not a new topic of discussion. The effects of energy resources on the Russian industrial system are one of the major problems. With a large resource industry and a disproportionate percentage of oil and gas exports, energy resources are frequently blamed for the economy's lack of diversification. Perhaps the most widely debated mechanisms hypothesized to explain the impact of natural resources on economic performance are the Dutch disease and the institutional resource curse.

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<sup>150</sup>Ploeg and Poelhekke (2008) have another interpretation of the decrease in long-run growth in countries with large natural resources. They indicate that rather than the natural resource price level or trend, it is its volatility which could harm the long-run growth, because growth depends negatively on volatility of unanticipated output growth. Indeed, they find that the possible positive effects of resources on growth may often be swamped by the indirect negative effect through volatility. This issue is also relevant for Russia, given the high volatility of oil prices, which has even increased recently.

A resource boom and the consequent high resource prices move production factors away from manufacturing industries and toward resource and non-tradable sectors in an economy struggling from the Dutch disease. As a result, a country experiencing a resource boom will have slow-growing manufacturing and an under-diversified economic structure. Economic development may be slowed because the industrial sector is often the primary growth driver. Instead, if an economy suffers from the institutional 'resource curse,' the interaction of weak institutions and bad incentives caused by resource rents causes manufacturing to grow slowly and development to be delayed.

Importantly, mitigating the detrimental effects of these two channels will necessitate different policy actions. In the event of Dutch disease, a government can rely on direct industrial policy tools to improve the manufacturing sector's competitiveness and isolate it from the effects of rising resource prices. It can, for example, utilize subsidies or specific trade policy instruments to channel money out of the economy, or it can invest reserve fund money abroad to channel money out of the economy.

The mechanism of the Dutch disease suggests two ways in which a resource boom harms the manufacturing sector. A resource boom, for starters, necessitates the reallocation of production elements from other sectors of the economy, such as manufacturing or services, to the resource sector, a phenomenon known as the 'resource reallocation impact.' Second, a boost in demand for all goods and services results from more revenue generated by a resource boom. Different sectors will respond to this growth in demand in different ways, depending on how exposed they are to global markets. There will be an increase in pricing and output in non-tradable industries that are not subject to foreign competition. As a result, prices on domestic factor markets will rise. The price of tradable industrial sectors is set worldwide and cannot be changed domestically. As a result of the "spending effect," production factors will reallocate away from manufacturing and into non-tradable sectors. Depending on the sectoral specificities, the degree of each effect is expected to vary across different manufacturing subsectors. Through the "resource reallocation effect," subsectors with larger economies of scale are more likely to be affected by the outflow of factors towards the resource sector. The "spending effect" is also likely to affect subsectors more open to international trade.<sup>151</sup>

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<sup>151</sup>Elena Paltseva et.al. (2018), 'Is there a dutch disease in Russian regions?,'available at <https://freepolicybriefs.org/2018/03/19/dutch-disease-russian-regions/>



By the end of 2013, the Russian economy had entered a slump. This resulted from a Dutch Disease-enforced combination of fundamental (middle-income trap) and market reasons (oil price depreciation and international sanctions). After a long period of depression, the economy found itself in a position of negative stability, resulting in a stable equilibrium with low indicators.

Given that current global economic trends necessitate new industrialization, the Russian economy has been confronted with several tasks involving contradictory conditions, such as changes in interest rates and taxation, which do not conflict with maintaining budget stability on the one hand and stimulating growth on the other. Recent geo-economic developments have compelled us to reconsider the social sciences' ability to predict the future.

International and national specialists began to make predictions, the majority of which predict severe reversals in global economic policy: the current international economic order will be disrupted. There is a distinct category – ‘black swans,’ created by N. Taleb<sup>152</sup> - to characterise such events, anomalous and unpredictable current analytics with major impact on life and quite readily explained retrospectively.

Despite the importance of such events for the Russian economy and attempts to dismiss the reported unfavourable trends, the base of the issues is different. The middle income trap, which occurred in conjunction with the accomplishment of average per capita income as well as resource reliance, undermining the competitiveness of the economic model in the long run and concentrated in the ‘Dutch disease,’ is one of the features of Russia's vulnerability today. Is the catastrophic fall in our economy since 2014 a result of its resource dependency and the middle income trap, or has this position become a ‘black Swan’ for us in terms of economic policy? In the first situation, the answer will be technical: sectoral restructuring, reindustrialization, and diversification, as well as institutional reforms. This is a long yet straightforward path. In the second scenario, there will be an issue of future permanent readiness. This will necessitate a substantial amount of resources, which will be unavailable for the development of reserves and their haphazard application.

The need to handle these difficulties in the context of the Russian economy's inevitable transition to a new industrialization strategy has exacerbated the economic predicament. Without its implementation, the country's position in the global community may be jeopardized .Macro-

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<sup>152</sup>Taleb N. The Black Swan.The impact of the highly improbable, Randonme House, 2007.

regulators were confronted with contradictory tasks as a result of the confluence of causes that led to the crisis.

It is a decision on the interest rate in monetary policy: to push the economy out of the crisis, it is required to lower it; nevertheless, to avoid a probable outflow of capital during the crisis, it is necessary to raise it. In fiscal policy, decisions on tax exemptions: they should be reduced in the interests of economic progress, but fiscal stability necessitates an increase.

#### I. Resource dependence and the middle income trap as the fields of research

##### A. Theory of economic policy in resource-dependent countries: institutional deadlocks and the problem of reconciling interests.

Many economists believe that the ‘Dutch disease’ causes not only economic problems, but also significant institutional inequities. The resulting low-quality institutions worsen the economy's inadequacies in responding to the crisis and make it more difficult to recover. At the same hand, such institutions are extremely stable, and they can easily become institutional traps or deadlocks. The term ‘resource curse’ was coined by R. Auty<sup>153</sup> and developed by J. Sachs and A. Warner in the 1990s<sup>154</sup> to describe this complex dilemma.

Economic policy in resource-dependent economies, which have a number of characteristics, has received a lot of attention. First and foremost, the work devoted to the analysis of Norway's successful experience in overcoming the risk zone of ‘Dutch disease’ and implementing a fairly liberal version of monetary policy that does not generate any tendency to accelerate inflation, hypertrophied expansion of the money supply, or excessive strengthening of the national currency<sup>155</sup>. However, the positive example of Norway is not representative and, for institutional reasons, is of little use in other nations. Many scholars who study monetary policy in resource-exporting countries conclude that, in the end, the monetary strategy chosen is decided by the ratio of characteristics that characterize export price dynamics and the share of domestic consumption occupied by imported commodities. The most highlighted subject in the study of the peculiarities of the growth of resource-dependent economies is the distortion of the

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<sup>153</sup>Auty R.M. *Sustaining Development in Mineral Economies: The Resource Curse Thesis*, London: Routledge, 1993.

<sup>154</sup>Natural Resource Charter (2nd edition, 2014), Received from [http://www.resourcegovernance.org/sites/default/files/NRCJ1193\\_natural\\_resource\\_charter\\_19.6.14.pdf](http://www.resourcegovernance.org/sites/default/files/NRCJ1193_natural_resource_charter_19.6.14.pdf).

<sup>155</sup>Gausdal S.G. Inflation targeting, Norges Bank, Received from (www.norges-bank.no/tamplates/article\_17891.aspx)

economy's institutional structure, which leads to failures of economic policy efficacy. As is well known, the 1973-1974 oil boom resulted in a spike in corruption, ownership structure distortion, increased borrowing, and, as a result, catastrophic damage to the public sector.

A. Gelb<sup>156</sup>, J. Sachs, and A. Warner<sup>157</sup> set the groundwork for this phenomenon's study. R. Auty, who not only collected the accumulated experience of studying the subject, but also made a substantial contribution to its development<sup>158</sup> was the systematizer of the thoughts of scholars in this field. Based on M. Corden's concept of the 'Dutch disease,' the authors show that a short-term economic boost resulting from a wave of oil and gas revenues to the country leads to gradual deindustrialization, deterioration of economic growth quality, and, in most cases, a slowdown, if not a halt, in the long run.<sup>159</sup>

Even if oil prices remain high in the medium term, the real exchange rate of the national currency in exporting countries is rising, while net exports are declining due to the crowding-out effect in the open economy. The non-commodity sector's competitiveness is gradually exhausting the influence of the positive price shock on the economy. This is referred to as 'Dutch disease.' In other words, exporting natural resources while simultaneously substituting imports for local goods production almost always reduces the exporting country's real potential, weakening its economy. Most researchers have come to this conclusion. In this situation, a drop in oil prices will almost always result in a sharp deterioration in the balance of payments, resulting in a high probability of a currency crisis and devaluation of the national currency in one of the scenarios formalized in P. Krugman's known models of currency crises.<sup>160</sup> Currency and financial crises, as well as a halt in economic growth and a drop in per capita income in oil exporting countries (Russia, Mexico, Venezuela, Nigeria, and others), occur when global energy prices fall. We should also take note of studies that show that the challenges of resource-rich countries are caused not so much by the presence of a substantial resource component in their economy as by their failure to effectively dispose of and reinvest the wealth generated by it. K. Brunnschweiler, in particular, demonstrated that many of the world's economic leaders created

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<sup>156</sup> Gelb A. *Oil Windfalls: Blessing or Curse?* N.Y.: World Bank Research Publications, 1988.

<sup>157</sup> Sachs J.D., Warner A.W. *Natural Resource Abundance and Economic Growth*, NBER Working Paper, 1995.

<sup>158</sup> Auty R.M. (ed.) *Resource Abundance and Economic Development*, Oxford University Press, 2001.

<sup>159</sup> Corden W.M. *Booming sector and Dutch disease economics: survey and consolidation*, *Oxford Economic Papers*, 36 (1984).

<sup>160</sup> Krugman P. *Currencies and Crises*, MIT Press, 1993.

their economies in the context of abundant resources a century ago.<sup>161</sup> The abundance of resources did not result in the consolidation of weak institutions, which posed a barrier to these countries' long-term economic success.

As a result, the researchers conclude that resource availability does not always imply a 'resource curse': to avoid this, it is vital to build a strong industrial sector that will develop available resources, add new value, and ensure quality and long-term economic growth. On the way to the establishment of such an economy, however, there are numerous hazards and low-quality institutions that obstruct sustainable development.<sup>162</sup>

The studies of H. Mehlum, K. Moene, and R. Torvik, in particular, bring to light the problem of 'grabbering' as a specific institutional phenomenon that unavoidably arises in a resource-dependent economy.<sup>163</sup> The fundamental cause of economic failures, according to the authors, is the state's institutional deficiency in forming institutions focused on supporting the development of the sector (producer social institutions) at the early phases of resource deposit development. Poor-quality institutions that stifle economic progress (grabber-friendly institutions) are strengthening in such an environment. These institutions achieve short-term objectives, knowing that the state will eventually abolish them. As a result, their policy is to monetize the value of existing resources as quickly as possible. Because grabbers are stronger and more adaptable than producers, their proportion of the economy is rapidly expanding, impeding the latter's progress. The economy is shifting its focus away from production and toward redistribution. Furthermore, as the number of 'producers' declines, 'grabbers' become more competitive for the right to redistribute. Armed confrontations and, in some cases, civil wars result (for example, Nigeria and Angola). As a result, in the worst-case scenario, economic growth becomes impossible in such circumstances. Finally, resource-dependent countries adopt a fairly standard economic policy of pumping money into the economy in the short term in the hopes of achieving economic

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<sup>161</sup>Brunnshweiller C.N. Cursing the Blessing? Natural Resource Abundance, institutions, and Economic Growth, ETH Economics Working Paper, 2006, № 51.

<sup>162</sup>Hartwick, J. Natural Resources, National Accounting and Economic Depreciation, *Journal of Public Economics*, 1990, Vol. 43, pp. 291-304

<sup>163</sup>Mehlum H., Moene K., Torvik R. Cursed by Resources or Institutes? Norwegian University of Science and Technology. Economic Department, Working Paper Series, 2005, № 10.

breakthrough..<sup>164</sup>They usually limit large currency inflows during high global market circumstances to avoid inflationary spikes (for example, Russia from 2002 to 2008). In the worst-case scenario, even this is not done. The country reaps super-profits from resource exports during years of good market conditions while also suffering from ‘Dutch disease’ when the market falls (for example, Venezuela).

The macroeconomic policy sterilizes the economy's surplus liquidity in most circumstances. Meanwhile, a structural, industrial policy and new industrialization are required, capable of channeling export income into investment and developing promising economic sectors (Norway, UAE). However, as previously stated, this is complicated by the fast consolidation of inadequate institutions in most nations.

As a result, different options must be explored to meet the strategic economic goals.

#### B. Ongoing research of the middle income trap

While the ‘Dutch disease’ is primarily to blame for the deindustrialization of the resource-based economy, the causes of the middle income trap are more fundamental. The middle income trap is a period of severe and sustained economic slowdown that occurs when a person's average level of well-being is reached.

According to B. Eichengreen, once a country reaches the average level of income per capita (\$16000 in 2005 prices), it begins to slow down and eventually enters a state of stagnation, if not recession.<sup>165</sup> Simultaneously, expansion may be qualitative, as a result of industry and technology, or it could be quantitative, as a result of high oil prices. The country cannot change the structure of its economy or replace its exhausted potential development model as it approaches a growth ceiling. There is an excess of factors of production in the economy from the previous model, resulting in a decrease in productivity under the new conditions. Following several years of stumping in the trap (up to seven years, according to the study), there should be a considerable time of recovery, the success of which is not guaranteed – the country could remain stuck. It isn't easy to get out of the bind. Capital productivity is dropping, the factor of new technologies is practically non-existent, the government is confounded, and inequality is

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<sup>164</sup>Kuzminov F.I., Bereznoy .V.A, Bakhtin P. Global energy challenges and the national economy: stress scenarios for Russia’ Foresight, 19 (2), Received from <http://www.emeraldinsight.com/doi/pdfplus/10.1108/FS-06-2016-0026> doi: 10.1108/FS-06-2016-0026

<sup>165</sup>Eichengreen B. Escaping the Middle Income Trap, manuscript prepared for 2011 Economic Policy Symposium held by Federal Reserve Bank of Kansas City.

rising, preventing the economy from recovering. Income inequality is acceptable during the early stages of economic growth, according to S. Kuznets' hypothesis, but afterward it either begins to fall (in successful countries) or inhibits economic growth. According to B. Eichengreen's research, high-quality exports and human capital lessen the likelihood of traps worsening, but resource dependency increases them. The exhaustion of cheap growth sources, according to some economists, is at the heart of the problem.

Using more thorough data, B. Eichengreen discovered that the country was caught twice, once at \$11000 per capita and again at \$16000.<sup>166</sup> Russia had already escaped the trap in 2007-2008, but everything was well following the 2008-2009 crisis (when growth slowed but real income remained unchanged). It has been observed that countries with a high proportion of technological exports are less vulnerable to a downturn. Assist this high-quality human resource. Furthermore, data suggest that rising from a low base to an average level is easier than rising from an average to a high level. V. Inozemtsev defines the trap as a situation in which 'the rising welfare of the people causes salaries to become too high for the country to compete with less developed countries at their expense, yet there is insufficient skilled labor to compete with more developed countries.'

People aspire to earn as much as they can in a developed country, but they can only work as much as they can in a developing country'.<sup>167</sup> This is combined with the behavior of the elites, who have grown accustomed to periods of rapid development to super-profits and are unwilling to set limits, so increasing inequality and shifting the severity of the crisis to the middle class (this is an institutional problem). One of the most important responsibilities that arise in the state of the trap, according to economists, is to restore productivity growth. According to Eichengrin's research, the spectacular increase in 'total productivity of factors of production,' and, in particular, the expansion of the labourmarket, was responsible for most of the rapid growth before to the shutdown. This can be attributed to technical advancements, urbanization, a huge migration of labour to more efficient industries, and an improvement in the quality of human capital due to the country's rising educational standards. A rapid drop in production growth

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<sup>166</sup>Eichengreen B., Donghyun P., Kwanho S. When Fast Growing Economies Slow Down: International Evidence and Implication for China, NBER Working Paper Series, 16919, Received from [http://www.nber.org/papers/w16919.pdf?new\\_window=1](http://www.nber.org/papers/w16919.pdf?new_window=1)

<sup>167</sup>Inozemtsev V. Trap of low income. What is the main challenge for Russia?, Forbes, 28.09.2017, Received from <http://www.forbes.ru/biznes/349681>.

causes the eventual halt. This can occur due to a technical shock (the inability to swiftly master more complicated technologies that allow for further productivity increases) or the depletion of the supply of inexpensive labour.

Traditionally, governments have attempted to kick-start worker productivity growth through increased investment, tax manoeuvres, and a resumption of the 'new industrialization' policy based on new technologies. As history has shown, major systemic reforms, such as the struggle against corruption and bureaucracy and the modernization of institutions, are met with resistance by the elite.

However, the state can compel them through top-down changes, which is the most profitable situation as world experience has shown.

As a result, dynamically growing economies slow down as a simple means to raise productivity to developed-country levels run out. The middle-income trap emerges when the economy can no longer rely on technology borrowing and simple replication of excellent practises, such as reallocating resources from low-productivity agricultural to higher-productivity agriculture. The country's ability to maintain high growth rates is becoming increasingly challenging, and it will finally come to an end. Russia is a good fit for this viewpoint. Import substitution, a surge in commodity prices, and capital inflows fueled economic expansion from 1999 to 2008. The real GDP has nearly doubled.

The presence of significant unused resources leftover from the time of large reforms, which were redirected to more productive sectors of the economy, resulted in a significant increase in productivity, which was due, among other things, to the presence of significant unused resources left over from the time of large reforms. It is self-evident that such issues exacerbate the economy's transition to new industrialization. Their inability to address the plan, on the other hand, jeopardizes the progress. From an institutional standpoint, the trap means that the economy is caught between two development patterns. Given the elites' unwillingness to change the system, the only way out is for education and the service sector to thrive, i.e., areas where rapid growth and large employment are likely. The Russian economy will most likely continue to move in this direction. However, we must recognise that, while breaking free from the middle-income trap will alleviate one of our economy's core challenges, it will not cure all of the problems at once.

## **II. Logistic macroeconomic policy in current environment**

The economy's severe resource dependence is the first of these causes. Despite periodic statements that the Russian economy is diversifying and that the ruble's quotations are less sensitive to swings in oil prices, the problem remains significant. The fact that the same oil prices were accompanied by various rates of economic development and budget conditions in different years does not speak well for the qualitative improvements in the country's economy over the last decade.

Resource reliance has grown, making it impossible to maintain respectable growth rates at moderate oil prices, sufficient for a quick economic recovery until recently. Because the status of the budget is so reliant on mismanaged oil prices, authorities have decided to compensate for dropping revenues by raising the tax burden on the private sector, which cuts disposable incomes and aggregate demand when the economy most needs them to sustain growth. Even though the emergence of the Stabilization Fund in 2004 alleviated the economy's basic symptoms of the 'Dutch disease,' the 'carrier' was the state, which became reliant on oil prices for its budget. In light of the theory mentioned above concerning the previous economic model's failure in the face of a non-diversified economy and depleting reserves, the authorities have just one tool at their disposal to sustain nominal budget revenues. These are equalising devaluations, which can drive recovery growth by substituting real imports, but only after real incomes have collapsed. This casts a pall over the economy's immediate prospects, because even without it, real disposable income is falling for the fourth year in a row, pushing down consumption - the most important component of aggregate demand. All of this raises doubts about the possibilities for a rapid economic recovery.

The primary reason for the slowdown in economic development in Russia at the end of 2013 was the economy's fall into the average income trap, based on an analysis of the dynamics of selected indicators of the Russian economy. Many countries and international experience tell us that competent economic management allows us to break out of the three-year trap. The trap was worsened in our situation by the exhaustion of the previous model's potential and the inability to diversify and break free from resource dependence. Finally, a series of government choices resulted in an unfavourable economic growth of the international market background. The new industrialisation can resolve several economic issues, and the resolution of these issues will add to the reindustrialization's success. As a result, a reflexive system with positive feedback exists.



And this poses a significant economic policy dilemma. As a result, the Russian economy was confronted with two major challenges.

It fell into the middle-income trap and the deindustrialization trap, losing both at the same time and growth of the industry. In many ways, Russia's economic performance is remarkable. The macroeconomic stabilisation and recovery of the economic condition have been spectacular following the 1990s, characterised by economic disarray and the 1998 crisis. From 1999 through the financial crisis of 2008, real GDP growth averaged 7% per year, with rising consumption and a gradually declining unemployment rate.

Despite a slowdown in the economy due to the global financial crisis, GDP is predicted to begin growing again in 2010.<sup>168</sup>

The condition in the global market for natural resources is one of the elements that has contributed to this progress. After a drop in 1997-1998, the crude oil price began to rise, rising from \$10 to \$100 per barrel between 1999 and 2007. The price has been extremely erratic since then, but it is still much greater than it was at the beginning of the 2000s.

This resulted in a windfall increase in export profits for Russia, as well as a massive influx of 'petrodollars.' As a result, the fundamental priority of Russian monetary policy in recent years has been to avoid the nominal appreciation of the rouble. The Bank of Russia's biggest efforts after 1999, according to Vdovichenko and Voronina (2004)<sup>169</sup>, were directed at changing the smoothness and level of the currency rate, rather than the inflation rate.<sup>170</sup> Furthermore, as Dobrynskaya (2008)<sup>171</sup> claims, Russia's monetary policy was uneven, with appreciations eased while depreciations were accommodated. The Central Bank of Russia officially admitted in its policy guidelines that it 'constrained rouble appreciation in order to help maintain the competitiveness of Russian goods on international and domestic markets' in recent years, and that 'the Bank of Russia and the Ministry of Finance (the administrator of the stabilisation fund)

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<sup>168</sup> Sources: IMF and OECD forecasts.

<sup>169</sup> Vdovichenko, Anna, Voronina, Victoria (2004), 'Monetary policy rules and their application in Russia', EERC Working paper series No 04/09. Moscow.

<sup>170</sup> The Bank of Russia relied mainly on monetary targeting. Vdovichenko and Voronina (2004) claim that this is a consequence of underdevelopment and low efficiency of the Russian financial sector and banking system.

<sup>171</sup> Dobrynskaya, V. (2008), 'The monetary and exchange rate policy of the Central Bank of Russia under asymmetrical price rigidity', *Journal of Innovation Economics*, issue 'The Economic Performance of Russia', #1, pp. 29-62.

policies throughout the period 2000-2005 kept the rouble's value 8.5 percent cheaper than its equilibrium value.<sup>172</sup>

The Central Bank of Russia built up foreign currency reserves to prevent the rouble from appreciating against a basket of currencies.<sup>173</sup> The consequent increase in the money supply, albeit somewhat offset by the stabilisation fund, contributed to Russia's high inflation. Furthermore, as the US dollar sank against the euro, the rouble depreciated in nominal terms versus the euro in order to maintain the basket. As the Eurozone is a significant exporter to Russia, this led to imported inflation. In recent years, such policies have resulted in a significant actual appreciation of the rouble rather than a nominal appreciation.

The reasons for exchange-rate targeting and the risk of a dutch disease

The government and major monetary authorities maintained that the purpose of exchange rate targeting was to keep domestic manufacturing industries competitive. The main official justification for the Central Bank of Russia's strategy is the widespread assumption that rouble appreciation in nominal terms, resulting to higher export prices, could result in slower and insufficiently diversified economic growth in Russia, which is overly reliant on the energy industry.

Empirical evidence suggests that countries with large natural resource wealth have lower long-run real GDP growth than countries without natural resources, and that they may experience de-industrialization as a result of a loss of competitiveness in manufacturing industries due to currency appreciation. Natural resources are one of the most robust characteristics that negatively affect countries' economic growth, according to Sala-i-Martin (1997)<sup>174</sup> and Doppelhofer et al. (2004)<sup>175</sup>, who conduct empirical studies of cross-country data. Sachs and Warner (1997)<sup>176</sup> also discover a negative association between resource abundance and growth,

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<sup>172</sup>Central Bank of Russia, 2007. Many papers confirm the undervaluation of the rouble, which resulted from the policy of the Central Bank of Russia.

<sup>173</sup> The current composition of the basket is the following: 45% in US dollar, 45% in euro and 10% in pound sterling.

<sup>174</sup>Sala-i-Martin, X. (1997), 'I Just Run Two Million Regressions', American Economic Review, Papers and Proceedings, May

<sup>175</sup>Doppelhofer, G., R. Miller and X. Sala-i-Martin (2004), 'Determinants of Long-Term Growth: a Bayesian Averaging of Classical Estimates (BACE) Approach', American Economic Review, 94(4), 813-835.

<sup>176</sup>Sachs, J. and A. Warner (1997), 'Natural Resource Abundance and Economic Growth', NBER Working Paper 5398, Cambridge, MA

which is more pronounced in the case of oil than in the case of other natural resources. However, several of the countries on their panel have political unrest or other governance concerns, which could explain the lack of economic progress. Exogenous increases in resource prices, as seen in a number of resource-exporting nations, result in a windfall boost in export income, putting downward pressure on the domestic currency's value. As a result, production suffers. The Russian Central Bank's considerable foreign exchange interventions are primarily motivated by concerns that Russia may succumb to the Dutch disease and uncertainties about the potential impact of rouble appreciation on domestic manufacturing production and employment.

Real wages increased at a significant rate, averaging 14 percent per year between 1999 and 2007, compared to the 7 percent average growth rate of real GDP, after a severe decrease of 40% in the crisis year of 1998 due to an unexpected inflation hike. When oil prices began to rise in 1999-2000, it was predictably the oil extraction industry that saw the most salary growth. At the time, the finance industry was in second place. After that, wages in other industries began to adapt. As a result, the manufacturing of machinery and equipment, agricultural, trade, financial intermediation, education, health, and social work sectors experienced the highest total growth rates between 2000 and 2007, catching up with the finance and oil sectors.<sup>177</sup>

During the period 1999-2007, total employment in the economy increased gradually, but employment in manufacturing industries fluctuated, with numerous declines after 2002. In addition, the proportional share of employment in all industrial sectors fell. However, contrary to the predictions of the Dutch disease, employment in the fuel business declined after 2002, and at a faster rate. The fact that employees went to the services sector, mainly the banking, commerce, and construction sectors, which offered substantially better earnings, explains the decrease of manufacturing employment despite increased total employment in the economy. Although this is consistent with the Dutch disease, there are several other possible reasons. During the Soviet era, there was a strong emphasis on industries rather than services. As a result, the services sector was underdeveloped and has grown dramatically since the mid-1990s. Second, technical advancements and improvements in the manufacturing sector may have resulted in lower labour demand in this sector. Third, working in the services sector, particularly finance, has grown prominent. The growth in the services sector was not solely due to increased export profits and

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<sup>177</sup> For example, Gurvich and Sokolov (2008) estimated that approximately two thirds of the real appreciation of the rouble against euro is due to the Balassa-Samuelson effect.

social welfare. In addition, despite the comparatively low pay compared to the private sector, employment in public administration and defense increased significantly after 1995, particularly in 1995 and 1996. This was due in part to the government's expansion at regional levels, where public service wages were not as low as in the private sector.

According to some research (for example, World Bank, 2003, 2006)<sup>178</sup>, regional governments employed personnel partly to combat unemployment (particularly during the economic disorganisation of the 1990s), but more because they thought they didn't have enough. These studies suggest that, in comparison to other OECD nations, employment in public administration and defence remains low in Russia.

Despite the loss of labour from the manufacturing sector, manufacturing production grew from 1999 until the financial crisis of 2008 and the likely impacts of the global economic recession. This industry even outperformed the service and oil production industries. From 1999 to 2007, the oil extracting industry was among the leaders just once, and the services sector was only twice. In contrast, the fastest growth was consistently seen in several manufacturing businesses, particularly in rubber and plastic production, machinery, and all forms of equipment. Furthermore, between 1999 and 2007, the average annual growth rate in overall manufacturing was larger than that of oil extraction, agriculture, and services (7.4 percent , 4.9 percent , 3.8 percent and 6.1 percent respectively).

While there was a reduction in the growth rate of industrial output in Russia in the early 2000s, the trend reversed between 2003 and 2008, accelerating manufacturing production growth. At the same time, expansion in the extraction business slowed even further, contradicting the Dutch disease theory. We can infer that manufacturing production increased significantly, notwithstanding an outflow of labor from the manufacturing and resource sectors to services, with no signs of absolute or relative de-industrialization. However, while overall economic employment increased and public administration employment expanded largely before 1998, the latter cannot be directly linked to the Dutch disease.

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<sup>178</sup>World Bank (2003), 'International Public Administration Reform Implications for the Russian Federation'.

World Bank, (2006), 'Institutional Reform in Russia: Moving From Design to Implementation in a Multi-Level Governance Context', Report Number: 35576-RU.

## **2.6 RUSSIA EXPORTS AND IMPORTS AND INTERNATIONAL COMPETITIVENESS**

Russian exports increased at a faster rate than imports from 2000 to 2005. As a result, the trade balance improved despite the rouble's continual appreciation over this period. However, because global trade rose over this time, it is vital to investigate whether Russian exports grew in lockstep with global trade or lost competitiveness. On international markets, Russian products remained competitive; however, the position on the home market appeared to be more mixed, with some categories of foreign manufacturing items becoming increasingly demanded.

Competitiveness in foreign markets: Between 1999 and 2007, Russian industrial product exports rose by 1.1 percent as a percentage of global trade. This implies that, despite the rouble's real appreciation, there was no loss of competitiveness during this time. The European Union and the Commonwealth of Independent States were the main markets for Russian manufactured exports. Surprisingly, China was also one of the largest importers of Russian manufacturing products, particularly food agriculture, wood paper, chemicals, and electronic equipment, with exports to China steadily increasing despite the rouble's appreciation against the Chinese Yuan, which was linked to the weakening US dollar.

A good performance on EU and CIS markets was linked to Russian products maintaining their competitiveness on global markets. Due to low production costs and high skill levels, Russian products remained competitive on the EU market. On the CIS market, which is naturally near to Russia, increased demand and a lack of production capacity within the CIS countries kept Russian products appealing, especially when European Union products suffered from the euro's appreciation. Despite rising costs of Russian manufactured goods, Russian manufactured exports to other CIS nations grew at a rate of 28.5 percent (in current USD) on average from 2003 to 2007.

Despite its low share of manufactured product imports from EU27 countries<sup>179</sup>, the European Union was a key counterpart for Russia: in 2007, the EU27 accounted for 30% of Russian manufacturing exports. Finally, Russia benefitted from China's dynamics, which imported Russian food agriculture, wood paper, chemicals, and electronic equipment. Competitiveness on the domestic market: In the years 2000-2007, Russia's internal demand increased, boosting domestic production and imports. Manufacturing products accounted for 93 percent of all imports in Russia in 2005, up from 70 percent in 2000. Although this is not indicative of a loss of

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<sup>179</sup> The ratio takes into account the intra-EU27 trade, which makes the share of Russian products appear very low.

competitiveness, it does indicate that foreign items are becoming more popular in Russia. The comparatively expensive Euro region, on the other hand, was Russia's largest exporter, with a share of 46 percent in 2005, up from 43 percent in 2000. Except for iron, steel, and non-ferrous metals, predominantly imported from CIS nations, imports from the Eurozone dominated all product categories. It should be emphasized that China played an increasingly important role (its share climbed from 4% in 2000 to 9% in 2006), particularly in the textile and electrical and electronic equipment sectors, putting pressure on Russian products' competitiveness in these areas despite high local demand. In summary, the increase in imported manufactured goods in Russia is primarily due to sectors that were either did not existing in Russia or were subject to Chinese competition.

To summarise, until the international financial crisis of 2008, the two main economic factors supporting the strong development of Russian industries were a booming internal demand, aided by rising terms of trade and increasing export revenues, and a good performance of Russian products on foreign markets such as the Eurozone and the CIS countries, despite rising prices. Furthermore, despite the Russian economy's disarray in the 1990s and the crisis of 1998, which resulted in deindustrialization, Russia was able to recover quickly. The reorganisation resulted in a 'natural' increase in industrial production levels. These variables appear to have had a greater impact on economic development than the rising terms of trade pressure on competitiveness. This resulted in the seeming paradox that, despite the rouble's actual appreciation between 1999 and 2007, Russian industrial production increased, refuting the Dutch sickness concept.

The institutional structure and political climate may have influenced these economic patterns. The government's participation in certain 'strategic sectors' increased, especially in the energy and banking/insurance sectors, and foreign investment in these 'strategic sectors' was restricted. As a result, the energy sector's growth has slowed. This problem was exacerbated by the fact that the definition of 'strategic sectors' and the conditions for foreign investment into them were not clearly defined, leaving foreign investors in the dark. <sup>16</sup> In the energy sector, certain significant Russian state firms have recently pursued acquisitions outside of Russia rather than developing natural resource production within Russia (OECD, 2006)<sup>180</sup>. These variables may explain why the expansion of energy extraction has slowed in recent years despite predicted profitability. Investments in most manufacturing businesses, on the other hand, were not restricted in this way.

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<sup>180</sup>OECD (2006) Economic Survey of the Russian Federation.

The investment climate in these areas has greatly improved, as has the opinion of these sectors among foreign investors. Russian manufacturing industries have become more appealing to investors due to strong talents in the Russian labour market and comparatively low production costs.

Over the last 10 years, the fear that Russia's economy might become overly reliant on the energy sector and insufficiently diversified has affected monetary policy. The goal of this policy was to keep the rouble from appreciating nominally to retain industrial competitiveness. Between 1999 and 2007, Russia was afflicted with Dutch sickness. In Russia, we see some signs: the rouble has appreciated significantly, real wages have risen, and manufacturing employment has declined while services employment has expanded. However, there was no evidence of deindustrialization, which contradicts the Dutch disease argument. Industrial production did increase dramatically.

Furthermore, the symptoms that exist in Russia could result from factors other than the presence of natural resources. The Balassa-Samuelson effect contributed to the rouble's real-term appreciation. The fact that services were not put forward during the Soviet Union's time contributed to their rapid development. Rather than the energy industry, the outflow of labour from manufacturing industries resulted in an inflow of labour in the services sector.

Different causes can explain the strong development of industrial production despite the existence of some signs of the Dutch disease:

1. After de-industrialization in the 1990s, a natural catching-up process can explain some high productivity improvements in industries. Hence, manufacturing production increased despite a major fall in employment.
2. Despite the rouble's real appreciation, Russian products gained market share in global commerce, owing to new market opportunities in the European Union and other CIS nations and rising Chinese demand for some Russian items. Internal demand, which was booming on the local market, also helped sustain domestic manufacturing.
3. While foreign investment in "strategic areas," such as energy and banking/insurance, was restricted, foreign investment in most manufacturing industries was extensively encouraged.

Manufacturing industries attracted a lot of investments (including foreign capital) and flourished swiftly due to their high capabilities and relatively low production costs. These positive variables

were sufficient to enable manufacturing industry expansion from 1999 to 2007, minimising the effects of the rouble's actual appreciation.

However, the global economic slowdown in 2008 resulted in a decrease in industrial production. In the long term, depending on the relative weights of the various elements and international competition on domestic and international markets, the situation may be less favourable. Because high inflation is a growing concern, the Russian Central Bank admitted in its 2008 policy guidelines that, while monetary policy would continue to be aimed at exchange rate targeting in the short term, it would shift to inflation targeting in the medium term, allowing the exchange rate to float more freely. The shift in monetary policy aims is taking longer than expected, as Russian monetary policy is being buffeted by a slew of interrelated effects, as well as a slew of uncertainties and challenges in assessing the situation in the long run.<sup>181</sup>

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<sup>181</sup> <https://www.imf.org/external/pubs/ft/issues/issues15/>



### CHAPTER 3

#### DOMESTIC ENERGY RESOURCE OF RUSSIAN POLITICS

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In 1991, with the disintegration of the Soviet Union and the collapse of Soviet Russia's regulated economy Boris Yeltsin established a new Russian Federation. Because of the fall of communism, the Russian Federation underwent a number of economic changes, including privatization and market and trade liberalization. Although the economy is far more stable than it was in the early 1990s, Russia's inflation remains a problem. In terms of a poor legal structure, underdevelopment of modern economic activity, technical backwardness, and lower living standards, the Russian economy has historically and now diverged markedly from major industrialized countries (Richard Connolly 2020).<sup>182</sup>

Following Boris Yeltsin's leadership in 1991, the government took a huge step toward building a market economy by instituting basic principles such as market-determined prices. The shift from central planning to a market-based economy has two essential and interrelated goals: macroeconomic stabilization and economic transformation. The former involves enacting fiscal and monetary policies that encourage economic development while maintaining price and exchange rate stability. The latter necessitated the establishment of commercial and institutional institutions, such as banks, private property, and commercial legal systems that allow the economy to function effectively. Opening local markets to international trade and investment, and thereby connecting the economy to the rest of the globe, was a critical step toward achieving these objectives. These essential aims were not addressed by Gorbachev's leadership. The Russian Republic's Yeltsin government had begun to address the challenges of macroeconomic stability and economic reform at the time of the Soviet Union's disintegration.

Russia has attempted to build a market economy and achieve sustainable economic development since the collapse of the Soviet Union in 1991. Yeltsin said in October 1991 that Russia will pursue dramatic, market-oriented reforms along the lines of "shock treatment," as advised by the US and IMF (Nuffield Poultry Study Group 2007).<sup>183</sup> The dismantling of Soviet pricing restrictions caused hyperinflation, which occurred again after the Russian financial crisis in 1998. Despite the country's richness of natural resources, well-educated populace, and broad -

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<sup>182</sup> Richard Connolly, *The Russian Economy: A Very Short Introduction* (Oxford University Press, 2020).

<sup>183</sup> ['Nuffield Poultry Study Group—Visit to Russia'](#) (PDF). *pg 7. The BEMB Research and Education Trust. Archived from the original* (PDF) *on 2007-08-07*. Retrieved 2007-12-27.

albeit increasingly decaying - industrial base, Russian GDP shrank by an estimated 40% between 1991-1998. However, such a statistic might be deceptive because most of the Soviet Union's GDP was spent on military spending and the manufacturing of items with low demand. The cessation of much of that wasteful expenditure gave the mistaken impression that the economy was contracting more than it actually was (Schliefer, Andrei; Treisman 2003).<sup>184</sup> In the early years of the post-Soviet period, critical aspects such as privatization of state businesses and substantial foreign investment were pushed into place. However, by 1996, other critical components of the economy, such as commercial banking and authoritative, complete business regulations, were either missing or only partially in place. Although a return to Soviet-era central planning appeared improbable by the mid-1990s, the post-transition economy's structure remained unclear.

- Monetary

The government imposed restrictions on money and credit creation in January 1992, at the same time that it repealed price controls. The Central Bank, led by Viktor Gerashchenko, began to ease the restrictions on the money supply in February. The money supply rose at particularly rapid rates of 34 percent and 30 percent in the second and third quarters of 1992. The Russian money supply has expanded by eighteen times by the end of 1992. This resulted in substantial inflation and a decline in the ruble's currency rate.

The rapid expansion of the money supply was affected by huge foreign currency deposits held by state-owned firms and individuals, as well as the ruble's depreciation. After the government imposed limitations on monetary emissions, businesses used these deposits to pay wages and other expenditures. Commercial banks monetized corporate loans by withdrawing funds from overseas institutions and using privileged access to Central Bank accounts.

- Inflation

Retail prices in Russia grew by 2,520 percent in 1992, the first year of economic reform. The deregulation of most prices in January 1992, which resulted in a 245 percent increase in average prices in that month alone, was a key contributor to the rise. By 1993, the yearly rate had dropped to 240 percent, which was still a significant number. In 1994, the rate of inflation had dropped to 224 percent. Annual inflation trends, on the other hand, obscure monthly differences.

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<sup>184</sup> Schliefer, Andrei; Treisman, Daniel, October 2003 [A Normal Country - Harvard Institute of Economic Research Archived](#) 2007-09-11 at the [Wayback Machine](#) Retrieved on February 25, 2009

In 1994, for example, the government was able to lower monthly rates from 21% in January to 4% in August, but rates quickly surged again to 16.4% in December and 18% in January 1995. The differences were driven by inconsistencies in Russian monetary policy. After restricting the flow of money in early 1994, the government eased its restrictions in response to credit requests from farmers, the Far North's industries, and a few favored major firms. By sustaining the restrictive monetary policy enacted early in the year and approving a somewhat stringent budget, the trend was averted more effectively in 1995. As a result, in the fourth quarter of the year, the monthly inflation rate remained almost unchanged at less than 5%. The inflation rate was 16.5 percent in the first half of 1996. Experts, on the other hand, remarked that the inability to pay wages to workers in state-owned firms, a strategy that kept prices low by lowering demand, assisted inflation control significantly.<sup>185</sup>

The extreme changes in the ruble's exchange rate have been a key indication of Russia's macroeconomic instability. The rate of exchange between the ruble and the dollar fell from 144 rubles per US\$1 to nearly 5,000 rubles per US\$1 between July 1992 and October 1995, when the ruble could be lawfully exchanged for US dollars for the first time. The ruble's rate was arbitrarily established at a grossly overpriced level prior to July 1992. However, the general macroeconomic volatility was reflected in fast swings in the nominal rate (the rate that does not account for inflation). The most dramatic example of such fluctuation was the 27 percent drop in the ruble's value on Black Tuesday (1994).

The Central Bank said in July 1995 that it would keep the ruble in a range of 4,300 to 4,900 per US\$1 through October 1995, although the term was later extended to June 1996. The pronouncement reflected the government's improved fiscal and monetary policies, as well as the accumulation of reserves with which it could protect the ruble. The ruble had steadied and even strengthened in inflation-adjusted terms by the end of October 1995. During the first half of 1996, it stayed constant.

A 'crawling band' exchange rate was implemented in May 1996 to allow the ruble to fall gradually until the end of 1996, starting at 5,000 and 5,600 per US\$1 and finishing at 5,500 and 6,100 per US\$1. The declaration that the ruble will become completely convertible on a current-account basis beginning in June 1996 was another evidence of currency stability. This meant that

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<sup>185</sup> ['Russian inflation, inflation rate in Russia, inflation rates, inflation calculator, rate of inflation in Russia on RussiansAbroad.com'](#). Retrieved 6 May 2016.

both Russians and non-Russians would be able to exchange rubles to other currencies for trading purposes.

- Privatization

All firms belonged to the state during the Soviet era, and all people were meant to possess them equally. Privatization concentrated most of this money in the hands of a few individuals, making them extremely wealthy. State-owned firm stocks were issued, and the new publicly listed corporations were immediately handed over to Nomenklatura members or known criminal bosses. During the Soviet era, for example, a manufacturing director might frequently become the owner of the same business.

During the same time period, violent criminal gangs frequently acquired control of state-owned businesses, clearing the way through killings or extortion. Corruption among government employees has become the norm. Under the guise of the government, heinous financial manipulations were carried out, enriching a small group of people in crucial positions in the corporate and government sectors. In a massive capital flight, many people moved billions of dollars in cash and assets out of the nation. President Boris Yeltsin controversially sold the main state firms to insiders for substantially less than they were worth. Many Russians see these well-known 'oligarchs' as robbers.<sup>186</sup>The oligarchs possessed enormous political power due to their vast riches.

The Russian economy is built on two pillars: oil and gas. Russia is presently the world's second-largest oil producer and exporter, after only Saudi Arabia. In terms of gas production and exports, it is without a doubt the undisputed leader. Oil and gas have long been linked to Russia's fortunes and fate. Its history as an oil exporter dates back to the late 1800s, when early oil operations were established in Baku and the western Caspian, both of which were then part of the Russian Empire.

When big fields were discovered in western Siberia in the 1960s, both output and exports skyrocketed; oil became an especially important part of Russia's growth. Increased oil output became a source of pride and prestige as well as a measure of national success. The Soviet Union's oil output surpassed that of the United States in the 1970s, strengthening the idea that the Soviet Union was a growing power and the United States was a declining nation. Oil and gas had

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<sup>186</sup> Jeremy (May 16, 2005). ['Analysis: punished for his political ambitions'](#). *The Times*. London. Retrieved 2007-12-27.

become critical to the Soviet Union's internal and international policy by the mid-1970s. Oil, which had always been a vital raw commodity for military purposes, began to be widely employed as a tool of soft power, particularly in Eastern Europe. The Soviet Union purposefully established oil dependency by pushing its Eastern European satellites to convert their heavy industries to operate on oil , and then giving Soviet oil essentially for free. As international oil prices soared dramatically in the mid-1970s, the value of the subsidy surged.

Any reduction in supply after the dependency had been established threatened the regimes' stability. As a result, the Soviets had no option but to keep increasing their oil production to keep up with demand. Oil addiction afflicted both the satellites and the Soviet Union itself. The habit was passed down to post-Soviet Russia. Today, Russia's economy is reliant on the value of its huge oil and gas reserves. Understanding the distribution of such value across the Russian economy is crucial to comprehending the country's whole political economy. Oil and gas are important to Russia for many reasons than merely export revenues. The Russian economy is based on the overall value of all oil and gas produced, not just exports. It is this overall value that is dispersed to numerous claimants across all societal and economic sectors. Understanding the processes and motivations for distributing the value represented by Russia's oil and gas is critical to grasping the country's political economy.<sup>187</sup>

Since 1999, the market price of Russia's oil and gas has soared considerably above what might be considered its natural price, or the cost of producing the commodity under competitive conditions (including a normal rate of return on the capital employed). The value of a resource over its natural price is referred to as rent by economics. In layman's terms, it's called a windfall profit. Owners keep a portion of the windfall as additional profits. The state collects a considerable portion in the form of taxes, levies, and fees. However, most of the windfall is given informally rather than being collected properly. For example, if oil or gas is supplied to local or international consumers at a lower price than the current market price in other words, if it is subsidized the subsidy is a piece of the rent that is shared with customers. Rents might also be divided on the producing side. The excess expenses of extracting and delivering the oil and gas are included in the rent if they are higher than what would be expected in a competitive market. The so-called informal tax is a system for rent sharing that is particularly prominent in

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<sup>187</sup>The concept of sharing the value of oil and gas in Russia is described in detail in Clifford G. Gaddy and Barry W. Ickes, Resource Rents and the Russian Economy, Eurasian Geography and Economy (November 2005).

Russia. Informal taxes are payments by producers in the form of bribes or contributions to different auxiliary funds and programmes that benefit local politicians directly or indirectly, whereas formal taxes are those imposed by law. In Russia, the informal rent-sharing categories of informal taxes, price subsidies, and surplus production expenses are particularly prominent. They may be the most essential in appraising present and future economic and political events, similar to the part of the iceberg that lays beneath the surface. For example, statements to the effect that a fall in oil prices would have minimal influence on the Russian economy are frequently heard. The profit is supposed to be taken by the government's oil stability fund. At significantly lower oil prices, the fundamental budget is still viable. However, this line of reasoning is based only on the formal portion of rents. In reality, formal taxes and a formal budget are only a small piece of the answer. Rent-sharing informally supports a substantially larger section of the economy and society. Lower oil prices mean lower overall rents, and hence less to be shared among all categories just those who pay formal taxes.

Excessive production expenses require special attention. The rise of the oil industry affects a growing number of old and new sectors. This is particularly evident in sectors that produce for the energy transportation sector. Pipelines, storage tanks, river and sea tankers, rail tank cars, and submersible pumps, onshore and offshore drilling rigs, and platforms are all in high demand. This problem isn't only a byproduct of increased oil and gas output. In times of high commodity prices, it is one of the unintended consequences of Russia's oil and gas rent-sharing schemes. The construction of rail tanker trucks is a good illustration of how oil and gas rents are shared with other industries. Rail transport of oil is several times more costly than pipeline transport. Rail shipping's high expenses are a drain on the economy as a whole.

However, many ancient, established Russian enterprises, such as Uralvagonzavod, a renowned Soviet-era tank maker in the Russian city of Nizhniy Tagil that also builds railway tank waggons, benefit from them. As a result of the costly decision to move oil by rail, this firm is currently quickly expanding. Russian railway tank vehicle manufacturing in 2005 was higher than it had been during the Soviet era. Pipe makers, too, have benefited greatly from increasing natural gas output and exports. Local large-diameter pipe manufacture in Russia has lately profited from rising demand for new export pipelines, as well as a new government priority to guarantee self-sufficiency and domestic capacity in crucial energy materials production. Even during the high oil prices of the 1970s, the USSR lacked the requisite technology and capacity for large-diameter

pipe manufacture, so Russia acquired Japanese and German pipes in 2004 for the building of its Blue Stream gas pipeline beneath the Black Sea to Turkey.<sup>188</sup> Russia is already using locally built large-diameter pipes in the building of its new North European gas pipeline beneath the Baltic Sea between Russia and Germany (which began in early 2006 and is expected to be completely operational by 2010). Gazprom, the project's operator, has initiated a large import substitution initiative to help domestic pipe makers, which has shown positive results at all stages of the manufacturing process.

Russia could simply continue to purchase large-diameter pipes from other countries while allowing loss-making businesses to fail. It might also modernise its business by moving away from producing just for the oil and gas industry, especially as demand for large-diameter pipes would undoubtedly decline after all of the big pipeline projects are done. However, pipe manufacturing is only one of many examples of how energy exports have been utilised to develop new production lines for existing sectors as a result of joint ventures between Russia's energy corporations and the country's industrial sector.<sup>189</sup>

The Russian government has facilitated the distribution of rents among a large number of actors, extended the life of otherwise obsolete large-scale Soviet-era manufacturing complexes, facilitated their limited modernization, and helped to alleviate unemployment by keeping many workers in these industries. As a result, whereas Dutch disease drives investment away from other critical industries in certain resource-rich nations, Russia's rent deployment scheme indicates that Russia is suffering from a different condition. Parts of Russia's manufacturing business gain significantly from growing demand from the energy sector as oil output and exports rise, despite rising oil industry expenses. Almost all of Russia's new oil production has been exported. As a result, Russia's importance in the global energy market has increased since

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<sup>188</sup>See, for example, Marshall Goldman, *The Enigma of Soviet Petroleum: Half Empty or Half Full?* (London: George Allen & Unwin, 1980) pp. 163–64; and Stanislav Zhiznin, *The Oil Component of Russian Foreign Policy*, *Oil of Russia*, November 3, 2005 ([www.oilru.com/or/24/404](http://www.oilru.com/or/24/404)).

<sup>189</sup>Similar growth is increasingly visible in shipbuilding. In spring 2006 Rosneft signed a 350 million dollar contract with stagnating Saint Petersburg shipbuilder Admiralteyskiye Verfi, for delivery of two unique seventy-ton icebreaker tankers for shipping oil from Prirazlomnoye oilfield in the Barents Sea. At the same time, Russia's state shipping company Sovkomflot ordered six 47-ton oil product tankers, of which five have already been delivered. These and other developments are, in the words of Russia's minister of industry and energy, Viktor Khristenko, an example of how development of the fuel-industrial complex stimulates the development of related industries, transport infrastructure, and machine-building. See *Kontrakt s pritselom v budushcheye* [Contract aimed at the future], *Ezhenedel'nik promyshlennogo rosta* no. 16 (15), May 22-28, 2006, pp. 8–9 ([www.minprom.gov.ru/publication/weekly/archive/2/15/EPR16%2815%29.pdf](http://www.minprom.gov.ru/publication/weekly/archive/2/15/EPR16%2815%29.pdf) and [www.korabel.ru](http://www.korabel.ru)).

2000. Between 2000 and 2005, Russia's increased oil output and exports contributed far more to fulfilling global demand than OPEC members' rising volumes. Russia was able to offset up to 50% of world demand increase. Russia has been the largest non-OPEC oil supplier since 1999–2000, rivaling Saudi Arabia in terms of production and exports.

It is still one of the most appealing investment sites for multinational oil firms since it is the only major energy producer with unexplored reserves that aren't fully closed to foreign investors. Oil is still more crucial to Russia's economy than gas, especially as links with Asian nations such as China and Japan increase. However, Russia's energy ties with Europe are mostly determined by gas exports, which are favoured as a cleaner and less expensive source of energy than oil. By 2030, Europe's natural gas demand is predicted to increase by 60%.<sup>190</sup> Through 2020, EU energy strategy aims to transfer as much as feasible from oil to gas.

The fact that approximately three-quarters of total global gas supplies are located near EU borders in Russia, Central Asia, and the Middle East is also driving the approach. By 2030, the EU will be 80% reliant on natural gas imports as output in Europe's offshore gas sources in the North Sea declines. Russian gas shipments have already aided in bridging Europe's supply and demand mismatch. Several big pipelines connect Russia to the European energy system, some of which have been in service for more than twenty-five years. New gas pipelines are being built, while existing ones are being upgraded and expanded. Long-term contracts with Russia have been signed by European gas firms for durations ranging from 2008 to 2030.

Gazprom, Russia's gas monopoly has emerged as a key participant in European energy markets. Through collaboration agreements and asset swaps with German corporations BASF and Wintershall, Gazprom has already made substantial advances into downstream German markets (April 2006). Since the 1970s, Germany has been Russia's closest Western energy partner. These latest agreements were reached as a consequence of hard diplomacy and President Putin's personal efforts, as well as that of Gazprom's senior management. Former German chancellor Gerhard Schroeder, as well as a number of German banks and corporations, played key roles.

Schroeder took over as chairman of the North European Gas Pipeline Company, a new Russian-German joint venture building a pipeline beneath the Baltic Sea, in a contentious decision on December 9, 2005. While in charge of the German government, Schroeder authorised this crucial

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<sup>190</sup>Marco Fantini, European Commission, Russia's Energy Policy and EU-Russia Relations, presentation for conference on Whither Russian Oil? at the American Enterprise Institute (AEI), May 19, 2006 ([www.aei.org](http://www.aei.org)).



energy project. His acceptance of Russia's offer to manage the corporation drew widespread public condemnation both at home and abroad.<sup>191</sup> Russia is Europe's energy powerhouse, due to its oil and gas exports. In its regional energy policy, Russia has identified a number of significant consumer and transit states. For Russian oil and gas, Turkey and Germany have emerged as energy gateways to Europe.

Turkey has also emerged as one of Russia's most important trading partners, with gas accounting for around three-quarters of Russia's overall exports to Turkey. In spring 2006, the Blue Stream pipeline over the Black Sea became fully operational. Gazprom and Botafl, the Turkish gas firm, seek to expand their partnership by first building underground gas storage facilities on Turkish soil, and then expanding Turkey's gas pipeline infrastructure to Israel and Greece. Russia has reportedly suggested constructing a new Blue Stream pipeline to boost gas shipments through Turkey even further. By making substantial downstream investments in Turkey, it hopes to gain an ownership stake in the projected Turkey-Greece-Italy gas pipeline link to southern Europe. Over more difficult former satellites, such as Ukraine, Russia prefers direct connection countries to European markets which are themselves significant, rich users of Russian energy. In the year 2000, Russia embarked on a new plan to diversify its energy export routes to Europe, with the goal of reducing the number of transit nations.

Diversification of oil exports has made less progress than diversification of gas exports. Despite the implementation of a number of half-measure projects, Russia's oil export system has remained virtually intact for decades. There are also no export pipelines for Russia's new energy markets in Asia, which are rising rapidly.

Things must start occurring quickly, regardless of where oil and gas may come from in the future. Even on the most basic metric of oil and gas sustainability, reserve replacement ratios, Russia's prospects are bad. Gavin Wright warned of the dangers that occur when such countries focus too much on divvying out the bounty from their resource wealth and not enough on generating the bounty, or maintaining the resource sector's long-term viability.<sup>192</sup> This is a risk that Russia faces as its elites focus their efforts on securing control of resource rents at the expense of measures that may secure the continuous reproduction of resources and the rents that

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<sup>191</sup>See, for example, Schroeder Attacked over Gas Post, BBC News, December 10, 2005 ([news.bbc.co.uk/2/hi/europe/4515914.stm](http://news.bbc.co.uk/2/hi/europe/4515914.stm)).

<sup>192</sup>Gavin Wright, Resource-based Growth Then and Now, working paper (Stanford University, June 2001).

they generate. President Putin's extensively bureaucratized, hierarchical governance style (the vertical of power) conceals significant differences among his high leaders. The initial divisions occurred between former President Yeltsin's appointments, who favoured a more decentralised Russian Federation, and Putin's appointees, who favoured a strong centralised state. After the majority of the Yeltsin holdovers were replaced, new divisions arose within Putin's team, including between rivalling groups of lawyers from Saint Petersburg, former members of the security services (also known as chekists or the siloviki), and economic liberals in the administration, as well as among other economic actors.

After 2003, the main source of rivalry and division among Putin's uniform system's elites was over who could control resource rents, particularly oil and gas rents. The YUKOS controversy was a perfect illustration of this behind-the-scenes rivalry and its consequences. The YUKOS crisis was largely seen in its early stages as a conflict between the economic interests of the siloviki and the oligarchs (private businessmen usually bankers who had acquired energy companies during Yeltsin's privatisation drive in the 1990s) and its varied allies. The actual problem at the core of the YUKOS incident, however, became clearer as time went on: the redistribution of Russia's oil assets and windfall earnings.<sup>193</sup> The final integration of YUKOS's key production unit Yuganskneftegaz into the state-controlled oil business Rosneft emphasised and highlighted this.

Elites inside and outside (but closely linked to) the Kremlin had established control over the most valuable production assets and firms by 2005. The list of officials of the executive branch and the president's administration who sit on the boards of state-controlled or state-owned enterprises in the oil and gas and other extractive sectors is long. For example, Vladislav Surkov, Putin's chief advisor, is chairman of the board of Transnefteprodukt, an oil product pipeline company; Igor Sechin, the deputy head of the presidential administration, is chairman of the board of Rosneft, Russia's largest state oil company; finance minister Aleksey Kudrin is on the supervisory board of diamond company ALROSA; and Dmitry Medvedev, the first deputy prime minister. These significant players, along with others, have been arguing over the best method to manage these assets and organisations in order to keep their valuable properties and guarantee that they continue to create new bounty. They've had to make a number of management decisions, including how to ensure reserve replacement, how to establish a regime for ensuring

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<sup>193</sup>Gaddy and Ickes, Resource Rents.

access to and exploitation of Russia's mineral resources, whether to use energy as a domestic and foreign policy political tool, and how to manage the oil stabilisation fund's structure, volume, and disbursement. The majority of the powerful control functions over oil and gas resources, production, and export are in the hands of people who have little or no technical expertise of the business. Former attorneys, members of the Soviet-era KGB and security agencies, and economists make up the majority of the authorities.

Mikhail Fradkov, Prime Minister; Dmitry Medvedev, First Deputy Prime Minister and Chairman of Gazprom's Board of Directors; and Igor Sechin, Deputy Head of the Presidential Administration and Chairman of Rosneft, are among them. This group sees opportunity exclusively in rising resource rents and appears oblivious to the challenges ahead, assuming that Russia's resource base would miraculously be preserved due to the country's vast endowment. They argue that infrastructure improvements, fortunate field discoveries, and the state's continued acquisition of existing Russian oil assets as well as energy assets overseas will ease the reserve replacement-production misbalance.<sup>194</sup>

A few people stand in opposition to these people, with a more realistic view of Russia's oil geology's inherent time and volume restrictions. Former oligarchs and present oil industry executives, such as Vagit Alekperov of LUKoil, as well as the CEOs of state-owned and state-loyal oil enterprises such as Rosneft, Gazprom, and Surgutneftegaz, are among the pragmatists. They are, however, acting as administrators rather than autonomous CEOs under Russia's increasingly centralised economic structure and corporatist state model. Furthermore, these energy executives must meet political demands for both formal and informal rent payments (taxes, investments in social infrastructure, and other mechanisms).

High tax loads and a lack of executive power limit their capacity to act. On the government side, Yuriy Trutnev, the minister of natural resources, is a key individual who has demonstrated an understanding of the sustainability issue. Trutnev, the former governor of Russia's Perm area in the Urals, utilised a successful business career (in retail and wholesale trade) to enter politics, first at the municipal level, then at the regional level, before being invited to Moscow in 2004. Trutnev is a petroleum engineer by training and education, having direct knowledge of Soviet oil production and issues in the 1980s. He believes that market processes may increase reserve

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<sup>194</sup>Central Bank of Russia, Platezhnyy balans Rossiyskoy Federatsii (analyticheskoye predstavleniye) ([www.cbr.ru](http://www.cbr.ru)).

replacement ratios; he favours regulation with limited government engagement in the most vital areas, and he is promoting his own version of Russia's subsoil resource law. Trutnev, on the other hand, has suffered significant setbacks in battles with Kremlin officials with vested interests in the resource industry. He has so far been unsuccessful in getting his version of the federal subsoil legislation passed, which intends to encourage reserve replenishment through open market processes.

Putin is unquestionably the most important player in Russia's energy strategy. Putin appears to have made an attempt to educate himself on the challenges, despite the fact that he is not a former industry insider (like Trutnev was). His dissertation, which he defended at the Saint Petersburg Mining Institute in 1997, was on strategic planning in the resource sector of Russia's economy, and the crucial role reserve replacement plays in it. Putin has consistently advocated for a new programme to improve reserve replacement rates in all extractive industries since taking office as president in 2000.

In this regard, Putin's ties to the St. Petersburg Mining Institute are significant. Vladimir Litvinenko, the institute's rector and a well-known geologist, has been a long-time adviser to Putin. Litvinenko has been outspoken about Russia's diminishing resource base. He proposes limiting Russia's oil exports and investing in processing businesses and geological research instead of extraction. He also advocates for more active and effective federal and regional administration of the economy's raw resources sectors.

It's unclear whether Putin shares any of Litvinenko's more extreme viewpoints. He is less likely to make strong pronouncements for fear of jeopardising the country's political and economic stability. Putin's administration has been built on assuring stability (the biggest successes of his presidency are generally described as economic stabilisation, stability, and growth). He would find it intolerable if the people believed Russia's oil and gas reserves were running out. Putin, on the other hand, cannot be blind to the consequences of inactivity on reserve replenishment. A drop in oil and gas production is more than just a possible stumbling block to Russia's long-term viability. If present production patterns continue in 2006 and beyond, they may jeopardise Kremlin elites' strategic intentions in the run-up to Russia's 2007–08 election cycle, which rely on rent-driven political stability and economic development. Furthermore, in the aftermath of its contentious January 2006 gas pricing dispute with Ukraine, Russia has to restore and reinforce its image as a dependable, long-term global energy provider, particularly in Europe. While world

oil prices are high, ensuring and guaranteeing reserve replenishment is critical, especially at a time when Russia's non-hydrocarbon energy sources (nuclear, hydropower, and electrical generation) have yet to reach their full potential. The legal environment for the development of Russia's energy resources, as established in a new legislation on subsoil resources, has been a focus of disputes pertaining to the sustainability of oil and gas production.<sup>195</sup> The country's weak legislative structure and surrounding ambiguity, according to many analysts of Russia's energy sector, is a key investment hurdle for both domestic and international oil producers. For Russian oil corporations and international businesses that perform or seek to undertake energy-related operations in Russia, there are no defined rules of the game. Many investors and operators still consider property rights to be weak.<sup>196</sup>

Despite the fact that President Putin and his ministers, as well as the owners and executives of Russian energy companies, appear to agree on the need for foreign investment in the energy sector, Russia continues to send mixed signals about the terms of foreign access to its vast energy reserves and transit infrastructure. For example, Russia's minister of economic development and commerce, German Gref, has stated that the country's natural resources are so huge that the country's capacity to use them would never be adequate.

At the same time, Putin has stated that foreign businesses will be unlikely to be able to acquire controlling holdings in Russian enterprises (although they might potentially obtain a 50% stake).<sup>197</sup> This is just one example of the contradictory statements on foreign access to Russian resources, which companies hope will be clarified, along with a slew of other disputed regulatory issues, with the passage of the new subsoil law, as well as a new draught law on strategic enterprises and the new Russian energy strategy for 2030.<sup>198</sup> The approval of new laws, on the

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<sup>195</sup>The Russian constitution declares that all mineral resources, with the exception of abundant materials like sand and clay, are the property of the Russian state and all its citizens.

<sup>196</sup>Some experts talk of the deliberate dilution of property rights of energy companies by the state to keep them under continuous pressure. See, for example, Gaddy and Ickes, *Resource Rents and V. Tambovstev and A. Shastitko, Uporyadocheniye otnosheniy sobstvennosti [Bringing order to property rights], Strategiya Rossii, no. 4, pp. 71–80.*

<sup>197</sup>Gref further suggested that by limiting foreign access to companies and investment: Russia would pay a price of decreasing rates of gross domestic product (GDP) growth. Neil Buckley, *German Gref interview: Free market advocate, Financial Times, April 4, 2005.*

<sup>198</sup>The Ministry of Natural Resources proposed tightening the criteria for classifying oil and gas fields as strategic. The strategic deposit classification threshold has been reduced below the initially proposed level of 1.1 bln bbls for oil and from 1 tcm to 750 bcm for natural gas. United Financial Group, update (Moscow, June 6, 2006). These and

other hand, is predicted to inexorably strengthen the Russian state's regulatory involvement in energy exploration, production, and export licencing. Following his appointment as Minister of Natural Resources in 2004, Yuriy Trutnev announced the implementation of new subsoil law to be his main goal. Versions of the bill are still being considered in Russian ministries and the Russian Duma two and a half years later.

Despite legal uncertainty and increased dangers for foreign operations in Russia, foreign participation in Russia's energy industry has gradually expanded during the late Gorbachev and early Yeltsin years, particularly through joint ventures. ExxonMobil, Shell, and a few other corporations began numerous big long-term and high-cost offshore oil and gas projects off Russia's Pacific coast in the mid-1990s. TNK-BP was formed in 2003 when BP and the Tyumen Oil Company formed a 50/50 joint venture (their major areas of operations are in western Siberia). ConocoPhillips is raising its share in LUKoil, Russia's largest private oil business, to 20% (the Timano-Pechora Province in northwest Russia is an important area of collaboration). Other firms engaged in Russia include Total of France and Schlumberger and Halliburton, two large oil service companies.

As additional offshore fields in the Barents Sea and elsewhere in the Russian portion of the Arctic are finally exploited, Russia is anticipated to deepen its collaboration with Norway's NorskHydro and Statoil. (Norwegian companies have extensive expertise with offshore Arctic energy projects.) Asian energy firms such as China's SINOPEC and CNOOC, India's ONGC, and a number of Japanese and Korean companies are looking to increase their involvement in Russian and Central Asian energy projects. Vladimir Putin's perspectives on energy policy and security have been shaped by a unique set of circumstances. On December 31, 1999, when he became acting president of Russia, international oil prices were at their lowest point since the mid-1980s.

The financial crisis and default of August 1998 had crippled Russia's economy, which was further burdened by obligations to international financial institutions accrued by President Yeltsin in the 1990s. However, the Russian economy's declining trajectory was beginning to show indications of reversal. Domestic manufacturing had increased as the fallen ruble rendered imported items prohibitively costly, and oil output had begun to recover. Putin's early policies

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other protective measures further limit foreign access to Russia's energy economy. Foreign companies will only be allowed to participate as minority shareholders in these strategic projects.

were aimed at restoring the authority of the central Russian state, with few strong signs of economic improvement, a weak national currency, a crippled federal government, the country plagued by separatist regional ambitions, and Russia's eighty-nine constituent federal units essentially operating autonomously. Oil and other vital commodities were seen as the sole way to protect the state from future crises and ensure its survival and revival.<sup>199</sup> As global energy prices rose and Russia's oil output grew, Putin's and Russia's energy policies shifted from survival and resurrection methods to aggressive development. Russian state-owned and private enterprises began expanding their activities throughout the former Soviet republics, eastern Europe, and beyond, purchasing previous energy assets with the help of rising oil export profits, which converted into significant investment income.<sup>200</sup>

By 2003, the term and concept of Russia's Liberal Empire, coined by Anatoliy Chubais, the head of the Unified Energy System and a former Russian prime minister, and described in detail in an article for a leading Russian newspaper, had formalised Russia's economic reexpansion into its near abroad.<sup>201</sup> In his 1997 economic dissertation on strategic planning in reserve replacement, Putin initially established his views for the energy industry. He presented a decision-making model in which a firm (or a state) takes efforts to adapt to volatile and unexpected external situations. Many of his later activities and initiatives in the Russian energy sector appear to have been driven by these views. Later, in a 1999 article for a St. Petersburg publication authored in his own capacity, Putin proposed that natural resources were both the key to Russia's future economic growth and a necessary survival mechanism.<sup>202</sup> He argued that, given Russia's tremendous resource wealth, it was only natural to use and manage this endowment properly for the sake of the country.

Putin stated strong worries about the possibility of Russia's economic overdependence on oil and reliance on oil exports in the early years of his administration, in 2001 and 2002, while

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<sup>199</sup>Putin had addressed this issue of state survival in his 1997 dissertation and his 1999–2000 Millennium Message after taking the helm of the state.

<sup>200</sup>For an in-depth analysis of Russia's regional policy on the basis of its new oil wealth, see Fiona Hill, *Energy Empire: Oil, Gas and Russia's Revival* (London: The Foreign Policy Centre, 2004).

<sup>201</sup>Anatoliy Chubais, *Missiya Rossii v XXI veke* [Russia's mission in the twenty-first century], *Nezavisimaya gazeta*, October 1, 2003

<sup>202</sup>Vladimir V. Putin, *Mineral'no syr'evye resursy v strategii razvitiya Rossiiskoy ekonomiki*, *Zapiski gornogo instituta*, vol. 144 (1), Saint Petersburg, 1999, pp. 3–9. Accessed through *Rossiia v okruzhayushchem mire: 2000*. [Analytical yearbook of the Independent Ecology-Political University], N. N. Marfenin, ed. ([lib.priroda.ru](http://lib.priroda.ru)).

simultaneously emphasising the significance of reserve replacement.<sup>203</sup> Since his 1997 dissertation and 1999 article, Putin's overall views on energy security and the utilisation of Russia's energy resources have remained largely stable, although they have also developed over time. By 2004–05, what Putin originally considered as a resource that should be replicated but not overproduced has become the means for Russia to achieve new, commanding heights, due to the doubling of world oil prices during this time period. Putin emphasized this viewpoint in a speech to the Russian Security Council on December 22, 2005:

Let me be clear: Russia appreciates and deserves its reputation as a steady, trustworthy, and responsible partner in the market for energy resources. Our country is already the world leader in gas exports and second in oil and oil products. We were in top place for months at a time.

Moreover, Russia has some competitive and natural advantages, as well as technical potential, to take a more major place in the energy industry. We should take use of these advantages in the interests of the world community as a whole, while also considering our own national interests. The current and future well-being of Russia is inextricably linked to our position in the global energy market.

Aspiring to be world leaders in the energy sector is a worthy goal. It is not enough to merely boost energy resource output and exports to achieve this. In terms of energy innovations, new technologies, and the search for contemporary forms of resources and resource efficiency, Russia should take the lead and set the pace. I am certain that our country's fuel and energy resources, as well as national research, are up to task.<sup>204</sup>

Putin clearly sees mineral resources, mainly oil and gas, as Russia's biggest competitive advantage in 2006, after reasserting and reclaiming state control over resource management. He also recognises that the state's economic and political progress during the previous seven years is dependent on hydrocarbon production and exports, both directly and indirectly. Because of its strategic importance, Putin defined energy as the Russian economy's holy of holies at the Russia-EU Summit in Russia's Black Sea city of Sochi on May 25, 2006.<sup>205</sup>

Energy-rich states employ their energy resources primarily for defensive purposes in order to secure the regime's survival, consolidate control at home, and avoid 'intrusion' from the

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<sup>203</sup>Press conference, July 18, 2001 ([www.kremlin.ru/appears/2001/07/18/0000\\_type63380\\_28591.shtml](http://www.kremlin.ru/appears/2001/07/18/0000_type63380_28591.shtml)).

<sup>204</sup>([www.kremlin.ru/eng/speeches/2005/12/22/2222\\_ty+pe84779\\_99439.shtml](http://www.kremlin.ru/eng/speeches/2005/12/22/2222_ty+pe84779_99439.shtml)).

<sup>205</sup>([www.kremlin.ru/appears/2006/05/25/2009\\_type63377type63380\\_106059.shtml](http://www.kremlin.ru/appears/2006/05/25/2009_type63377type63380_106059.shtml)).



outside.<sup>206</sup> Russia, on the other hand, has been particularly harsh toward nations that have attempted to exit Russia's sphere of influence by engaging in talks with NATO or the European Union (EU). It would be naive to believe that the Russian government's actions in Ukraine (a gas dispute between Ukraine and Russia in 2006) and Georgia (an energy crisis between Georgia and Russia in 2006) were just defensive. Countries, who are not members of NATO or the EU, as Korteweg points out, are more exposed to Russian energy blackmail. Russia's typical technique of warning countries what would happen if they made decisions that were against Moscow's interests has been to use energy weapons for aggressive objectives.

### **3.1 INCREASING CONCERNS ABOUT RUSSIAN HYDROCARBON RESOURCES**

For many countries, Russian energy is a serious issue. Countries must choose between adopting cheap Russian energy and relinquishing some political influence to Russia, or paying exorbitant energy prices but preserving sovereignty over decision-making. Unfortunately, several former Soviet republics, such as Belarus, have elected to negotiate long-term energy contracts with Russia in order to import inexpensive Russian energy, resulting in a loss of political autonomy. It should be noted that former Soviet countries are frequently forced to sign these contracts because they would otherwise be unable to afford the increased energy rates.

Ivanenko claims that the world should be increasingly concerned about Russia's use of nuclear weapons because Russian leaders have learnt through hard experience that they must react to public demands for strong foreign policy or risk losing power.<sup>207</sup> As a result, one may say that in order to stay in power, Russian officials are willing to exploit Russia's oil resources as a foreign policy instrument. Ivenko believes that the government has gained significant power over the Russian energy industry, particularly after 2003, and that the government is now capable of employing companies like Gazprom and Rosneft as foreign policy pawns.<sup>208</sup> The Kremlin defends national energy interests overseas but at the expense of high taxes at home, according to the article.<sup>209</sup> This would suggest that Russia's foreign policy objectives are highly vital to it, and that Russia is willing to compromise its domestic well-being in order to accomplish its objectives close to home. Some say, on the other hand, that Russia is simply conducting business like any

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<sup>206</sup>Korteweg, R., 2018. Energy as a Tool of Foreign Policy of Authoritarian States., 4.

<sup>207</sup>Ivanenko, V., 2008. Russian energy policy and its domestic and foreign implications, 269.

<sup>208</sup>Ivanenko, V., 2008. Russian energy policy and its domestic and foreign implications, 267

<sup>209</sup>Ivanenko, V., 2008. Russian energy policy and its domestic and foreign implications, 274.

other country with significant natural gas and oil resources. Western corporations with significant investments in Russia's energy industry, predictably, actively defend this view.<sup>210</sup>

Obviously, the Russian state apparatus also maintains that what they are doing is economically sound. These same organisations also back Russia's intentions to develop additional sea pipelines into Europe. These corporations say that Europe is not reliant on Russian energy, hence they are unconcerned about Europe's energy security. While Europe is not entirely reliant on Russian hydrocarbon exports, it is heavily reliant on them. If Europe is already dependant on Russian energy, wouldn't buying more from Russia tip the balance back towards dependence? Thus, even if Russia is simply conducting business, there is an underlying problem in that Russia is obtaining more political power in its zone of influence (especially when we consider European Union). Russia's energy weapon poses a serious threat.

Russia's government has been consolidating its energy weapon under President Putin's administration. Furthermore, some academics believe Putin's participation in firms like Gazprom and Rosneft is larger than most people realise. According to Henderson, Putin has considerable influence over [Gazprom], not just because of the state's 51 percent share, but also because of top management appointments, the majority of whom are old acquaintances of government ministers.<sup>211</sup> For example, Alexey Miller, the CEO of Gazprom, is an old colleague of Putin's from the Mayor's office in St. Petersburg. Other members of Gazprom's management committee have ties to Putin and the government as well. As a result, it is obvious that in Russia's gas industry, there is a complicated interaction between state and private actors.<sup>212</sup>

It's worth noting that Gazprom isn't the only state-owned energy corporation with a director who is Putin's close ally. Igor Sechin, the CEO of Rosneft, is one of Vladimir Putin's most trusted associates. Sechin used to be Putin's subordinate in St. Petersburg, and subsequently in Putin's Presidential Administration, he held numerous high-ranking roles. Furthermore, the head of Transneft (Russia's state-owned oil pipeline firm) is Nikolay Tokarev, a Russian oligarch who is a member of Putin's inner circle. Tokarev's climb to prominence in Russia's state-controlled energy industry can be traced back to his early career, when he became a close ally of Prime

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<sup>210</sup>Closson, S., 2014. Subsidies in Russia's gas trade, 62.

<sup>211</sup>Henderson, J., 2016. Does Russia Have a Potent Gas Weapon? 462

<sup>212</sup>Kivinen, M., 2012. Public and business actors in Russia's energy policy, 50.

Minister Vladimir Putin during his KGB days, according to reports.<sup>213</sup> There are a slew of additional enterprises in other industries whose directors have direct ties to Putin and his allies. Putin has clearly constructed a complicated structure in which members of Putin's close circle oversee every significant Russian state-owned corporation. Sistema is a common name for this system. Sistema, for example, is Putin's network of affluent and influential individuals who have consolidated enormous amounts of influence in the Kremlin, according to Kimberly Marten.<sup>214</sup> As a result, a small group of businessmen has complete power over the country. Putin now has enormous political and economic authority both inside and outside Russia. For example, Putin might decide whether to raise or lower oil and gas prices for certain nations on his own. The business sector in Russia functions under both legal and informal regulations. In Russian business culture, complex patron-client ties are frequent. In reality, according to Korteweg, Russia has spread this ideology outside its borders: countries are expected to behave like Moscow's clients, and those who have shown to be loyal clients have gotten significant gas price concessions.<sup>215</sup> Does Putin profit from the Russian energy industry as a result of this? Is it true that Gazprom does business directly with Russia's President?<sup>216</sup> Is there a financial benefit to Putin's network? Is it purely political, or is it something else? The literature on Russia's energy weapon does not provide answers to these problems. Russia's oil exports are clearly being used as a foreign policy instrument.

It may also be claimed that someone takes his or her 'fair' piece of the 'hydrocarbon pie' at every feasible step. Who gets the greatest chunk of the pie - Russia as a country or Putin and his Sistema? Russian companies doing business in Africa have direct ties to Putin's Sistema and so to the Kremlin. It will also be argued that the situation on the Crimean Peninsula is similar: firms tasked with constructing massive infrastructure developments are owned by Putin's associates.

### **Trade relation between Russia and Africa**

Russia's impact in Africa declined significantly after the fall of the Soviet Union in the early 1990s. Nine embassies, three consulates, and a variety of commercial missions and student exchange programmes were closed by Russia, for example.<sup>217</sup> Nonetheless, Russia has attempted

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<sup>213</sup>Jessica Bachman, Reuters, Transneft boss – from KGB to oil diplomat.

<sup>214</sup>Marten, Kimberly. Informal political networks and Putin's foreign policy: The examples of Iran and Syria.

<sup>215</sup>Korteweg, R., 2018. Energy as a Tool of Foreign Policy of Authoritarian States, 5.

<sup>216</sup>Kivinen, M., 2012. Public and business actors in Russia's energy policy, 54.

<sup>217</sup>Marten, Kimberly. Russia's Back in Africa: Is the Cold War Returning? 155

to expand its footprint on the African continent during the previous 20 years. Since 2014, Russia has been very active. Although there are other reasons for Russia's growing interest in Africa. Russia seized the Crimean Peninsula in February and March of 2014. Following that, significant economic sanctions were placed on major Russian business figures, many of whom are close allies of President Vladimir Putin. As a result, it might be claimed that, following the events of 2014, Russia needs to begin seeking for new revenue streams. The Kremlin perceives Africa as an avenue to grow its economy without reform by generating new revenue sources and undercutting the sanctions imposed by the West, according to Nataliya Bugayova and Darina Regio.<sup>218</sup> According to Kimberly Marten, one reason for Russia's current activity in Africa is that it is looking for new markets as a result of the 2014 sanctions.<sup>219</sup> In essence, Russia is looking for new customers for its weaponry trade, as well as resources it can take from Africa. A range of African natural resources might be one of the new possible revenue streams. Russian businesses are ramping up their activity in the mining of resources such as coltan, cobalt, gold, and diamonds, according to Adibe.<sup>220</sup> For example, Alrosa, a Russian business, has made significant investments in the diamond mining industry in Zimbabwe and Angola. In addition, Nordgold, a Russian gold mining corporation, has recently made interests in Burkina Faso. Even the state-owned Rostec<sup>221</sup> agreed to invest heavily in the expansion and development of a platinum mine in Zimbabwe.<sup>222</sup> All of these companies have close links to Putin and the Kremlin. First, Sergey S. Ivanov, the CEO of Alrosa, is the son of Sergei B. Ivanov, a former KGB operative who served as Putin's deputy FSB director. From 2001 until 2007, he also served as the Defense Minister. Through their relationships and ownerships, both men wield tremendous power in Russia.<sup>223</sup> Second, Nordgold is owned by Severstal, which is run by Alexei Mordashov, who acquired the firm during the 1990s Russian privatisation boom. Mordashov is now increasingly close to President Putin, with whom he even had a televised meeting.<sup>224</sup> Because of his ties to Putin and other

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<sup>218</sup>Bugayova, Nataliya, and Darina Regio. The Kremlin's Campaign in Africa: Assessment Update, 2.

<sup>219</sup>Marten, Kimberly. Russia's Back in Africa: Is the Cold War Returning? 155.

<sup>220</sup>Jideofor Adibe, What Does Russia really want from Africa?

<sup>221</sup>Rostec is a Russian state-owned 'military-industrial' empire

<sup>222</sup>Bugayova, Nataliya, and Darina Regio. The Kremlin's Campaign in Africa: Assessment Update, 3.

<sup>223</sup>Rough Polished, Sergey Ivanov elected as President of Alrosa.

<sup>224</sup>Julian Evans, The Sunday Times, Dynamic tycoon is close associate of Putin.

members of Russia's financial elite, Mordashov was placed on an international sanctions list. Finally, it's only logical that Rostec, a Russian state-owned corporation, be directly controlled by Moscow. Sergey Chemezov, the Director-General of Rostec, has been Putin's loyal ally for over 30 years. When they were both living in the same apartment complex in Dresden in 1983, they first met. Both were KGB agents at the time.<sup>225</sup> Gazprom, on the other hand, has inked agreements for natural gas production projects in Algeria, while Zarubeshneft has expressed interest in oil production projects in Angola and the Democratic Republic of the Congo.<sup>226</sup> Furthermore, in 2018, Oranto Petroleum, a Nigerian oil and gas business, said that it would collaborate with Russia's top oil producer Rosneft to develop 21 oil assets throughout Africa.<sup>227</sup> Other Russian corporations have made investments in various African nations, and many of Putin's associates, including the notorious Yevgeny Prigozhin, are behind these companies. At the age of 18, he was condemned for theft, and in 1981, he was also sentenced to twelve years jail under charges of robbery, fraud, and engaging adolescents in prostitution, Prigozhin's route to become one of Putin's most trusted acquaintances read. Prigozhin was imprisoned for nine years in the end. He opened a fast-food company after his release in 1990, which ultimately expanded into a restaurant and a catering empire. It is reported that the political elite of St. Petersburg frequented Prigozhin's restaurants, and as a result, Prigozhin got acquainted with Putin. Prigozhin's catering firm began obtaining major food contracts for schools and the military when Putin became President.

In 2012, for example, Prigozhin's businesses received over 90% of catering contracts in military units. In light of the foregoing, one may claim that Russia has both national and corporate interests in Africa. Because the owners and directors of these enterprises have very close relationships with the Kremlin, Putin's allies profit from their companies, and the Russian government gains political power everywhere these companies operate. As a result of political influence, more economic cooperation may emerge. The Russian International Affairs Council (RIAC), which describes itself as one of Moscow's most well-known and authoritative think tanks, claims that trade between Russia and Africa has exploded in recent years.<sup>228</sup> Furthermore, RIAC appears to agree with previous Russia-Africa studies on Russia's economic interest in the

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<sup>225</sup>Putin's List, Chemezov Sergey.

<sup>226</sup>Zarubeshneft is Russian oil company

<sup>227</sup>Tsvetana Paraskova, Nigerian Firm To Partner With Rosneft To Develop 21 African Oil Assets.

<sup>228</sup>Alexander Gasyuk, An upstart that plays up its ties to the establishment.

region: major Russian businesses actively engage in Africa...priority areas for investment include energy and mining, as well as infrastructure, transport, manufacturing, and agriculture.<sup>229</sup>

### **3.2 CRIMEAN EXCLUSIVE ECONOMIC ZONE – THE TRUE TREASURE OF CRIMEA**

There are several compelling grounds for Russia's annexation of Crimea. The Peninsula provides warm water ports for the Russian Black Sea Fleet, and from a geopolitical standpoint, Crimea is strategically placed on the Black Sea's coast, and Vladimir Putin's approval ratings have risen as a result of the crisis.<sup>230</sup> The actual treasure, however, is found in the Crimean Exclusive Economic Zone. The EEZ is defined by the United Nations Convention on the Law of the Sea (UNCLOS) as the sea region contiguous to the coastal territory that does not extend beyond 200 nautical miles from the baselines used to determine the territorial sea. The claimed maritime zone around Crimea adds nearly 36,000 square miles to Russia's current holdings. The expansion is more than three times the size of the Crimean landmass, according to some estimates.<sup>231</sup> The owner has sovereign rights for the purpose of exploring and exploiting, protecting and managing the natural resources of the seabed and its subsoil [and] producing energy from water, currents, and winds inside the EEZ.<sup>232</sup> To put it another way, Russia controls all natural resources located in the Crimean EEZ. Furthermore, Russia has the authority to determine how those resources are utilised, who has access to them, and when they are used. Understanding the importance of the Crimean EEZ is critical for this research because without the UNCLOS, Russia may not be the undisputed owner of Crimean natural resources within a 200-mile radius of the coast.

#### **Overview of oil and gas deposits on the Black sea shelf**

Unfortunately, limited information regarding the prospective oil and gas reserves on the Black Sea shelf inside the Crimean Exclusive Economic Zone is available. When it comes to Crimean energy resources, no widely recognised prognoses are available, Keypour and Hendla argue.<sup>233</sup> The Crimean territory comprises 44 hydrocarbon resources, 7 gas condensate reservoirs, 10 oil and 27 gas fields, and natural gas reserves of 165.3 billion cubic metres, 47 million tonnes of oil,

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<sup>229</sup>Olga Kulkova, What Russia Can Offer Africa.

<sup>230</sup>Sputnik News, Putin's Approval Rating Reaches Six-year High – Poll.

<sup>231</sup>William Broad, In taking Crimea, Putin Gains a Sea of Fuel Reserves.

<sup>232</sup>United Nations Convention on the Law of the Sea, 43-44.

<sup>233</sup>Keypour, Javad, and Ivar Hendla. The Annexation of Crimea: A Realist Look from the Energy Resources Perspective, 155

and 18.2 million tonnes of gas condensate.<sup>234</sup> To put this in context, Russia is believed to have generated 669 billion cubic metres of natural gas and 11 million barrels of oil per day (about 1.5 million tonnes of oil) in 2018.<sup>235</sup> It's worth noting that the majority of the gas in the Crimean EEZ is so-called unconventional gas, sometimes known as shale gas. Natural shale gas refers to unconventional hydrocarbons, and it is a variation of natural gas which means natural gas is trapped in clay shales, coalbed methane, and tight gas in thick sandstones, occurring at considerable depths under low pressure in geological zones, Zhiltsov adds.<sup>236</sup> Naturally, the expenses of shale gas exploration and extraction are quite expensive. Extraction of 1000 cubic metres of shale gas, for example, is predicted to cost between 20 and 40 dollars.<sup>237</sup> As a result, Russia would have to spend enormous sums of money to obtain these resources.

Nonetheless, it may be argued that the Kremlin was fully aware of these expenses before to the annexation of the Crimean Peninsula, and that some state-owned Russian enterprises may begin operating in the territory in the near future. Furthermore, huge early expenditures can greatly enhance shale gas extraction rates, implying that Gazprom, for example, might begin extracting significant volumes of shale gas very fast. If the Kremlin decides to spend public funds in this, it's very probable that corporations connected to Putin's group of acquaintances will be granted extraction rights in the area. It's unclear who firms will be granted these extraction rights. Another option is to offer gas extraction rights in Crimea to international businesses, like Ukraine did before the invasion. This would allow Russia to collect risk-free money, but the potential earnings would be far lower than if the resources were exploited by Russia. As a result, it's unlikely that Russia will sell licences. When Ukraine surrendered the Crimean Peninsula to Russia in 2014, Chornomornaftogaz, a Ukrainian firm, and all of its assets were transferred to Gazprom, a Russian state-owned company. The takeover was swift: Gazprom sent a group of trusted employees to take over Chornomornaftogaz's headquarters, and Russian navy officers with no insignia took over the oil and gas rigs under their command. Ukraine lost around 2 billion cubic metres of stored gas immediately after the seizure. Russia grabbed roughly 7 billion cubic metres of natural gas from nine producing areas near Crimea since the takeover, Ukrainian

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<sup>234</sup>Keypour, Javad, and Ivar Hendla. *The Annexation of Crimea: A Realist Look from the Energy Resources Perspective*, 155.

<sup>235</sup>British Petroleum, BP Statistical Review.

<sup>236</sup>Zhiltsov, Sergey S., ed. *Shale Gas: Ecology, Politics, Economy*. Springer International Publishing, 2017, 2.

<sup>237</sup>Unconventional Gas in Ukraine, Main deposits of oil and gas on Black Sea shelf.

media claimed in 2018. The Odesa gas field provided more than half of the gas.<sup>238</sup> Ukraine took a big impact since it only produces roughly 20 billion cubic metres of natural gas per year but uses more than 30 billion cubic metres.<sup>239</sup>

If all energy facilities in Crimea are included, Ukraine's first losses are estimated to be about \$300 billion, according to Ukraine's former Energy and Coal Industry Minister. The potential revenue from producing gas or oil from the Black Sea is not included in this figure. Ukraine has said that it will attempt to reclaim annexed Chernomornaftogaz equipment by declaring it stolen. However, it is doubtful that Ukraine will ever see the equipment again - potential legal battles might drag on for years, and/or Russia could simply refuse to follow the Permanent Court of Arbitration's judgement (PCA). As expected, Ukraine lost all of its relationships with international energy corporations involving the Crimean hydrocarbon industry after the annexation.

ExxonMobil, Shell, and a few other large companies, for example, inked a production agreement for Crimean Skifska offshore area, committing \$400 million in early exploration...in a transaction valued more than \$12 billion in 2013.<sup>240</sup> Following the events of 2014, this agreement was promptly terminated. According to Biersack and O'Lear, there is a silent, though evident link between Crimea's takeover and Russia's energy drive eastward.<sup>241</sup> Russia has negotiated many transactions for over half a trillion dollars with China in recent years. The contracts, for example, involve the construction of a new pipeline and 30-year transportation agreements for providing China National Petroleum Corp with around 40 billion cubic metres of gas each year. Gazprom is the Russian counterpart in each of these agreements. Crimea is important for this historic bilateral energy accord for two reasons. Russia was ready to sign the contract with China as soon as it was certain it would obtain access to the undeveloped Black Sea energy sources. Furthermore, given that China's natural gas consumption has increased by almost 2000% in the previous 40 years and is expected to continue to expand at least until 2050, a significant portion of Crimean natural gas will end up in China.<sup>242</sup> It seems unlikely that natural

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<sup>238</sup>Ukrinform, Chornomornaftogaz: Russia has stolen more than 3.5 bln cu m of Ukrainian gas.

<sup>239</sup>Central Intelligence Agency, The World Factbook: Ukraine.

<sup>240</sup>John C. K. Daly, Ukraine Claims Energy Losses for Crimean Annexation Reach \$300 Billion.

<sup>241</sup>Biersack, John, and Shannon O'Lear. The geopolitics of Russia's annexation of Crimea: narratives, identity, silences, and energy, 260.

<sup>242</sup>China Daily, China's natural gas consumption to keep growing before 2050: report.



gas from Crimea will be sent to China today. Rather, the point is that since regaining control of Crimea, Russia's overall gas production potential has grown.

The second reason Crimea is crucial to the Russia-China agreement is that Russia will have to compete with other gas providers in China. It's fair to expect that Russian gas to China will be sold at lower margins than European supplies, says the report.<sup>243</sup> As a result, because Russia now owns the massive gas reserves in the Crimean Exclusive Economic Zone, it will be able to lower costs for Chinese gas supplies. The rapidity with which Russia and China signed the agreement following the invasion of Crimea suggests that Russia was anxious for a method to counteract China's pricing reduction (the agreement had been in the works since 2006). The Russia-China natural gas pact is also a great illustration of how Putin's close supporters are rewarded with rich government contracts by the Kremlin. As previously stated, the deal includes the construction of a pipeline. The expense of developing processing facilities and a pipeline to China will cost Russia \$70 billion, according to estimates.<sup>244</sup>

China is said to have provided a \$50 billion loan for the pipeline's development up to the Chinese border.<sup>245</sup> The pipeline is known as the Power of Siberia and it stretches over 8000 kilometres through Russia and China. The Chinese \$50 billion loan offered to the Russian government and how the Kremlin has rewarded Putin's cronies with large infrastructure projects in the Crimean Peninsula have been made public by Putin's close supporters. Gennady Timchenko is widely recognised as one of Russia's most prominent people. He is also one of the world's wealthiest persons, with a net worth of over 20 billion dollars.<sup>246</sup> Timchenko built his fortune as an oil dealer in St. Petersburg in the 1990s. Timchenko went on to co-found Gunvor, which grew to become one of the world's largest independent commodities trading organisations operating in the oil and energy markets.<sup>247</sup>

Timchenko is also a close friend and associate of Vladimir Putin, who is alleged to have invested in Gunvor. In fact, some refer to Timchenko as Putin's personal wallet because of their close

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<sup>243</sup>Ariel Cohen, The Strategic Upside Behind Russia's \$55 Billion 'Power of Siberia' Pipeline To China.

<sup>244</sup>Biersack, John, and Shannon O'Lear. The geopolitics of Russia's annexation of Crimea: narratives, identity, silences, and energy, 261.

<sup>245</sup>Jane Perlez, China and Russia Reach 30-Year Gas Deal.

<sup>246</sup>Forbes List of Real-Time Billionaires, Gennady Timchenko.

<sup>247</sup>U.S. Department Of The Treasury, Treasury Sanctions Russian Officials, Members Of The Russian Leadership's Inner Circle, And An Entity For Involvement In The Situation In Ukraine.

relationship.<sup>248</sup> It is widely agreed that Putin's burgeoning political career in St. Petersburg in the 1990s provided Timchenko and his firms with a tremendous boost in the Russian corporate sector.

Timchenko has now gained major or complete control of a number of large Russian enterprises. Gennady Timchenko, for example, is a major shareholder in Bank Rossiya (Russian bank), Sobinbank (Russian bank), Volga Group (investment and holding company), Novatek (Russia's second-largest natural gas producer), Avia Group (business aviation company), Sakhatrans (coal transportation company), Transoil (oil and oil product transportation company), Aquanika (Russian mineral water and soft drink manufacturer), and Stroytransgaz (Russian natural (construction company)).<sup>249</sup>

Through his Stroytransgaz firm, Timchenko is a direct partner in the Power of Siberia pipeline. Within Russian boundaries, the company was one of the principal contractors for the whole pipeline project.<sup>250</sup> In addition, another tycoon, Arkady Rotenberg, and his brother Boris were also interested in the Power of Siberia pipeline project. The other key contractor in the arrangement was Arkady's construction business Stroygazmontazh, which constructed a 1126-km-long portion of the gas pipeline from the Neryungri area of the Republic of Sakha (Yakutia) to the border with the People's Republic of China.<sup>251</sup> The Russian government forms an agreement with another entity (in this case, sending gas to China), China pays a loan, and the Kremlin awards construction and maintenance projects to Russian enterprises owned by Putin's supporters.

With a single deal, Russia may boost exports, gain geopolitical influence, get a massive loan at a low interest rate, and move government funds to Putin's inner circle. It's worth noting that these massive government-sponsored projects are always put out to tender, yet the same handful of corporations win the bids year after year. Rotenberg's Stroygazmontazh, for example, won 279

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<sup>248</sup>Znak News, Миллиардер и друг Путина Тимченко после введения санкций заявил, что готов отдать все свои активы государству. «Мы с женой обсуждали, нам миллиарды не нужны» (Znak News, Billionaire and Putin's Friend Timchenko announced that he is ready to give all his assets to the government – 'we have talked about this with my wife, we don't need the billions).

<sup>249</sup>Alexey Kobylyanskiy, Sanctioned Russian companies – brief analysis and legal basis.

<sup>250</sup>Interfax, «Стройтрансгаз без конкурса получил подряд на второй участок Силы Сибири» (Stroytransgaz was given yet another contract for the Power of Siberia)

<sup>251</sup>Stroygazmontazh, Projects, The Power of Siberia gas pipeline.

out of 374 tenders in 2014. The total value of the bids received by Stroygazmontazh was over 230 billion rubles (\$3.5 billion).<sup>252</sup>

Certain peculiarities recur year after year when examining Russian construction projects, whether a gas pipeline or a bridge. Russian infrastructure projects, in particular, appear to be far more expensive than equivalent initiatives in other regions of the world. When Gazprom built new pipelines in Russia in the 2010s (in collaboration with other businesses), they were two to three times more expensive than analogous projects in Europe, even when they were in temperate, accessible areas in southern Russia.<sup>253</sup> In other words, when something is created in Russia, there appears to be a big problem with obvious price inflation. As a result, it's not unreasonable to believe that Russian taxpayers overpaid for the Kerch Strait Bridge. Russia makes advantage of its hydrocarbon resources to further its foreign policy objectives. As one of the world's largest gas and oil producers, Russia wields immense political influence in a number of countries.

In summary, Russia has been developing asymmetrical economic partnerships with a number of nations, including those in the European Union, for many years. Many of these countries have become reliant on Russian energy to some extent or another. To put it another way, they've become victims of Russia's 'energy weapon.' Although Russia benefits monetarily from hydrocarbon exports, analysts believe that obtaining political influence through the sale of hydrocarbon resources is just as crucial for Russia. Subsidies for energy exports are another technique to obtain political clout in a foreign country.

This strategy has predominantly been employed in former Soviet republics, owing to their poor economies and the fact that they have little option in the face of Russia's ever-increasing pressure. Corruption, informal politics, and Vladimir Putin's circle of close friends are all strongly ingrained in Russian corporate culture today. For example, Putin's close associates sit on the boards of Russian state-owned energy corporations such as Gazprom, Rosneft, and Transneft, giving the Kremlin direct influence over almost all significant Russian hydrocarbon exporters. Presidents Joe Biden and Vladimir Putin met recently in Washington, DC, and it appears that the contentious Nord Stream 2 Russian natural gas pipeline is a done deal. Nord Stream 2 will

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<sup>252</sup>Vedomosti News, «Стройгазмонтаж Ротенберга стал крупнейшим подрядчиком в 2014 году» (Stroygazmontazh became a major contractor in 2014)

<sup>253</sup>Joshua Yaffa, Putin's Cabinet and the Bridge to Crimea.

convey 55 billion cubic metres of gas per year from Russia to Germany across the Baltic Sea and then to the rest of Europe if it is finished on schedule by the end of this year. It is estimated to bring Russia \$3.2 billion each year.

The pipeline's development and finance have been halted for nearly a year due to US sanctions imposed in 2019. Sanctions were later increased in the year 2020. Some analysts predicted that Biden would use the sanctions as a bargaining chip at the recent Geneva summit to pressure Putin over Russia's occupation of territories in Ukraine and Georgia, support for Belarus' dictatorial regime, violations of human rights within Russia, and the poisoning, imprisonment, and outlawing of political opposition. Instead, a month before the conference, the White House removed restrictions on Nord Stream 2, causing consternation among certain US legislators and European allies. The pipeline is a joint venture between a few European gas firms and Gazprom, the world's largest gas provider, which is majority controlled by the Russian government. Putin sees the pipeline as a way to strengthen his hold on Europe by increasing the region's reliance on Russian energy. For decades, natural gas has been the core of Putin's domestic and international influence. Nord Stream 2 provides Russian President Vladimir Putin with a new direct and powerful control line in Western Europe.

### **The control of Putin over Russia's energy resources**

Putin has been seizing control of Russia's gas and oil industries since assuming power in 2000. He renationalized Gazprom, the state-owned oil corporation that was privatised when the Soviet Union fell apart. Regaining government control over the gas and oil industries, according to academic studies, led to the reinforcement of authoritarianism in Russia. It also happened at the same time as Putin's political opponents were being punished. After being arrested at gunpoint and imprisoned for ten years for tax evasion in 2003, Mikhail Khodorkovsky, the owner of the Yukos oil business and a vocal opponent of Putin's rising authoritarianism, became the regime's first renowned political prisoner.

The government finally seized Yukos and integrated it into state-owned enterprises. Putin's administration had extensive influence over oil and gas production in Russia, which is one of the world's top producers and exporters, by the end of his first term in office in 2004. The proceeds from oil and gas sales allowed Putin to finance his domestic programme as well as increase military spending. It also provided him tremendous clout over neighbouring nations who rely on Russia for their energy. For example, when the Ukrainian government adopted more pro-

Western policies and angered the Kremlin in 2006 and 2009, Russia cut off the country's gas supply and, as a result, cut off the gas supply of nations farther down the supply line in Central and Western Europe, including Germany.

### **Russia's relation with Europe**

Nord Stream 2 might help Western Europe avoid such complications in the future by providing a direct supply connection from Russia to Europe. However, it exposes Western Europe to the same direct Russian pressure that was used to punish Ukraine. As a result, the proposed pipeline has caused controversy. Even before it is completed, Nord Stream 2 has caused a rift among NATO members. Sweden, Poland, and the Baltic states, for example, have all expressed concern, citing environmental issues connected to the pipeline's construction and maintenance. They are concerned that Russia may strengthen its military naval presence in the Baltic Sea by utilising its new pipeline infrastructure. Russia's intelligence-gathering capability would be enhanced as a result. Russia's administration would benefit from further crumbling NATO, or creating divisions inside the alliance, as he puts it. NATO, which he refers to as a Cold War relic, is the greatest threat to Russian security, according to Russian President Vladimir Putin. With less external interference, Russia may continue to pursue political repression of its own citizens and territorial aggression against neighbouring countries.

### **The growth of Russia's energy influence**

The origins of Russia's current oil and gas influence may be traced back to the country's Soviet era. As we will see, the Kremlin intentionally initiated an attempt to make Russian energy indispensable throughout both Eastern and Western Europe at that time. By the 1970s, Soviet energy influence had become a major source of concern for the West (Klinghoffer, 1977).<sup>254</sup> Low oil prices, the dislocations of the USSR's collapse, and the privatisation of major oil businesses all contributed to a temporary drop in energy influence in the late 1980s and 1990s. Russia's vast resources and huge pipeline network, on the other hand, assured that its 'petro-power' was ready to re-emerge under President Putin. During the 1950s and 1960s, the Soviet Union intensified its attempts to economically link up with its Warsaw Pact members. Economic cooperation of various kinds was supposed to complement the Soviet Bloc's military and ideological links through the Council for Mutual Economic Assistance (CMEA or

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<sup>254</sup>Klinghoffer, Arthur (1977). *The Soviet Union and international oil politics*. New York: Columbia University Press.

COMECON). While the CMEA was founded in 1949 by Stalin, the Bloc members felt economically abused during those years. Khrushchev, on the other hand, intended to establish a 'socialist division of labor,' from which the USSR and its allies would all benefit. At the same time, this network of mutual reliance would make leaving the group extremely difficult for any state.

The USSR's role as the leading provider of raw materials and energy to the rest of the Bloc was an important aspect of this emerging 'socialist division of labour' (Kramer, 1985<sup>255</sup>, Newnham, 1990).<sup>256</sup> Then began a trend that continues today: Russia purposefully provided heavily subsidised oil and gas to its allies—but only if they stayed politically cooperative (Marrese & Vanous, 1983).<sup>257</sup> Loyal governments that faced political difficulties, as Poland during the Solidarity movement of 1980–81, were aided even more generously. Meanwhile, Kremlin critics such as Romania were forced to rely on the far more expensive global market for fuel.<sup>258</sup> These subsidies simply reinforced Eastern Europe's (and the rest of the USSR's) dependency on Russian oil and gas. Huge energy-intensive businesses arose, many of which (like petrochemical facilities) were entirely reliant on subsidised fuel.

Average customers were also accustomed to wasting energy. Many flats in the Soviet Bloc, for example, were designed without individual thermostats or gas meter, which encouraged waste. As we'll see, the Kremlin's legacy of reliance is nevertheless a potent source of influence today. Soon after, another major aspect of today's Russian energy influence emerged: the notion that the new East European pipelines would allow enormous quantities of Soviet oil and gas to be exported to the capitalist west (Jentleson, 1986)<sup>259</sup>.

This would provide Russia with vital hard cash as well as a useful political instrument, allowing Moscow to wrest Western Europe from American dominance. Even as early as the early 1960s, American policymakers were concerned that the Druzhba [Friendship] oil pipeline, which was

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<sup>255</sup>Kramer, John (1985). Soviet-CMEA energy ties. *Problems of Communism*, 34(4), 32–47

<sup>256</sup>Newnham, Randall, *Soviet Oil and Gas Trade with Eastern Europe: Developments in the 1980s*, California Seminar on International Security and Foreign Policy Discussion Papers, 112 (1990).

<sup>257</sup>Marrese, Michael, & Vanous, Jan (1983). *Soviet subsidization of trade with Eastern Europe: A Soviet perspective*. Berkeley: University of California.

<sup>258</sup> As Kramer notes (1985: 35), in 1979 Hungary received 97% of its energy imports from the USSR, Bulgaria 92%, and East Germany 90%. Romania, in contrast, received only 16% of its imports from the Kremlin, having to buy the rest on the world market.

<sup>259</sup>Jentleson, Bruce (1986). *Pipeline politics: The complex political economy of east–west energy trade*. Ithaca, NY: Cornell University Press.

being built from Russia to East Germany at the time, would allow the Soviets to establish influence in the West. As a result, the United States pressured West Germany and other suppliers to stop exporting large diameter pipe and other equipment to Russia (Newnham, 2002: 132–136).<sup>260</sup>

The problem had been simmering for decades, with a major battle emerging under President Ronald Reagan, who encouraged NATO to boycott Russia's new natural gas pipelines to Western Europe (Jentleson, 1986). Nonetheless, the links were established, and they have only grown stronger over time. The stage was prepared for Russia to be able to exploit its energy power in two ways: first, by subsidising its allies, and second, by selling to its opponents at full global market price and making large profits. In any case, the Kremlin strengthened its influence. In retrospect, rising oil prices appear to have played a key role in reinforcing Moscow's view that it was winning the Cold War in the 1970s and early 1980s. In 2004, Gaddy (348)<sup>261</sup> wrote: [The current moment] isn't the first time that an oil windfall has influenced Russian thinking. The combination of massive new Siberian oil supplies coming online and price shocks caused by the 1973 Arab-Israeli conflict generated the biggest economic boom the Soviet Union ever experienced in the early 1970s. The money was set aside for expanding subsidies to Eastern Europe and new arms delivery to clients in far-flung corners of the globe. It would be used to pay for a costly war in Afghanistan by the turn of the next decade.

The international market price for oil fell in 1986, fortunately for the West and Russia's beleaguered East Bloc partners. Many analysts, like the late economist and former Russian Prime Minister Yegor Gaidar, believe this was a crucial factor in the USSR's quick demise (Gaidar, 2007).<sup>262</sup> Falling oil and gas revenues made it difficult for Russia to continue the Cold War, prompting a withdrawal from Afghanistan and other Third-World endeavours. Due to the falling price of oil and gas, Russia had little choice but to concentrate exports to the wealthier West, reducing subsidised supplies to Eastern Europe.

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<sup>260</sup>Newnham, Randall (2002). *Deutsche mark diplomacy: Positive economic sanctions in German–Russian relations*. Penn State Press: University Park, PA.

<sup>261</sup>Gaddy, Clifford (2004). Perspectives on the potential of Russian oil. *Eurasian Geography and Economics*, 45(5), 346–351.

<sup>262</sup>Gaidar, Yegor (2007). *Collapse of an empire: Lessons for modern Russia*. Washington, DC: Brookings Institution Press.

This contributed to the destabilisation of the Soviet Union. Meanwhile, plummeting oil and gas revenues have harmed Russia's economy, putting another nail in the Gorbachev government's coffin. During the years of Yeltsin, Russia's 'petro-power' continued to decline. There are several causes for this. For starters, oil prices have stayed extremely low. Second, the general Russian economy remained in free collapse as a result, exacerbating the government's need for hard currency exports. Third, these economic disruptions simply served to lower oil and gas output, decreasing income even further.

Finally, the privatisation of Russian resources ensured that businesses, not politicians, would wield much of the country's scarce 'petro-power.' From 1986 through 2000, the world market price for oil stayed below \$20 per barrel with a few exceptions, such as a price increase during the 1991 Gulf War (EIA, 2007b).<sup>263</sup> The impact on Russia was enormous. The Russian economy, which was already reeling from the severe impacts of Gorbachev and Yeltsin's steps toward the free market, was further weakened by such low pricing. According to estimates, a \$1 shift in international oil prices leads Russia's GDP to grow or decrease by 0.35 percent (EIA, 2007a)<sup>264</sup>. As a result, the drop in oil prices in the 1980s—to around \$30 per barrel—cost Russia roughly 10% of its GDP, which was a significant blow. Along with the drop in oil prices, production dropped as well. Oil production peaked in the mid-1990s at 6 million barrels per day, approximately half of what it had been during the Soviet period (EIA, 2007a). Obviously, such a drop left Russia with far less 'petro-power.'

Between 1991 and 1998, the Russian economy fell by nearly 40% due to the massive extra disruptions caused of the end of Communism. Unsurprisingly, such a rapid economic decline left the Russian government unable to meet both domestic and foreign debt obligations. Russia's 'petro-power' was hit in two ways by this gradual financial collapse. First, Moscow's acute need for cash compelled it to pursue a export at all costs programme. Even little payments from consumers like Ukraine, which receives substantially subsidised oil and gas, were critical. Russian officials were concerned that these countries may simply refuse to pay or switch to alternative suppliers if the Kremlin dared to hike costs. It was necessary to safeguard Russia's market share. Worse, Ukraine, Belarus, and the Baltic States were stood astride in the middle of

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<sup>263</sup>Energy Information Administration. (2007b). Annual oil market chronology. [www.eia.doe.gov/emeu/cabs/AOMC/Overview.html](http://www.eia.doe.gov/emeu/cabs/AOMC/Overview.html), Accessed 31.07.2007

<sup>264</sup>Energy Information Administration. (2007a). Country analysis briefs: Russia. [www.eia.doe.gov/cabs/Russia/Full.html](http://www.eia.doe.gov/cabs/Russia/Full.html), Accessed 25.04.2007



Russia's lucrative Western export lines. A decision to shut down the export pipelines might have ruined Russia's already-low credit rating and driven the currency farther down the drain. This was a serious threat, as the summer 1998 ruble collapse demonstrated.

Second, the urgent necessity to overcome huge budget shortfalls pushed the Kremlin to hastily privatise key state assets, particularly oil and gas reserves, at fire sale rates. Privatization reduced state power in the oil and gas industries as the Yeltsin years advanced. The majority of oil assets were sold, often for pennies on the dollar. For example, Russian investor Roman Abramovich was able to purchase Sibneft, a Russian oil company, for around \$100 million in 1995 and then sell it for more than 130 times that amount (\$13.1 billion) ten years later (Kramer, 2005).<sup>265</sup> By the late 1990s, oligarchs had gained ownership of oil fields without making any actual payments; under the so-called loans for shares scheme, even short-term loans were sufficient to steal assets from the impoverished Russian state. While foreign firms were not permitted to purchase existing oil assets, they were allowed to gain majority ownership of potentially profitable undeveloped fields. Only approximately 10 percent of Russia's oil was in state control by the end of the Yeltsin years, hardly enough to dictate export policy. Even the last big state-owned oil corporation, Rosneft, was set to be sold to private investors. In reality, it was only saved in 1998 when private purchasers rejected the \$2.1 billion price tag for 75 percent of the company as being far too costly (Lane, 1999:35)<sup>266</sup>. Rosneft would be worth around \$80 billion by 2006, based on the \$10.4 billion it obtained when only 15% of its shares were available for sale (Kramer, 2006a).<sup>267</sup>

The Kremlin's involvement in the gas industry was greater, but remained diminished. The majority of natural gas production remained in the hands of Gazprom, the state-owned energy conglomerate founded just before the Soviet Union fell apart. However, the state's interest in the corporation was reduced to roughly 38 percent after major shares were sold to local and foreign bidders. While the government retained power, Gazprom's actions were more driven by economic rather than political considerations. Its use as a governmental leverage tool was dwindling. In the latter years of Yeltsin's presidency, there was widespread anticipation that Gazprom might be entirely privatised, thereby removing the Kremlin's energy control.

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<sup>265</sup>Kramer, Andrew (September 29, 2005). Russian gas giant to buy nation's no. 5 oil producer. *New York Times*.

<sup>266</sup>Lane, David (Ed.). (1999). *The political economy of Russian oil*. Lanham, MD: Rowman & Littlefield.

<sup>267</sup>Kramer, Andrew (July 14, 2006a). Stock sale by Rosneft gives Putin upper hand. *International Herald Tribune*

Many commentators concluded in the latter years of Yeltsin's presidency that not only did the Kremlin not control the oil and gas sector, but that the business, in many respects, dominated it. Leading oligarchs played a significant role in Yeltsin's tight victory in 1996, earning significant clout. Even in international policy, it appeared that energy firms played a significant, if not dominant influence (Rutland, 1999:183).<sup>268</sup> The Kremlin's power had been fragmented to the point that no clear decision-making method could be seen. The contrast with today's forceful Russian government was obvious.

### **3.3 RUSSIA'S PETRO-POWER RETURNS**

#### **What is petro power?**

Russia has one of the world's major petroleum industries. When it comes to natural gas, Russia both stores and ships the most to the world. It's a major oil producer and possesses the world's second-largest reserves of coal and the world's sixth-largest reserves of oil. It consumes as much energy as the fourth most populous country. Russia's daily oil production averaged 10.83 million barrels (1.722,000 m<sup>3</sup>) in December 2015. In 2009, its oil production and exports both accounted for around 12% of worldwide output. As of June 2006, Russia was pumping out 9.7 million barrels (1,540,000 m<sup>3</sup>) of crude oil and condensate per day, marking a new post-Soviet high. An increase of 3.2 Mbb/d (510,000 m<sup>3</sup>/d) above 2000 output. More than five million barrels of oil per day (or seven hundred and ninety thousand cubic metres per day) and approximately two million barrels of refined goods per day (or three hundred and twenty thousand cubic metres per day) leave Russia for markets mostly in Europe. In 2005, the average domestic demand was 4.10 million barrels per day (2.6 Mbb/d).

Also, oil from Kazakhstan mostly passes via this nation. Russia exports more natural gas than any other country. Russia is often regarded as having the greatest proven reserves of natural gas in the world, however this is not universally accepted. OPEC, the US Energy Information Administration, and the CIA have all estimated Russia's proved reserves to be larger than any other country's (48.7 tcm). Nonetheless, Russia is only credited by BP with 31.3 tcm as of 1 January 2014, putting them in second position, just behind Iran (33.1 to 33.8 tcm, depending on the source). The US Geological Survey estimates that Russia has the greatest proved reserves of natural gas in the world, and that it also has the highest mean probable volume of natural gas in

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<sup>268</sup>Rutland, Peter (1999). Oil, politics, and foreign policy. In David Lane (Ed.), *The political economy of Russian oil* (pp. 163–188). LanhamRowman and Littlefield.

the world (6.7 trillion cubic metres). Untapped oil reserves in Russia are estimated at 22 billion barrels by the US Geological Survey, making it the world's second largest oil producer behind Iraq.

Russia's energy influence rose to new heights under President Putin's leadership. This result was the consequence of a combination of factors. First, from 2000 to 2008, the global oil and gas market benefited Russia and other producers substantially. While prices have decreased as a result of the present global crisis, a return to the 1990s' period of cheap oil appears doubtful. Second, Putin's government tried to seize control of the country's oil and gas industry. This allowed Russia to use its economic might for the benefit of the country, which was a vital requirement during the late Yeltsin years. Third, Russia has made a concerted effort to expand its control over oil and gas assets outside of its borders, particularly pipelines that transport its goods throughout the world. To summarise, Russia is now far more free to use its oil and gas to impose severe costs or offer rich advantages to those it wants to influence. The status of the international oil and gas markets under Putin's leadership was a major element in the emergence of Russia's energy power. Worldwide, supplies were scarce, leaving Russia's consumers with little options other than buying from Moscow. States would be unable to readily avoid or apply counter-penalties in response to Moscow's energy sanctions. To show its dissatisfaction with Putin's foreign policy or his increasingly dictatorial behaviour at home, the EU, for example, would have found it nearly hard to boycott Russian oil or gas. In addition, when Putin was elected President in 2000, oil prices climbed to historic highs, hitting about \$150 per barrel by mid-2008.

This shift from the Yeltsin era allowed Russia to earn handsomely from oil and gas sales. As a result, the Kremlin was able to pay off Russia's foreign debts, which had become so large under Yeltsin that they were preventing Russia from properly utilising its petro-power. Despite the fact that the recession has depleted Russia's financial reserves, the country is significantly more solvent now than it was in the 1990s. If a nation like Belarus threatens to halt Russian oil or gas exports through its pipelines, Russia will be able to ignore the threat. It understands that, unlike during the Yeltsin years, it can afford a temporary drop in revenue.

Due to the tightness of global markets, Moscow was able to maintain and extend its dominant market position among existing energy clients, as well as attract new consumers like China and Japan. Belarus, for example, gets nearly all of its natural gas from Russia—99 percent. About 89

percent of the Baltic States' gas comes from Moscow, 88 percent from Georgia, and 69 percent from Ukraine. Even some Western clients, such as Austria (72 percent) and Greece (85 percent), have significant levels of reliance (EIA, 2007c:6).<sup>269</sup> These underlying conditions—high prices, limited supply, and substantial market shares—all fulfill the preconditions for the deployment of economic power mentioned in the theory section.

Another requirement that had been permitted to slide away during the Yeltsin years was governmental resource control. Almost all of Russia's oil reserves were privatised during the Yeltsin years, as previously stated. Even Gazprom, Russia's largest company, was being evaluated for privatisation. Putin's laissez-faire policy came to an abrupt end. Of course, the treatment of Yukos, widely regarded as Russia's best-run private oil company, is a classic illustration of this. The founder of Yukos, Mikhail Khodorkovsky, was reportedly targeted because he posed a direct challenge to Putin's leadership of the energy industry (Baker & Glasser, 2007: Chs. 14 and 17).<sup>270</sup> He was moving blithely forward in various areas, seemingly unconscious of the oncoming threat, which enraged Putin. He intended to buy another huge Russian oil corporation, Sibneft, and thereby become a major player in the oil industry. He was considering selling a major interest in Yukos to Western investors to fund this growth. He was also publicly supporting anti-Putin political groups in Russia. The outcome is well known: Khodorkovsky was arrested on what were largely considered to be false tax accusations and sentenced to eight years in a Siberian jail.

Worse, his business was destroyed. The Russian government sought ever-increasing payments for 'back taxes,' and Yukos was compelled to declare bankruptcy and liquidate its assets. The majority of Yukos' oil assets were transferred to the state-owned Rosneft in a farcical 'auction' held in December 2004.<sup>271</sup> The Kremlin then discreetly worked to strengthen its position in the energy sector. Gazprom purchased privately-owned Sibneft for \$13.1 billion in late 2005 (Kramer, 2005), later dubbing the transaction 'Gazprom Neft' [oil]. The transaction was seen as

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<sup>269</sup>Energy Information Administration. (2007c). Country analysis briefs: Ukraine. [www.eia.doe.gov/NewCabs/V6/Full.html](http://www.eia.doe.gov/NewCabs/V6/Full.html), Accessed 09.08.07.

<sup>270</sup>Baker, Peter, & Glasser, Susan (2007). *Kremlin rising: Vladimir Putin's Russia and the end of revolution* (updated edition). Washington, DC: Potomac Books.

<sup>271</sup> Rosneft bought the assets through a front, Baikal Finance Group, which it formally took over three days later. The price was vastly understated--\$9.35 billion for assets worth more than \$60 billion ([Meyers and Kramer, 2007](#)).

mainly voluntary in this case, with a reasonable market price given. Roman Abramovich, the owner, was thought to have cashed out before the government put pressure on him.

Tougher measures were viable, as the instance of Russneft, a smaller company, plainly demonstrates. Its owner, oligarch Mikhail Gutseriev, originally refused to sell in the summer of 2007. The government quickly retaliated with dubious tax claims, similar to those used against Yukos. Gutseriev folded, selling to aluminium magnate Oleg Deripaska, a Kremlin-approved purchaser. Then he made the mistake of publicly criticising the sale as being unjust and coerced. A warrant for his arrest had been issued, but he had wisely fled the country (Kramer, 2007).<sup>272</sup> Despite the expansion of Rosneft and the creation of Gazprom Neft, roughly 60% of Russia's oil reserves are still held by private companies (Hashim, 2007:11).<sup>273</sup> The surviving private companies, on the other hand, have obviously understood Putin's message. In internal politics, everyone now backs Putin and Medvedev, and they gladly follow their lead on foreign policy issues. In today's Russia, this is the cost of doing business. As previously stated, part of Putin's administration's motivation for targeting Yukos was its dread of the company's efforts to woo international investors. Large, independent foreign enterprises either owning Russian energy companies or directly operating oil fields would clearly make it impossible for Moscow to govern the Russian oil sector. Putin has made a concerted effort to get foreign corporations to sell their dominant stakes in the energy sector.

The handling of the joint venture called as Sakhalin-II, which was founded during the more liberal Yeltsin years and is owned by Shell, is a perfect illustration of Russia's new energy xenophobia. Late in 2006, Shell was under to intense political pressure (Kramer, 2006c)<sup>274</sup>. The Russian environmental agency's claim that the project may harm the environment was a crucial component of this. This allegation was regarded with unanimous scepticism, given the poor track record of both Soviet and Russian oil exploration in this area, with their projects falling far short of Western environmental norms. Surprisingly, the environmental concerns vanished once the business decided to sell primary ownership of the project to Gazprom at the end of 2006. To

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<sup>272</sup>Kramer, Andrew (August 29, 2007). Arrest ordered for Russian oil entrepreneur, a critic of the Kremlin. New York Times.

<sup>273</sup>Hashim, S. Mohsin, Bringing the State Back In? Evaluating the Scope and Limits of Russia's Capacity to Leverage Energy as a Foreign Policy Weapon. Paper presented at annual meeting of the Northeastern Political Science Assn. and International Studies Assn.-Northeast, Philadelphia, November 2007.

<sup>274</sup>Kramer, Andrew (December 11, 2006c). Shell bows to Kremlin pressure on Sakhalin project. International Herald Tribune.

protect its 'Petro-Power,' Russia tries to maintain as many of its allies in a position of energy dependency as possible, a dependency that can be controlled as Russia sees fit. Controlling pipelines and other energy facilities in neighbouring nations is an important part of this approach. Russia wants to take control of pipelines that transport Russian oil and gas to other nations in Poland, Belarus, Ukraine, and the Baltic republics. If Moscow is unable to control these transit routes, it will attempt to circumvent them, such as with the new Nord [North] Stream pipeline, which runs straight from Russia to Germany over the Baltic Sea. At the same time, Moscow controls pipelines that transport oil and gas from the Caspian and Central Asian nations through its own territory, and works hard to prevent these countries from finding alternate export routes.

The use of false 'environmental' justifications is one of the strategies Russia has used to control pipeline routes, as described above. A trans-Caspian pipeline, for example, has been suggested, which would bypass Russia and allow Central Asian gas to reach the West via Azerbaijan and Georgia. The Russian environmental agency, predictably, instantly criticised it as a potential threat to marine life. Surprisingly, the Kremlin-favored Nord Stream trans-Baltic pipeline, which is significantly longer, was immediately approved by the same agency as posing no harm to the sea (Watchdog Okays, 2007)<sup>275</sup>.

### **Petro-Carrots: Oil and gas as economic incentives**

In this part, we'll look at one aspect of Russia's energy power: its usage as a type of 'positive linkage,' or incentives. Oil and gas enable Russia to 'pay off' international firms and individuals. More significantly, the Kremlin has the ability to control whole countries. Loyal friends are rewarded with enormous supplies of subsidised energy, just as they were during the Warsaw Pact era, at tremendous expense to Moscow. The beneficiaries are different today, of course, because much of Central Europe has joined the EU and NATO and is no longer linked with the Kremlin. As we'll see, the Ukraine (under President Kuchma), Belarus, and other minor breakaway enclaves in Moldava and Georgia have all lately received petro-carrots. While this assistance has not always been successful (most notably in Ukraine during the Orange Revolution), it has aided pro-Kremlin officials in Belarus, Abkhazia, South Ossetia, and the Trans-Dniestr region to

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<sup>275</sup>Watchdog Okays Nord Stream Booster (April 5, 2007). Upstream Online <http://www.upstreamonline.com/incoming/article130836.ece>

remain in power. This 'near-abroad' influence, as Moscow puts it, is critical to Russia's ambitions to remain a big state.

Under President Leonid Kuchma, Russia's generosity to Ukraine was a clear example of using oil and gas prices to benefit a client state. Kuchma, who led Ukraine from 1994 to 2005, was a firm supporter of Russia, establishing a Treaty of Friendship, Cooperation, and Partnership with Moscow, declaring Russian to be the official language, and siding with Moscow on a number of foreign policy issues.

The Kremlin, predictably, rewarded these initiatives with subsidised oil and gas sales. During Kuchma's presidency, Moscow maintained gas prices at around \$50 per Thousand Cubic Metres locked (TCM). In fact, Kiev paid far less than that, because much of the gas was simply given to Ukraine as transit fees for being shipped to Western Europe. Furthermore, Ukraine was permitted to fall behind on even the few payments it did due, accumulating a significant debt to Russia. Following the pro-Western 'Orange Revolution' of 2004, when Kuchma was replaced by Viktor Yuschenko, the political basis of these subsidies became all too evident. Oil and gas 'carrots' became 'sticks' in Moscow's war against Yuschenko, as we'll see in the following part.

Belarus is another prime example of a country that benefits from Russian oil and gas incentives. Clearly, Russia was not rewarding Belarus for political or economic reforms; Belarus has remained a Soviet-era relic in the area under autocratic President Lukashenko. Lukashenko, on the other hand, has always backed Moscow in foreign policy, even going so far as to pursue the idea of forming a new federation with Russia for years. As a result, the Kremlin has ensured that Belarus will be given extremely cheap gas. Belarus paid just \$47 per TCM in 2006, but Russia demanded \$230 from the new pro-Western Ukrainian government, about five times more (Vinocur, 2006).<sup>276</sup>

Even the country's feeble, primarily state-run economy struggles to pay for the heavily discounted gas it receives. Russia had been willing to overlook this until recently. Belarus was able to 'pay' its debts during the Yeltsin period, for example, by giving up claims on shared Soviet-era assets in Russia (1993) and claims for damage done by Soviet soldiers in Belarus (1996). (Lane, 1999: 168)<sup>277</sup>. Both of these statements were a stretch, given that Belarus had

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<sup>276</sup>Vinocur, John (January 3, 2006). For Schröder and Putin, linkup no coincidence. New York Times.

<sup>277</sup>Lane, David (Ed.). (1999). The political economy of Russian oil. Lanham, MD: Rowman & Littlefield.

seized Soviet facilities on its own soil and that damage caused by the Soviet-era military was hardly solely Yeltsin's fault.

Putin progressively raised the pressure on Belarus to pay slightly fairer energy costs, despite the fact that Belarus is still subsidised. Russia boosted prices for its allies, such as Belarus and Armenia, but raised them even more for its opponents, such as Ukraine, Georgia, and Moldova. As a result, a 'price scissors' has been developed, which benefits Moscow in two ways. For starters, it boosts overall revenue since all customers pay more. Second, the price disparity allows it to penalise its adversaries while also rewarding its allies. Belarus can hardly complain about having to spend \$100 per TCM for gas while Georgia pays more than thrice that. Massive pricing differentials and lenient handling of Belarussian debts have played a key role in keeping the country afloat economically and, as a result, in maintaining Lukashenko in power. As a result, the policy must be seen as a big achievement for Moscow.

The West has long attempted to support opposition movements in Belarus, such as the 'Zubr' movement, which rallied around pro-Western candidate Alexander Milinkevich in the 2006 presidential election. Nonetheless, Lukashenko's claim to have brought stability to the country owing in part to low unemployment, subsidised food, and energy—helped to keep his opponent's support at bay. Even if he hadn't utilised paranoid police methods and electoral fraud to achieve an overwhelming win, he would have likely won reelection. The lack of an 'Orange Revolution' in Minsk was aided by energy incentives. Moscow has successfully exploited incentives to fund many pro-Russian enclaves in less compliant states, in addition to the large petro-subsidies granted to cooperative neighbours like Belarus.

Moldova, for example, has long been a thorn in Moscow's side because of its nationalistic policies, which have alienated the country's Russian minority. As a result, Russia has backed the separatist 'Trans-Dniestr Republic,' which is governed by Russian speakers. It, like Belarus, has kept the old USSR's emblems and style. This tiny'republic,' like Belarus, has been unable to pay even for its subsidised gas, but Moscow has remained tolerant. By March 2007, the'republic' had accumulated a debt of \$1.3 billion to Gazprom, which it declared it would simply not pay (Solovyov, 2007).<sup>278</sup> Despite this, the gas continued to flow.

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<sup>278</sup>Vladimir, Solovyov (April 6, 2007). Moscow's hand tired of giving: Transdnestrian leader abuses Russian generosity. (Kommersant (Moscow))



Similarly, Georgia's two breakaway regions have received subsidised oil and gas, despite the fact that the country has been a key target of Russian oil and gas sanctions. South Ossetia and Abkhazia, both supported by Russian 'peacekeeping forces,' have declared de facto independence from Georgia, allowing Moscow to step up military and political pressure on Georgia's government (Maloney, 2007).<sup>279</sup> Moscow has spent resources on their support. Gazprom, for example, wants to invest around \$600 million in South Ossetia (Lowe, 2007)<sup>280</sup>, a territory with roughly 70,000 residents, to create new pipelines and gas infrastructure. This is clearly a politically driven investment. The Trans-Dniestr Republic, Abkhazia, and South Ossetia are all underdeveloped, backward territories that would be unable to exist economically without Moscow's assistance. The fact that they all still exist 16 years after the USSR's demise must be attributed in part to Moscow's 'petro-carrots.'

Another facet of Russian oil and gas power is the possibility of using it to bribe individuals and businesses. Russia may gain important allies overseas by providing firms ownership in oil and gas reserves, pipelines, and other projects. Russia has been careful in recent years to maintain majority ownership of such programmes. Nonetheless, with energy prices at an all-time high, international companies are willing to accept minority stakes, as Shell did when it was forced to relinquish control of the Sakhalin-II project. Others in the West have succumbed to the allure of investing in Russia's lucrative energy sector—on Russia's terms. German corporations have signed on as minority owners in a variety of projects, for example, deepening Germany's energy connection with Russia. Burckhard Bergmann, CEO of the German gas company E.ON Ruhrgas AG, is now one of the 11 members of Gazprom's Board of Directors ([www.gazprom.com](http://www.gazprom.com)). His firm and BASF each possess a minority investment in Nord Stream AG, a Gazprom-controlled corporation that is building a contentious pipeline under the Baltic Sea to transport Russian gas to Germany. Similarly, Gazprom has agreed to develop a South Stream pipeline between Italy and Austria with Eni, the Italian energy giant (Dempsey, 2007).<sup>281</sup>

The EU had been attempting to regulate such transactions by rallying its members behind a Energy Charter that would regulate the West European market and restrict Russian dominance.

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<sup>279</sup>Maloney, Daniel, South Ossetia's Role in Russia's Buffer State Foreign Policy. Paper presented at annual meeting of the Northeastern Political Science Assn. and International Studies Assn.-Northeast, Philadelphia, November 2007.

<sup>280</sup>Lowe, Christian (July 25, 2007). Russia pours cash into Georgia rebel region. Reuters

<sup>281</sup>Dempsey, Judy (November 23, 2007). Eni of Italy signs a pipeline deal with Gazprom. New York Times.

However, the allure of rapid money was too strong. The majority of businesses understand that if they refuse to accept Moscow's conditions, their competitors will. This strengthens Russia's negotiating position. Profits from oil and gas may also be used to sway politically powerful persons. After the first Gulf War, Saddam Hussein's administration allegedly adopted this strategy, secretly granting oil export licences to those who aided Hussein politically and economically. Permits authorising the export of heavily discounted oil might be resold to oil traders for a substantial profit.

Similar consequences have been observed in Russia's attempts to include notable Westerners in the management of state-controlled oil and gas enterprises. The most well-known instance is that of Gerhard Schröder, who has sparked heated debate in Germany. Former Chancellor has long advocated for closer connections with Russia, particularly in the energy sector. He was a crucial figure in the controversial Nord Stream pipeline project's negotiations. In one of his last acts as a lame duck president, Schröder signed a billion-euro German government loan guarantee for the project more than a month after his defeat in the September 2005 German election. Schröder was unexpectedly chosen Chairman of the Board of Nord Stream AG, the joint Russian-German firm that will build and manage the pipeline, only days after leaving government (Follath and Schepp, 2007).<sup>282</sup> The appointment sparked widespread anger in Germany, where it was viewed as a scandalous conflict of interest, prompting the European Union to begin an investigation into the loan guarantee agreement (Buck and Benoit, 2006<sup>283</sup>, Vinocur, 2006)<sup>284</sup>. Following this accomplishment, President Putin allegedly tried a second personnel coup in late 2005, giving Donald Evans the chairmanship of the state-owned Rosneft oil corporation (Putin, 2005).<sup>285</sup> Evans had just been out of office as Secretary of Commerce for a few months. He was well-known as one of President Bush's personal friends, having resided in Midland, Texas, with him and acting as the chair of his presidential campaign committee in 2000. Moscow clearly anticipated that by recruiting Evans, it would be able to sway the President. Evans finally denied the job offer, maybe fearing that it would embarrass Bush.

### **Petro-sticks: Oil and Gas as Economic Sanctions**

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<sup>282</sup>Follath, Erich, and Matthias Schepp (March 5, 2007). Der Staat Gazprom: Putins Energie-Imperium [The Gazprom State: Putin's Energy Empire]. Der Spiegel

<sup>283</sup>Buck, Tobias, & Benoit, Bertrand (May 8, 2006). EU to probe German gas pipeline guarantee. Financial Times

<sup>284</sup>Vinocur, John (January 3, 2006). For Schröder and Putin, linkup no coincidence. New York Times

<sup>285</sup>Putin eyes Bush pal for oil post. (December 16, 2005). Associated Press

Those who criticise the Kremlin have been subjected to economic sanctions, in contrast to Russia's preferential treatment of its political supporters. Price spikes have been implemented, as well as oil and gas embargos. When Russia shut off gas supply to Ukraine and Georgia at the start of 2006, the world saw these methods in action. At the start of 2009, Ukraine was hit with yet another gas cutoff. The Baltic states have also been singled out for attack. However, 'petro-sticks' have been employed in a variety of more subtle ways, such as punitive price rises and debt payment demands. While these pressure techniques have not always resulted in quick cooperation with Moscow's desires, they have had the twin impact of weakening Russia's adversaries while also serving as a model for others to follow.

One of the most well-known examples of Russian oil and gas sanctions is the situation of Ukraine. This is true not just because Ukraine is a significant country in its own right, but also because cutting off Russian gas to the country might have a significant influence on global markets. Because the primary Russian gas pipeline to Western Europe runs through Ukraine, Kiev can quickly respond to any Russian supply disruptions by restricting or stopping the flow to the rest of Europe. This threat was enough to bind the Russians' hands under President Yeltsin, compelling them to make several compromises with Kiev on gas supplies and cost. Any Russian threat to withdraw supply, as one author put it in the late 1990s, was not really credible, because Moscow needed the transit route as much as Kiev needed Russian gas (Rutland, 1999:168)<sup>286</sup>. This comparatively benign approach was discontinued under Putin, much to the consternation of both the Ukrainians and Western Europe. The heated conflict between presidential contenders Viktor Yanukovich and Viktor Yushchenko shook Ukraine in late 2004. Yanukovich, the president-intended elect's successor, Leonid Kuchma, was seen favourably by Moscow, and the Kremlin voiced its support for him (Yasmann, 2006).<sup>287</sup>

In November 2004, when Yanukovich was declared the winner in a tainted election, Moscow hurried to acknowledge his triumph. The pro-Western Yushchenko supporters' following Orange Revolution, which finally succeeded in forcing a new election, was roundly criticised by Moscow. Yushchenko's triumph in the second competition, which took place in late December,

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<sup>286</sup>Rutland, Peter (1999). Oil, politics, and foreign policy. In David Lane (Ed.), *The political economy of Russian oil* (pp. 163–188). Lanham, MD: Rowman and Littlefield

<sup>287</sup>Yasmann, Victor (January 3, 2006) Russia: Moscow Uses Different Lever of Influence, Same Message. Radio Free Europe/Radio Liberty Newline  
([www.rferl.org](http://www.rferl.org)).

appeared to push Ukraine out of Russia's circle. Worse, he was able to do it because to a popular rebellion sponsored by the West.

The overthrow of Milosevic in Serbia, followed by Georgia, Kirghizstan, and Lebanon, looked to Moscow to be a possible model for an uprising against Putin himself. It could not be tolerated as a result. As a result, the Kremlin and its allies publicly brandished the gas weapon throughout the heated election campaign. What else except gas could convince the people of Ukraine that being a friend of Russia is better than being a friend of the EU and NATO? claimed the leader of one pro-Moscow Ukrainian organisation. It was made quite obvious that voting for Yushenko meant voting for cold winters, closed industries, and economic collapse. These threats began to be carried out after Yushenko's ultimate win at the end of 2004.

Ukraine has previously signed a gas contract with Gazprom in 2005. However, it became evident very quickly that the country would face a significant price hike following that. Unconvincingly, Gazprom stated that this was merely part of a natural increase to attain World Market Prices (WMP), i.e., the prices paid by Western European countries. However, this requirement for a gas price hike was never recognised during Kuchma, when prices remained stable at around \$50 per TCM for several years. Moscow has now asked an almost five-fold premium in comparison to West European levels—roughly \$235 per TCM. Furthermore, Gazprom abruptly demanded payment of Ukraine's accrued gas debt. Gazprom's demands, if met, would have bankrupted Ukraine. When the yearly gas contract ended at the end of 2005, and the two parties were unable to strike a new deal, things came to a head. Gazprom abruptly stopped supplying gas to Ukraine at the start of 2006, much to the amazement of the rest of the globe. Even some Russian state-run television commentators said flatly that the gas interruption is retribution for the Orange Revolution (Yasman, 2006).

Kiev's vows to respond by shutting off the supply of goods to Western Europe were disregarded by Moscow. Supplies in that region also fell over the next two days, before normal shipments resumed. The Kremlin did not secure total victory in the end. However, it was able to persuade Ukraine to agree to double the price of gas it paid, to around \$100 per TCM. The Yushenko regime suffered a severe economic setback as a result of this. The price was also below the WMP, allowing the Kremlin to easily justify future price rises.

As a result, Yushenko and the Ukraine were virtually kept captive, with no way of predicting when the next economic setback would strike. And the price hike had a political impact: as

economic anger grew, President Yushchenko's party scored worse than predicted in the March 2006 legislative elections, halting the Orange Revolution's advance (Myers and Kramer, 2006).<sup>288</sup> Russian intervention, predictably, continued after 2006. President Yushchenko's every move was met with further threats of gas supply cutoff, price hikes, and increased debt repayment demands.

The trend was repeated in Ukraine's legislative elections in the fall of 2007, when Yushchenko's supporter Julia Timoshenko was elected Prime Minister. The Kremlin used thinly veiled economic threats to persuade citizens to vote for her opponent, Yanukovich. When it failed, Gazprom stepped in once more, cutting Ukraine's gas supplies in early 2008 over yet another debt repayment issue, which was widely interpreted as retaliation for Timoshenko's victory (Harding, 2007).<sup>289</sup>

Finally, Gazprom shut off gas imports again at the start of 2009, severely reducing supply to Western Europe for many days. As Yushchenko and Timoshenko's successes demonstrate, the Kremlin's pressure methods do not always appear to succeed right away. When Moscow is challenged, however, there is a cost; the Ukrainian economy has been severely harmed as a result of Gazprom's actions. The success of sanctions, as David Baldwin points out in his classic work *Economic Statecraft*, cannot be assessed just by whether they result in instant political victory. The expenses incurred must also be seen as a victory since they weaken the opponent (Baldwin, 1985:132–133).<sup>290</sup> Gazprom's price hikes have the extra benefit of bolstering the Kremlin at the same time—quite directly, given that Gazprom is state-owned.<sup>291</sup> Furthermore, the economic troubles in Ukraine have imposed a political cost on Yushchenko and his pro-Western partners, weakening both political support and their capacity to follow through on campaign promises. Every hryvnia transferred to Moscow for gas is a hryvnia that cannot be spent on social services like health, education, or infrastructure.

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<sup>288</sup>Myers, Steven, & Kramer, Andrew (March 27, 2007). From ashes of Yukos, new Russian oil giant emerges. *New York Times*.

<sup>289</sup>Harding, Luke (October 3, 2007). Russia issues gas ultimatum to Ukraine. *The Guardian*.

<sup>290</sup>Baldwin, David (1985). *Economic statecraft*. Princeton, NJ: Princeton University Press.

<sup>291</sup> This is a notable contrast to most forms of economic sanctions, which impose costs on *both* the target and the sender. For example, President Carter's grain embargo against the USSR, imposed after it invaded Afghanistan in 1979, was very unpopular in the U.S. While it hurt Moscow somewhat, it seemed to hurt struggling American farmers more. Thus the embargo was hastily revoked by the incoming Reagan administration, despite Reagan's fierce anti-communism.

Furthermore, as previously said, the Kremlin demonstrated its determination by ignoring Ukraine's attempts to disrupt gas supplies to Western Europe. For years, 'transit states' like Ukraine, Belarus, and Poland believed they were immune to Russian sanctions since they could survive without Russian gas better than Russia could live without the hard currency generated by gas sales. Rising oil and gas prices, on the other hand, had enabled Moscow to pay off its debts and accumulate massive currency reserves, allowing it to utilise its resource leverage more forcefully.

This is a crucial lesson for the future: if necessary, the Kremlin will slash Western Europe's energy artery in order to achieve its political objectives. This lesson has been learned in Western Europe, with EU officials watching every energy issue between Russia and its neighbours with obvious concern. The EU has pushed Russia to sign a Energy Charter, promising to refrain from politically driven embargoes, but Moscow has refused.<sup>292</sup> Ukraine's limited power as a transit state is expected to erode more in the future, as Russia seeks new methods to reach its affluent Western customers. The new Nordstream pipeline will connect Russia to Germany under the Baltic Sea, while the South Stream route will traverse the Black Sea to connect Russia directly to Bulgaria and hence to Southern Europe. Other territories targeted by Russian 'petro-sticks' are, if anything, in a worse condition than Ukraine. Because the Baltic States and Georgia, for example, are tiny, cutting off their oil and gas costs Moscow very nothing. These nations also have less influence over Russian oil and gas transit to other countries than Kiev does.<sup>293</sup> As a result, Russia has felt free to publicly deploy its petro-power against them.

Georgia's scenario is comparable to Ukraine's in that Russian sanctions were sparked by a 'colour revolution' - the November 2003 'Rose Revolution,' which deposed President Shevardnadze and replaced him with Mikheil Saakashvili, who was backed by the West. Russia, like Ukraine, quickly began to threaten Georgia's gas supply. However, rather than a gradual decline in gas pressure, the Kremlin appears to have resorted to more direct steps in this occasion. Both gas

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<sup>292</sup> Historically speaking Russia's position is very ironic. During the Cold War the USSR was targeted by Western embargoes, such as multilateral technology sanctions, which hurt it greatly. From the first days of the Soviet state Moscow tried to persuade Western states to sign agreements prohibiting embargoes. For example, an important factor in the Rapallo agreement between Germany and Russia in the 1920s was Germany's agreement to renounce embargoes ([Newnham, 2002](#):80). Now, it seems, the shoe is on the other foot, and it is Western nations which must ask Russia to renounce the economic weapon.

<sup>293</sup> Georgia can cut off Russian gas shipments to Armenia, an ally of Russia, which gives it some potential leverage. And some Russian oil is shipped to the West through Baltic ports, although Russia has greatly reduced this amount.

pipelines to Georgia were abruptly interrupted by a series of carefully coordinated bomb blasts on January 22, 2006, only days after the flow of gas to Ukraine was reinstated. Electric cables feeding Georgia were also disconnected at the same time (Chivers, 2006).<sup>294</sup>

The Kremlin continues to deny any involvement in the scandal, but many analysts have their suspicions. Despite the fact that the Saakashvili government did not fall or begin to follow Moscow's policy right away, Georgia paid a high price. Moscow was able to persuade Georgia to accept enormous gas price increases, from around \$63 per TCM in 2005 to \$110 per TCM in 2006. Finally, in 2007, Georgia became the first ex-Soviet country to pay the full WMP price for natural gas, which was \$235 per TCM.

When combined with additional Russian sanctions, such as refusing to buy Georgian wine and goods due to 'health and safety' concerns and trying to deport thousands of Georgian guest workers as 'illegal immigrants,' the economic impact on Georgia has been significant. As a result of the bad economy, Saakashvili has found himself on the defence politically. In November 2007, he was compelled to declare a temporary state of emergency in the face of significant protests, weakening his government while also undermining his democratic credentials. As previously stated, Russia's significant subsidies to the breakaway regions of South Ossetia and Abkhazia, which could not continue without Russian help, have severely undermined Georgia. The sanctions on the Baltic States, which have long angered Moscow with their pro-Western attitude, are another noteworthy case of Russian 'petro-power.' Russia now appears determined to use its resources to retaliate against these countries for any economic or political defiance, no matter how little. Russia, for example, shut off the oil pipeline that fed the Mazeikiiai refinery in Lithuania in July 2006.

This facility is vital to the region since it feeds the rest of the Baltic states. It is also the government of Lithuania's primary source of revenue. Russia officially blamed the shutdown on a oil leak, which it said would take up to two years to restore (Kramer, 2006b).<sup>295</sup> Surprisingly, this technological issue arose only after Lithuania opted to sell the refinery to PKN Orlen, a Polish business, rather than competing Russian proposals. Fortunately, Lithuania was able to retool the refinery so that it could run on sea-borne oil. However, the complex was struck by a

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<sup>294</sup>Chivers, C. J. (January 23, 2006). Explosions in southern Russia sever gas lines to Georgia. New York Times.

<sup>295</sup>Kramer, Andrew (October 28, 2006b). Lithuanians are given a taste of how Russia plays the oil game. New York Times

large fire not long after, the cause of which is still unknown. The Kremlin now responds quickly to political defiance as well. Estonia took a small but meaningful step in May 2007. It chose to relocate a historic Soviet war memorial from Tallinn's city centre to a more remote park. This was seen as a slap in the face to the Red Army, whose forces had rescued Estonia from the Nazis, by both Moscow and the local Russian minority. Many Estonians viewed the 'liberation' as a new form of enslavement.

The conflict swiftly intensified, and Russia stated that oil shipments to Estonia, which are generally carried by train, would be halted owing to maintenance work (Halpin, 2007).<sup>296</sup> The embargo lasted only two weeks, but it was extremely costly because all freight shipments were halted, affecting coal and a variety of other industries. Attacks against Estonia's embassy in Moscow, as well as a new tactic - a cyber-assault on a number of Estonian websites accompanies Russia's economic measures. The Western world was taken aback by the Baltic instances. Estonia and Lithuania, unlike Ukraine and Georgia, are members of both NATO and the EU, thus Russia's economic sanctions were a smack in the face to both organisations. No one believed the thin fig leaf of technical difficulties.

Overall, it is apparent that Russia has regained confidence in its 'petro-power' in recent years. With precisely calibrated methods that range from threats to price rises to outright embargos, it openly rewards its supporters and punishes its foes. These approaches may not always 'work,' in the sense of gaining political conformity, as seen in this section. However, they invariably exact a price from Moscow's enemies, both financially and in terms of greater political instability and, as Baldwin points out, if economic sanctions raise the cost of noncompliance in a target nation, they are having a significant impact (Baldwin, 1985:132).<sup>297</sup>

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<sup>296</sup>Halpin, Tony (May 3, 2007). Russia cuts off oil in battle over war statue. The Times (London).

<sup>297</sup>Baldwin, David (1985). Economic statecraft. Princeton, NJ: Princeton University Press.'



## CHAPTER 4

### RUSSIA AND INTERNATIONAL PIPELINE POLITICS

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One of the world's biggest infrastructure and logistical networks is the system of oil and gas pipelines. While the distribution of this pipeline network is dependent in part on whether a country produces oil and gas (petro-states have a larger network than non-petro-states), pipelines, like other aspects of modern infrastructure (from highways to their Internet variant), mirror existing global power and wealth divisions. Pipelines have become one of the most visible points of social conflict over infrastructure and logistics in the last decade, entering political discussion and debate like never before. Pipelines have been a topic of front-page news and are now part of mainstream politics.

The Nord Stream 2 pipeline is an underwater twin pipeline that would transmit natural gas straight from Russia to Germany. It follows the path of the current Nord Stream twin pipeline beneath the Baltic Sea for 1,230 kilometers. The initial Nord Stream pipeline, which had a 55 billion cubic metre (bcm) annual capacity, was completed in late 2012. Following the start-up of Nord Stream 2, the pipeline system's overall capacity is expected to double to 110 bcm. The pipeline passes across five nations' exclusive economic zones: Russia, Germany, Denmark, Finland, and Sweden.

Nord Stream 2 was constructed by Nord Stream 2 AG, a Switzerland-based collaboration. Its board of directors is chaired by Gerhard Schröder, the German chancellor from 1998 to 2005 who was widely chastised for his relations to Russia.



**Source:-** Nord Stream 2 AG.

The project's only shareholder is Moscow-based state-owned Gazprom, which has pledged to supplying up to half of the project's funding, with the rest coming from German businesses Wintershall and Uniper, Royal Dutch Shell, French ENGIE, and Austrian oil and gas giant OMV. The project's total expenses, according to Nord Stream 2 AG, are estimated to be roughly 9.5 billion euros.

According to the Nord Stream 2 consortium, the gas that the pipeline would transport is located in northern Russia's Yamal Peninsula, which has about 5 trillion cubic meters of gas reserves. The gas will be transferred to Russia's shore once it has been harvested. It will then be fed into the pipeline after passing via a compressor station, which elevates the pressure of the fuel. The pipeline exits on land in north-eastern Germany, near Greifswald, after crossing the Gulf of Finland.

Russia, Germany, Finland, Denmark, and Sweden all received the essential permissions for the planned pipeline's construction inside their countries. Nord Stream 2 construction began in Germany in 2016 with the fabrication of steel pipes and ended in May 2018 with the drilling of a trench on the seabed. The first steel pipes were laid in July 2018 near Germany's landfall at Lubmin. The project was completed in 2021.

Despite geopolitical concerns, supporters of the project argue that Germany requires additional gas imports and that the new pipeline could provide stable and economical supplies. According to the Federal Institute for Geosciences and Resources (BGR), Germany is the world's largest

natural gas importer importing virtually all of the natural gas it uses (94 percent in 2018). Domestic natural gas output has been declining since 2004, and will most certainly end in the next decade, making future hydraulic fracturing exploitation of Germany's natural gas reserves doubtful<sup>298</sup>.

The Federal Office for Economic Affairs and Export Control (BAFA) discontinued disclosing import quantities by nation in 2016 due to data privacy restrictions. According to the BGR, Russia, Norway, and the Netherlands are expected to continue to be Germany's key suppliers. A spokeswoman for the German economy ministry estimated Russia's proportion of German natural gas imports to be 'about 40%' in July 2018. In 2018, this was also the proportion of EU gas imports as a whole.

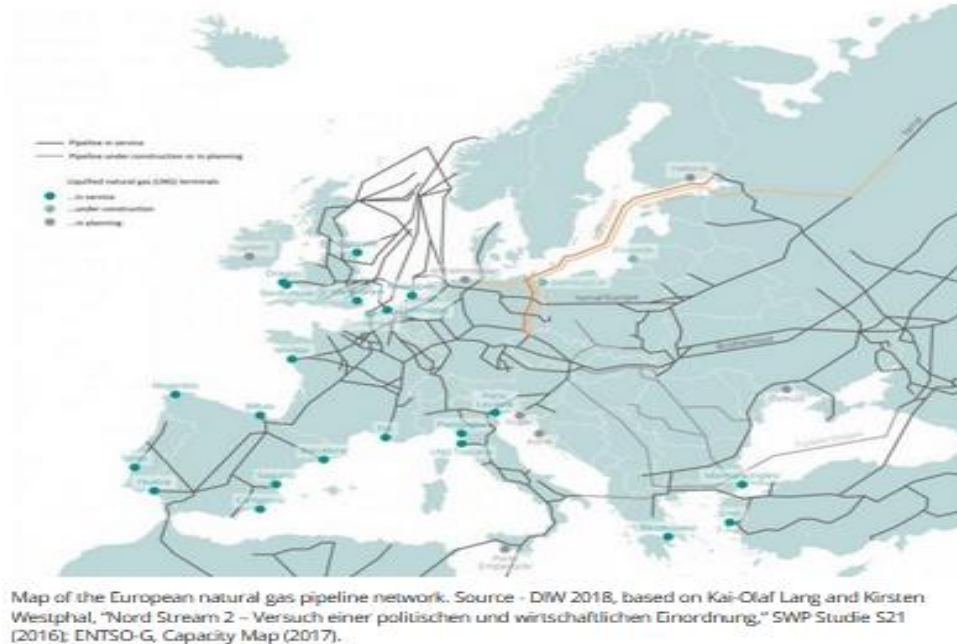
In 2015, Russia supplied 35 percent of German gas imports, Norway 34 percent, and the Netherlands 29 percent, with the latter's share set to decline as production in the Netherlands is trimmed back and perhaps phased out by 2030. Proponents of the project argue that as European Union gas output decline more fossil fuel will need to be imported in the future years, with much of it coming from Russia. As a result, Germany's position as a transit nation for feeding the rest of Europe will grow. Since 2014, German gas consumption has increased, owing primarily to record imports from Gazprom.<sup>299</sup>

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<sup>298</sup> <https://www.cleanenergywire.org/factsheets/gas-pipeline-nord-stream-2-links-germany-russia-splits-europe>

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Julian Wettengel (2022), 'Gas pipeline Nord Stream 2 links Germany to Russia, but splits Europe,' available at <https://www.cleanenergywire.org/factsheets/gas-pipeline-nord-stream-2-links-germany-russia-splits-europe>



**Source:** D/W 2018, based on Kai- lang and Kirsten wetphai, “Nord Stream 2- Versuch einer politischen and wirtschaftlichen Ginordrug.” SWP Studie S21 (2016); ENTSO-G, Capacity Ma (2017).

Russia is one of the world's top producers of primary energy resources, with a particularly strong position in the global gas markets. It has the world's greatest gas reserves and is the world's second-largest gas producer, trailing only the United States, which recently overtook Russia due to the revolution. Russia has a unique transcontinental infrastructure in the heart of Eurasia (150,000 km of trunk pipelines), making it the backbone of the rapidly growing Eurasian gas market (which includes Europe, North Africa, the Commonwealth of Independent States (CIS), the Caspian Sea region, and Northeast Asia). Russia is a significant component of this emerging market because of its control over transportation assets in the area, as well as its massive gas reserves.

The majority of Russia's gas exports go to Europe and the CIS, although Asian shipments are likely to grow significantly in the future. Russia's overall gas exports of 170–200 bcm make it significant in terms of natural gas trade, as it presently accounts for around 20% of global gas trade. Russia has a significant effect on prices and ‘rules of the game’ in both the European and CIS gas markets (almost 50% and 100% of total gas imports, respectively), as well as geopolitical leverage. Russia is a stronghold of the traditional gas market model, defending oil indexation and long-term take-or-pay contracts. As a result, it is one of the key ideologists of the

Gas Exporting Countries Forum, advocating for an ‘energy security of supply’ strategy with significant assurances to producers. Another unusual characteristic of this study is that Russia has long utilized gas as a geopolitical tool. Gas is one of the most important (and paradoxical) aspects of the EU-Russian economic and political relationship.

Gas is likely the most important tool of integration in the former Soviet Union and the former Eastern Bloc, allowing Russia to exert influence over these nations. Plans to enhance LNG and pipeline exports to Asia indicate Russia's desire to strengthen ties with Asian nations (particularly China) and perhaps form strategic alliances with them in opposition to the US and Europe.

The Russian government's geopolitical use of gas is sometimes referred to as a geopolitical "weapon." However, a better term would be "an instrument to achieve influence" having such an instrument for international negotiations and strengthening soft power is critical for the former empire.

During the transitional period in 1990s, the energy sector was cross-subsidizing the rest of the economy, and due to the accumulated underinvestment it currently faces serious challenges:

- Outdated technical facilities and equipment (almost 60% in the electric power and gas industries, 80% in the oil processing), technological and environmental backwardness, extremely high energy intensity accompanied by insufficient investments in renovation and development of the energy industry
- Depletion of the Soviet legacy fields and an increasing share of the “heavy to produce” hydrocarbon reserves (tight and ultraviscous oil, wet and low-pressure gas), and reserves located in remote regions of the Eastern Siberia and the Far East, Yamal peninsula, Arctic continental shelf, and Caspian Sea
- Lack of competition, high concentration, and increasing state involvement in the operational management of the energy sector
- Strong fuel price disproportions, leading to the industry’s and the economy’s overdependence on natural gas, which accounts for about 53% of the domestic primary energy consumption

"Russian Federation's Energy Strategy until 2030"<sup>300</sup> is the foundational text outlining Russian energy strategy. Officially, Russia's energy strategy is to "make the most effective use of its

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<sup>300</sup> The last edition was approved in 2009; the new, updated energy strategy up to 2035 is currently in development.

natural energy supplies and the energy sector's potential to achieve stable economic growth, higher living standards, and stronger worldwide market positions." The state's most important strategic initiatives in the energy industry, according to this document, are:

- Establishment of oil and gas industrial complexes in the country's east (which should allow the regions to not only become energy independent and accelerate their development, but also diversify export flows to Asian Pacific countries)
- Arctic continental shelf and northern regions exploration (which should assist stabilize oil and gas output during a projected decline in Western Siberia's typical oil-producing areas in 2015–2030)
- Growth of complex and difficult-to-reach fields (mainly through various tax exemptions)
- Energy infrastructure development and territorial diversity
- Promotion of renewable energy sources
- Energy conservation

#### **4.1 PIPELINE POLITICS IN RUSSIA**

In a meeting with his Russian counterpart, then-President Vladimir Putin, President Bush made the now-famous remark, 'I looked the guy in the eye.' This occurred almost seven years ago. In my experience, he is honest and reliable.... It was like I could see into his heart. The president very certainly now regrets making that comment. In the years since, Russia has been shown to be rapidly reverting to its old authoritarian ways (minus the communist ideology) under Putin's leadership.

Power has been centralised, energy and media companies have been nationalised, Kremlin critics have been assassinated, and members of opposition parties have been arrested and excluded from what many consider to be rigged elections. (In October 2007, Senator John McCain said, 'When I peered into Putin's eyes, I saw three letters: a K, a G, and a B,' riffing on President Bush's regrettable statement.) Even worse, Putin has shown no signs of wanting to give up power. By all accounts, Putin is still securely grasping the reins of power from his new perch as prime minister despite having completed a carefully staged transition from president to prime minister this past spring, effectively turning over the presidency to his faithful apprentice Dmitry Medvedev<sup>301</sup>. Putin has done more than just transform the internal politics of Russia. It seems that Russia's capital is getting back into its bullying ways from the Cold War period by trying to

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<sup>301</sup> <https://www.thenewatlantis.com/publications/pipeline-diplomacy>

exploit its petroleum wealth to gain political clout over its former Soviet satellite republics. In January 2006, when Russia's natural gas company and sole gas exporter, Gazprom (of which then-Deputy Prime Minister Medvedev was chairman), became embroiled in a pricing dispute with Ukraine, it stopped sending gas to Ukraine in an effort to starve the country of needed energy and hasten a favourable conclusion to the dispute. For three days during the dead of winter, various European nations downstream from Ukraine received an average of 30 percent less Russian gas due to the country's actions of syphoning off gas earmarked for customers located farther west. Russia's price issues with Moldova, Georgia, and Belarus are all quite similar.

Gazprom's participation with the Nord Stream and the South Stream pipelines has also aroused questions. These two Russia-Europe gas pipelines will avoid various countries including Ukraine and Belarus that now have pipelines travelling through them if they are completed. Many commentators believe that Russia will be able to encircle these transit nations like a boa constrictor, ready to squeeze them whenever it is convenient thanks to these new pipelines, especially in light of the ongoing conflict between Russia and them. (Gazprom, however, has not indicated that it expects to discontinue utilising present lines; rather, it is trying to increase the capacity of the Yamal-Europe pipeline, which connects Russia to Western European markets through Belarus and Poland.) It is anticipated that the two new pipelines would further entrench Western Europe's reliance on Russian gas, leaving the region just as vulnerable as it is in Eastern Europe at the present time.

The planned Nabucco pipeline, which would take gas from the Caspian Sea to Europe and bypass Russia, faces stiff competition from the South Stream project. Several European politicians have recently expressed concerns about Russia's dependability as an energy supplier. Their worries are well-founded. Roughly a quarter of Europe's current energy consumption comes from natural gas, and about a third of that comes from Russia, which has the largest known gas reserves in the world. According to a research by the European Commission, Europe will become more reliant on Russian gas in the next years as its demand for gas grows far faster than domestic output. Some in Europe and beyond are concerned that Russia will exploit this energy relationship to manipulate gas prices (unlike oil, there is no global price for gas since gas is difficult to transport) and to strengthen its hand in political disagreements, like the accession of Eastern European countries to NATO, Kosovo independence, and a U.S.-sponsored missile

defence programme on its borders. Most people believe that Europe is effectively holding Russia's metaphorical barrel at this point. However, this does not provide the whole picture. Energy exports help keep Russia's economy afloat, which is why the country relies so heavily on its domestic production.

According to the Energy Information Administration of the United States government, the energy industry contributes 20% of Russia's GDP. Gazprom is alone responsible for about 25% of Russia's tax income. Gazprom, and by extension Russia's, economic success has been greatly aided by Europe. Gazprom's own statistics shows that Europe accounted for 60% of the company's overall income at the turn of the decade while only using roughly 33% of its output. The massive gas price subsidies given to former Soviet nations and the Russian home market caused this discrepancy.

Revenues from oil sales are crucial for Moscow to solve a number of longstanding internal challenges. Russia's inflation rate is approximately four times as fast as the country's growth rate, despite the fact that the economy has been growing quickly in recent years (by 8.1% in 2007). In addition, the 'Dutch disease' might affect Russia's economy, making it less competitive internationally. This occurs when exports of a country's natural resources cause the value of its currency to rise.

Not to mention the avalanche of social problems that will continue to plague Russia in the future, such as a dwindling population, failing social programmes, widespread alcoholism, and the emergence of an HIV/AIDS pandemic. The energy industry in Russia is the backbone upon which the rest of the nation rests. Russia may be less concerned with utilising the earnings from its energy strategy to boost its faltering home economy at the moment than it is with using it to increase its presence on the world arena. Russia is like the real-life version of the Wizard of Oz: a seemingly mighty monster on the outside, but a feeble and weak entity on the inside. It is essential for its survival and regaining its position as a worldwide powerhouse that it keeps the gas flowing and the taps open.

For Europe, the main issue surrounding Russia's dependability as an energy provider may not be one of will, but of capacity to transfer its petroleum resources to the market. Russia's energy industry is defective despite record-high earnings; reserves that were formerly easily accessible are drying up in western Siberia, other fields in eastern Siberia and elsewhere are costly to develop, and gas pipelines are working at capacity and in serious need of maintenance.



Moreover, many observers think that Russian energy corporations, for all their riches, lack the means and competence to handle these challenges on their own. To exacerbate the matter, Russia's internal consumption is also likely to grow over the next years, leaving less gas available for export. In the middle of a particularly harsh winter in January 2006, Russia had to use more of its own gas to fulfil domestic demand and fell short of its obligations to European customers.

Observer of Russian and Caspian energy problems and author of the superb 2007 book *The Oil and the Glory* Steve LeVine thinks worries regarding Russia's future production and transportation capability are probably overblown. Russia and the energy-rich Caucasus and Central Asian governments' relationships with Western energy corporations have been on-again, off-again, with the former two states turning to the latter in times of need and the latter pushing the former out of the market when times were good. Russia will likely grow more receptive to external help as it nears the point at which it cannot fulfil home and foreign demand. Companies from other countries eager to make a profit will very doubt come back to Russia, despite the country's reputation for rejecting them in the past. However, investing in energy infrastructure takes a long time and may be costly, so Europe may have to cope with a Russia in the future that is unable to fulfil its obligations.

Russia does have an interim solution to keep the gas coming, and that's Central Asia, which is completely landlocked. At the moment, Russia is supplementing its dwindling domestic reserves with gas from central Asian republics. It reached an agreement in May 2007 to upgrade and construct additional pipelines to Russia with neighbouring Kazakhstan and Turkmenistan. In light of this new information, the Russia-Ukraine gas conflict merits further examination. Since the fall of the Soviet Union, Russia's pipelines have served as a 'steel umbilical cord,' effectively incorporating the newly independent states of the Caucasus and Central Asia into Russia's energy production and distribution networks.

Through this barter deal, energy supplies from Russia and Central Asia could reach the West, while Eastern Europe benefited from inexpensive gas. When the conflict between Russia and Ukraine first broke out, ties between the two countries were already tense. Since the Orange Revolution and the election of pro-Western President Viktor Yushchenko, Ukraine has been leaning in that direction. As a result, Russia's tough stance is easy to interpret politically and as a continuation of their prior relationship, with Russia behaving like a protective mother punishing

a kid who defies her. Russia was ‘renegotiating’ energy contracts with Moldova, Georgia, and Belarus around the time of the Ukraine issue. An intriguing example is Belarus, which, despite the breakup of the Soviet Union, has maintained strong ties to Russia. This loyalty, however, did not spare Belarus from Russia's hard negotiation tactics; in January 2007, for three days, Transneft, Russia's state-owned pipeline firm, stopped delivering oil to Belarus. Medvedev, at the time Gazprom's vice chairman, said that the corporation was only ‘moving all our contacts with customers to a market foundation’ after the conflict with Belarus. Usually one can't accept the words of a Russian official at face value, but Medvedev could be telling the truth here. As a result of adjusting gas prices in Eastern Europe to more market levels in 2007, Russia has seen annual revenue growth of 93.5 percent from these nations. The price of Russian gas in these regions will converge with that in Western Europe by 2011.

Russia now seems more interested in the advantages of oil money than regional supremacy. And the fact that the Kremlin has taken measures to allow for the rise in prices inside the country is perhaps the best evidence to corroborate Medvedev's argument. According to Gazprom's 2006 annual report, the company has been given the green light to drastically increase prices inside Russia for the regulated sector, by as much as 15% in 2007, 25% in 2008, 20% in 2009, and 28% in 2010. By 2011, it is possible that U.S. pricing may meet or exceed European prices (after adjusting for shipping costs and taxes). Higher prices should lower demand for gas in these areas, freeing up more for exports, which is one of the possible benefits of Russia's intention to wean Eastern Europe and domestic markets off gas price subsidies. This might raise Gazprom's earnings and enable the Kremlin fulfil its obligations to international customers.

## **4.2 RUSSIA’S GREAT POWER ROLE**

### **Pipeline politics With the Middle East**

Russia is participating in a number of Middle Eastern energy infrastructure projects. When it comes to pipelines, at least one observer believes Russia might use disruptive tactics. Russia operates in three steps to get the desired result: 1) it attempts to obstruct a pipeline 2) If that fails, it will attempt to co-opt the scenario. 3) If it doesn't work, make a backup plan. It's worth mentioning that there's a Russian conspiracy theory emerging concerning the Syrian civil war. According to the belief, the US sparked the civil war when Bashar al-Assad rejected a Qatari

pipeline through Syria that the US had backed.<sup>302</sup> At the very least, this demonstrates how some Russians feel that other big countries, such as the United States, participate in disruptive activities. Overall, Russia may anticipate the Middle East's upheaval to improve its role, or at the very least energy costs. Given Russia's present participation in the Middle-East it appears that it is in the second and third stages of its pipeline strategy. In the 2010s, Russia was involved in a number of Middle Eastern energy projects. Although the Russia-Iran relationship has had its ups and downs, Russian enterprises were invited to assist in the development of Iranian gas and oil in 2013.

- Lukoil has also been extensively involved in the development of Iraq's West Qurna-2 oil field, which is perhaps one of the world's largest undeveloped oil reserves. Thousands of Russians were reportedly sent as instead of labour in Iraq, according to one estimate. GazpromNeft became interested in Kurdish oil production in Iraq in 2012, despite Baghdad's opposition to direct Kurdish-Russian cooperation.<sup>303</sup> Rosneft bolstered Russia's position in Iraq by supporting Iraqi Kurdistan with its oil pipeline infrastructure by 2017. Kurdistan intends to reimburse Rosneft with oil, which the Russian corporation intends to process in German refineries.<sup>304</sup> When it comes to nuclear power, Russia has also sought to play off other parties in the area, particularly Saudi Arabia.<sup>305</sup>
- These energy partnerships have sometimes conflicted with some of Russia's military activities in Syria, but the bigger goal is almost undoubtedly to strengthen Russia's presence in the area by becoming an energy partner. For example, Russia needs a new pipeline, Turk Stream, to bypass Ukraine. This will really be two pipelines: one for Turkey, which is already operational, and the other for exports to Europe, which has begun in 2019.<sup>306</sup> The project is still moving forward, despite the fact that the nations are on opposing sides in the Syrian crisis.
- If the Syrian war is settled in Assad's favour, Russia is likely to use its backing for him to influence pipelines that go through Syria. Syria has the potential to serve as a transit

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<sup>302</sup> See Coote, Bud. The Caspian Sea and Southern Gas Corridor – A view from Russia, The Atlantic Council, Global Energy Center, Report, April, (2017), p. 24.

<sup>303</sup> Yetiv and Oskarsson. Challenged Hegemony, pp. 121-123.

<sup>304</sup> Mammadov. Russia in the Middle East: Energy Forever?

<sup>305</sup> Yetiv and Oskarsson. Challenged Hegemony, pp. 121-123.

<sup>306</sup> TASS, Construction of first line of Turkish Stream pipeline to be completed in May — Gazprom CEO, TASS online, 3 April, (2018), accessed 29 May, 2018, <http://tass.com/economy/997533>.

nation between the Gulf's energy wealth and Europe. Russian plans for offshore drilling off the Syrian coast are already in the works.<sup>307</sup>

### **About Mediterranean and Europe**

- According to Brenda Shaffer, a major energy expert, Russia's involvement in Syria is mostly about Russian dominance in the eastern Mediterranean, as well as Russian influence with Greece, Turkey, and Cyprus.<sup>308</sup> Russia's military presence in the Mediterranean, primarily naval; its presence in a part of the Mediterranean where new gas fields are being developed, offshore in Israel and Egypt; and its ability to influence the European Southern Gas Corridor to the Caucasus and Central Asia, as well as energy exports to Europe from the Middle East are all important to Russia.<sup>309</sup>
- Russia is most likely attempting to undermine the EU's diversification. Unlike Central Asia or Europe, Russia has attempted to collaborate with established competitors in the Middle East. This has necessitated the support of a gas hub in Egypt.<sup>310</sup> Egypt's involvement makes financial sense as well, given the country possesses a massive gas field that has yet to be exploited.<sup>311</sup>
- Iran is a possible future rival as a gas supplier to Europe, although Algeria and Qatar are the primary competitors. The latter is the world's largest LNG producer, and when the shale gas revolution lost Qatar its US market, it turned to Europe for new opportunities. Given its focus in diversification, the EU welcomed this development.<sup>312</sup> Rosneft and Gazprom both have a presence in Algeria.
- Qatar is also a major player in the region, which might impede Russia's efforts to expand its influence. Unlike Qatar, Russia, on the other hand, has conventional tools of influence, such as military sales, such as providing submarines to Algeria, which might favour

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<sup>307</sup> Mammadov. Russia in the Middle East: Energy Forever?

<sup>308</sup> Interview with Brenda Shaffer, (2018).

<sup>309</sup> See Nopens, Patrick. Geopolitical Shifts in the Eastern Mediterranean, Egmont Security Policy Brief No. 43, February, (2013).

<sup>310</sup> Mammadov. Russia in the Middle East: Energy Forever?

<sup>311</sup> El Wardany, Salma. 'Why One Giant Gas Field Is a Big Deal for Egypt', Bloomberg online, 19 December, (2017), <https://www.bloomberg.com/news/articles/2017-12-19/why-one-giant-gasfield-is-a-big-deal-for-egypt-quicktake-q-a>, accessed 20 august, 2018

<sup>312</sup> Yetiv and Oskarsson. Challenged Hegemony, pp. 125-127 and 129

Russian influence in Algeria.<sup>313</sup> Russia, presumably, has the resources not just to use energy as a tool of foreign policy, but also to use other aspects of its foreign affairs to further its foreign energy policy goals.

### **On the US presence in the region**

- Although Russia's approach to the Middle East is not mainly neo-imperialist, this does not rule out the possibility that Russia's interests in the region are motivated by the ability to pursue neo-imperialist policies elsewhere, such as in Europe. Rauf Mammadov, an energy specialist, claims that Russia is also pursuing a 'divide and conquer' strategy with the US and its Arab allies, which is, of course, the traditional approach of empires.<sup>314</sup> Russia's interest in the region isn't about pushing the United States out of the Gulf, as the United States feared during the Cold War. Russia's interest in the region is mostly economic. The US presence in the Gulf aids Russian efforts to build economic ties with the area to some extent, since the US ensures critical regional stability. Economic relationships with China and the United States, on the other hand, are more significant to the area than trade ties with Russia.<sup>315</sup>
- Russian energy relations in the region might be viewed as a 'soft balance against the US.'<sup>316</sup>
- The United States has several motives to maintain geopolitical influence over the Gulf. The so-called Carter doctrine of 1980, named for President Jimmy Carter, best expresses these sentiments. This designates the Gulf as a 'vital interest' of the United States, which it is willing to defend with military action.
- One of the primary reasons for the US presence in the Gulf is to ensure the free flow of oil, although this is not due to any American dependency on Gulf oil. Instead, the free flow of oil from the Gulf helps to maintain a fair price for oil on the worldwide market,

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<sup>313</sup> Kessler. 'Russia's Charm Offensive in North Africa

<sup>314</sup> Mammadov. Russia in the Middle East: Energy Forever?

<sup>315</sup> Yetiv and Oskarsson. Challenged Hegemony, pp. 115-116 and 119. See also Kozhanov, Nikolay. Russian Policy Across the Middle East – Motivations and Methods Russia and Eurasia Programme, Chatham House Research Paper, February, (2018).

<sup>316</sup> Ibid, pp. 125-127 and 129

which is good for the global economy. This is advantageous to the United States, which has a strong interest in global expansion.<sup>317</sup>

- This, at least, has been the standard strategy up to this point. The United States' interest in the Middle East has faded as a result of the fact that oil imports have become less of a concern in the last five years 2013. The United States sees itself as a type of swing producer of oil, properly or not, and hopes that its shale output will assure a decent oil price. The flow of oil from the Gulf, on the other hand, is still significant because of its influence on global prices. Although the United States is concerned that Russia would be able to expand its position as a result of the Middle East's upheaval, Russia also needs to cooperate with Middle Eastern countries on concerns that extend beyond the area. Building financial ties with the Gulf is a means for Russia to get around Western sanctions.<sup>318</sup> After the sanctions were imposed, Qatar's sovereign wealth fund and the Anglo-Swiss commodities trader Glencore became the first to invest in Russian energy, purchasing one-fifth of Rosneft.<sup>319</sup> The transaction with Qatar was significant because it showed that Russia could attract investment despite sanctions.

### **Beyond the region: OPEC**

- In 2017, the increased collaboration between Russia and Saudi Arabia was focused on the oil price. Despite their disputes, such as over Syria and collaboration with Iran, and their position as rival global oil producers, the two nations have opted to work together on the issue that matters most to them: the oil price. The American shale energy revolution increased the amount of oil available on the worldwide market, putting downward pressure on the global oil price. Saudi Arabia and Russia are both reliant on oil revenues. Cooperation was required in order to raise the oil price through production reduction. Rauf Mammadov claims that this has essentially left Saudi Arabia reliant on Russian energy diplomacy and willingness to agree to production cuts.<sup>320</sup> Putin is, in a way, the force behind the Saudi throne, limiting Saudi Arabia's role as a swing producer, or 'energy powerhouse.'

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<sup>317</sup> See Rossbach. 'Energy and the Future of US Primacy

<sup>318</sup> Yetiv and Oskarsson. *Challenged Hegemony*, pp. 115-116 and 119.

<sup>319</sup> Mammadov. *Russia in the Middle East: Energy Forever?*

<sup>320</sup> *Ibid.*

- In December 2017, the OPEC + deal, which limit oil output by OPEC and non-OPEC countries, were extended until 2018. Russian and Saudi Arabian production together account for nearly a quarter of world output and<sup>321</sup> it appears that Russian efforts were instrumental in bringing Iran into the fold. According to James Henderson and Ahmed Mehdi, the question is how long Russia will be able to sustain its regional diplomacy, balancing the Middle Eastern countries.<sup>322</sup>
- Perhaps an attempt to form a Super-OPEC will be made in the near future. Saudi Arabia had planned to sell Aramco as part of its transition to a post-oil economy, a move that would profit from a higher oil price.<sup>323</sup>
- The Saudi Crown Prince has suggested that the OPEC+ agreement be extended for another 10–20 years. Russia is more apprehensive about the agreement, and it is unlikely that it would be extended or repeated if the price is higher than USD 70. Russian firm revenues are really down due to corporate taxation, as the Russian government, not the corporations, negotiated the arrangement.<sup>324</sup> This is the type of logic that state capitalism is known for. If Saudi Arabia persists, it will be compelled to give up more of its market share in order to assure that reductions occur. If additional oil enters the international market, Saudi Arabia will have to reduce even more to keep the price stable. Finally, cooperation between Saudi Arabia and Russia is reliant on the United States. It has given Riyadh some freedom to engage with Moscow, but Saudi Arabia remains reliant on the US for security. This indicates that, in this scenario, political considerations will almost certainly take priority over economic concerns.

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<sup>321</sup> Lawler, Alex; El Gamal, Rania and Nasralla, Shadia. ‘OPEC, Russia agree oil cut extension to end of 2018’, Reuters online, 30 November, (2017), <https://www.reuters.com/article/us-opecmeeting/opec-russia-agree-oil-cut-extension-to-end-of-2018-idUSKBN1DU0WW> , accessed 8 May, 2018.

<sup>322</sup> Henderson, James and Mehdi, Ahmed. ‘Russia’s Middle East Energy Diplomacy’, Snapshot in Foreign Affairs online, 20 June, (2017), <https://www.foreignaffairs.com/articles/middle-east/2017-06-20/russias-middle-east-energy-diplomacy>, accessed 23 April, 2018.

<sup>323</sup> Lawler, et al. ‘OPEC, Russia

<sup>324</sup> Interview with Rauf Mammadov, (2018).

## The Russian Pivot to Asia

- After the Ukraine crisis in 2014 and the resulting increasing tensions between the West and Russia, pivoting to Asia appeared to be Russia's favoured choice. After 2014, this was at least one of the most common interpretations of relationships. Some speculated that focusing on Asia was a way to exert pressure on Europe.<sup>325</sup>
- The development in Asia, on the other hand, puts pressure on Russia. Russia is in the process of embracing its junior status in respect to China, according to Erica S. Downs of the CNA Corporation. For the time being, Russia appears to be adapting with China's might. Moscow was undoubtedly not pleased that China started the Belt and Road Initiative, an enormous infrastructure project, at a time when oil prices were low and Russia was under Western sanctions.<sup>326</sup> The initiative aims to change the worldwide flow of goods from the Pacific to the West, through the Indian Ocean and Central Asia.<sup>327</sup> There is already a divide of labour in Central Asia between China and Russia. Russia offers military stability, while China aids economic progress.<sup>328</sup> However, tensions between China and Russia may worsen in the future.
- China and Russia used to battle for influence in Turkmenistan. Then, all of a sudden, Russian interest decreased, most likely due to a drop in European gas demand, indicating that Russia no longer need extra Turkmen gas. If China's economic imprint in Central Asia grows too large, it might pose a concern for Russia if it results in Chinese attempts to play a political or security role in the region. For the time being, Russia's strategy appears to be 'if you can't fight them, join them.' Russia backs the Belt and Road Initiative as a means to attract greater Chinese investment. Russia, it appears, wants something from the initiative as well.<sup>329</sup> As a result, Sino-Russian strategic relations are now developing. China and Russia share a number of mutual interests, including geopolitics and oil. The desire to counterbalance the United States, which they see as a

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<sup>325</sup> See the perspectives highlighted in Skalamera, Morena and Goldthau, Andreas, 'Russia: Playing Hardball or Bidding Farewell to Europe? Debunking the Myth of Eurasia's New Geopolitics of Gas', Harvard Kennedy School, Belfer Center for Science and International Affairs, Discussion Paper 2016-3 (June 2016).

<sup>326</sup> Interview with Erica S. Downs, (2018).

<sup>327</sup> Herberg, Mikal E. 'Introduction', in Downs, Erica S. et al., Asia's Energy Security and China's Belt and Road Initiative, National Bureau of Asian Research, NBR Special Report no. 68 (November 2017).

<sup>328</sup> Interview with Erica S. Downs, (2018).

<sup>329</sup> Ibid.



danger to their interests, is at the top of the list. In reality, their energy link goes back a long time. Russia is currently one of China's largest oil exporters.<sup>330</sup> Nonetheless, the relationship has taken a long time to build, and their reliance is likely to be similar to Russia's relationship with Europe in the sense that Russia wants a high price for its energy exports, while China wants to pay a cheap price.

Russia has even displaced Saudi Arabia, its new energy partner, as China's primary oil supplier.<sup>331</sup> This might sour the Russian-Saudi Arabian relationship in the long run, especially if Saudi Arabia is forced to give up more market share in Asia to keep the OPEC plus agreement going. Despite China's energy insecurity, Russia remains the relationship's junior partner for the time being, particularly in terms of energy. Russia can't compete with China, thus it has to maintain good relations with a developing China. Increased exports to Asia is one of the goals of Russia's Energy Strategy through 2020,<sup>332</sup> however, Russia is already tied in as an oil supplier, as well as in China's broader energy relationship.

China receives a portion of the oil that flows via the East Siberia Pacific Ocean pipeline in eastern Russia, and China also receives the majority of the oil that reaches the Pacific coast port of Kozmino. It would be a dilemma for Russia if China refused to buy Russian oil. Diversification is a problem for China, as it is for the EU.<sup>333</sup> It does not want to become overly reliant on Russia for oil and gas imports, or on anyone else for that matter and this is certainly a geopolitical factor in China's situation.

Russia most certainly regards China as a potential investment partner and Russia had hoped that China would do more to alleviate the impact of Western sanctions than it has and this something that emphasizes the relationship's nature. Russia aims to boost its gas exports to Asia, and its new LNG facility in Yamal provides new chances in the region.<sup>334</sup> This is rather unsurprising, given that Yamal's LNG exports are the consequence of Chinese investments.<sup>335</sup> On pricing,

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<sup>330</sup> Medeiros, Evan S. and Chase, Michael S. Chinese Perspectives on the Sino-Russian Relationship, National Bureau of Asian Research, NBR Special Report no. 66 (July 2017), pp. 4, 5, 9.

<sup>331</sup> Interview with Erica S. Downs, (2018).

<sup>332</sup> Simola and Solenko, 'Overview of Russia's oil and gas sector', p. 18

<sup>333</sup> Interview with Erica S. Downs, (2018).

<sup>334</sup> Ibid.

<sup>335</sup> Mikulska, Anna. 'Russia starts LNG exports from Yamal: what it means for Europe', *energypostweekly*, 22 January 2018, <http://energypost.eu/russia-starts-lng-exports-from-yamal-what-it-means-for-europe/>, accessed 12 April 2018.

American LNG to China is unlikely to compete with Russian and Turkmen gas. Perhaps the limited geopolitical concerns are shown by American LNG supplies to China.

China, on the other hand, is unlikely to accept a significant reliance on American LNG. In 2017, Australia was China's top LNG provider, while Turkmenistan was the country's largest gas supplier.<sup>336</sup> These are only two of the roadblocks to Russia's goal of establishing China as a viable alternative to Europe's market. Because the Russian pipelines in the West and East are not connected, Russia cannot force China to compete with Europe for the same gas exports. Because of the greater distance, the gas produced for Europe in western Russia may be more expensive to transfer eastwards. Furthermore, Russia may not be able to strike a favorable arrangement with China. However, it is contingent on China's desires. Being an energy appendage to China, according to Erica Downs, might be worse for Russia than being export-dependent on the EU. China is primarily interested in buying Russian energy and natural resources.<sup>337</sup> That is not a sound basis for the Russian economy's development. Having two large markets, however, improves Russia's energy security as an exporter.

China has the upper hand in the relationship and has been able to set the terms of the new agreements.<sup>338</sup> Russia was compelled to pursue a gas agreement with China by the geopolitical challenges it caused in Europe in 2014. China is probably fully aware of the possible threat of integrating Russia's eastern and western pipeline networks, just as Europe is concerned about Russia pitting China against Europe. In any event, China has prioritized the eastern pipeline project, which is one of two in eastern Russia.

China has no plans to build the Altai pipeline, which would connect western Russia's gas deposits, which are presently utilized to feed Europe, to western China. The Altai pipeline, on the other hand, may be completed at some time in the future. The Power of Siberia pipeline, which would transport gas from eastern Russia to eastern China, is China's top priority. It is planned to start delivering gas to China in 2019.<sup>339</sup> Other Asian clients, such as Japan, exist, but

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<sup>336</sup> Interview with Erica S. Downs, (2018).

<sup>337</sup> Ibid.

<sup>338</sup> Henderson, James and Mitrova, Tatiana. *The Political and Commercial Dynamics of Russia's Gas Export Strategy*, Oxford: Oxford Institute for Energy Studies, September, (2015), pp. 19, 20 and 21.

<sup>339</sup> Grigas. *The New Geopolitics of Natural Gas*, pp. 258-261

extending pipelines to Japan would place Russia in the same geopolitical dilemma as it is in Europe: supplying a US ally.<sup>340</sup>

A regional agreement on North Korea that stabilizes the security situation on the Korean peninsula will alter not just Far Eastern geopolitics but also regional energy security dynamics. It might, for example, turn North Korea into a transit nation for power from Russia to South Korea.<sup>341</sup> Russia appears to have recognized that it can only prioritize commercial connections with Asia at best. Russia will not be allowed to conduct a neo-imperialist power game there; China has that right. Furthermore, Russia will not be able to become more powerful than China permits, at least in regard to China.

As a result, Russia will be unable to strike a balance between the EU and China. Russia will instead have to concentrate on preserving both markets. A lot has been written recently about the gas relations between European Union nations and Russia. Concerned about their growing reliance on Russian gas (40 percent of imports) and the strategy of the quasi-public company Gazprom, which aims to take control of some major gas companies in certain countries without offering anything substantial in return, European states are increasingly concerned. Politicians and the media are painting an overly pessimistic picture of EU-Russia ties, based on a geopolitical power struggle. Unfortunately, this viewpoint has pervaded discussions about the economic threats posed by Gazprom's strong position.

Nord Stream 2 (NS-2) is a 1200-kilometer-long Russian underwater gas pipeline project that aims to transport natural gas from Siberia to Germany. It has been divisive since its start, and it is once again in the spotlight as a significant geopolitical flashpoint. On November 23, 2021, the Biden administration (the third US government in a row to reject the project) put further sanctions on it under the Protecting Europe's Energy Security Act of 2019.<sup>342</sup> The sanctions were imposed just a few weeks after US Senator Jim Risch, the ranking member of the Senate Foreign Relations Committee, introduced amendments to the FY National Defense Authorization Act on

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<sup>340</sup> Ibid, p. 262.

<sup>341</sup> Interview with Robert Manning, (2018).

<sup>342</sup> Darryl Coote, **U.S. Imposes Further Sanctions Over Russia's Nord Stream 2 Pipeline**, *United Press International*, 23 November 2021.

5 November 2021, which would provide Ukraine with material support in the face of Russian aggression.<sup>343</sup>

These penalties and amendments are meant to put pressure on Russia, and they come at a time when Russia is stationing soldiers near the Ukrainian border, fueling fears of another invasion along the lines of Crimea in 2014.<sup>344</sup> According to Ukraine's defence ministry, around 90,000 troops have been deployed in border areas, particularly in the country's most vulnerable eastern regions, where Russia has been fomenting separatist for decades.<sup>345</sup> On the other hand, Russia is concerned about Ukraine's military build-up in the same corridor and wants NATO to guarantee against eastward movement.<sup>346</sup>

The Russian perspective, on the other hand, should be regarded with a pinch of salt because it has been approaching gas pipeline politics and isolating Ukraine for over a decade. In terms of the economy, natural gas prices in Europe have raised by 10% since Germany's energy regulator, the Bundesnetzagentur, delayed the clearance process for Russia's NS-2 gas pipeline in mid-November. The Swiss-based 'Nord Stream 2 AG' operating business (a subsidiary of Russian Gazprom) must first conform to German legislation before being licensed, the regulator stated, potentially postponing the project's start date.<sup>347</sup> It wants the project's Russian backer to set up a local business (currently located in Switzerland) to run the German section of the pipeline.

#### **4.3 RATIONAL BEHIND NORD STREAM 2**

Because one-third of Russian gas shipments to Europe pass via Ukraine, Central European nations are particularly sensitive to Russian–Ukraine ties. Previously, in the event of a conflict between the two, Russia had openly shut off its gas pipelines to Ukraine, leaving millions of Europeans without power during the winters of 2006 and 2009.<sup>348</sup> As a result, some European governments began looking for new ways to secure gas supplies without disruption, leading to the June 2015 launch of Nord Stream 2 (together with TurkStream, a southern pipeline that

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<sup>343</sup>Risch Introduces Amendments on Ukraine, CFIUS, State Authorization to NDAA, *Amendment introduced by Bob Menendez and Jim Menendez in the United States Senate Committee on Foreign Relations*, 5 November 2021.

<sup>344</sup> Sandrine Amiel, **Russia's Military Build-up Near Ukraine is Different This Time, Say Experts**, *Euronews*, 25 November 2021.

<sup>345</sup> Pavel Polityuk, **Russian Troops now Number 90,000 Near Ukraine Border after Drills, Kyiv Says**, *Reuters*, 3 November 2021.

<sup>346</sup> Russia Says It's Worried about Ukrainian Military Build-up, *The New Indian Express*, 1 December 2021.

<sup>347</sup> Germany's Energy Regulator Suspends Certification of Nord Stream 2 Project, *World Is One*, 16 November 2021.

<sup>348</sup> Mark Temnycky, **The Security Implications of Nord Stream 2 for Ukraine, Poland, and Germany**, *Focus Ukraine*, 17 March 2021.

transports gas from Russia to the Balkans via Turkey).<sup>349</sup> The European Commission has pushed for the continuation of gas transit through Ukraine and for the Nord Stream project to be governed by EU rules.

The first need was not met, while the second was somewhat met. From the start, Russia claimed that the European Commission was acting under the pressure of Western friends and insisted on the project's solely commercial basis. Supporters of the project claim that the pipeline will quadruple the amount of inexpensive natural gas flowing from Russia to Germany compared to the old Nord Stream pipeline, which opened in 2011 and runs parallel to the new one. Facts, on the other hand, tell a different narrative.

The present Ukrainian–Polish pipeline may be repaired for roughly €6 billion. NS-2, on the other hand, would cost more than €11 billion to build.<sup>350</sup> Furthermore, it is essentially redirecting gas from an existing Ukrainian–Polish pipeline, implying that Europeans would receive the same quantity of gas from a new source. Furthermore, €11 billion is not the project's total construction cost because a single pipeline, such as the NS-2, cannot perform its function in isolation. Additional distribution gas pipes will be required on both the Russian and European sides. As a result, the total construction cost of the NS-2 route should include the entire additional infrastructure required to meet this goal.<sup>351</sup>

#### **4.4 ADDITIONAL LEVERAGE FOR RUSSIA**

After conflict broke out between Russia and Ukraine at the start of 2022, all eyes were on those two nations, with particular focus on Russia, which was criticised by NATO members as a big stormy petrel of world peace. Instead, Ukraine benefited from the support of the United States and other NATO members. Thus, the onset of war was a precursor to worldwide upheaval that would send shock waves throughout the globe and, in reality, didn't wait too long to throw the global economy into disarray.

It was expected that the US and other NATO members would impose sanctions on Russia in response to the invasion. In 2022, Russia surpassed all other countries in terms of the number of sanctions placed on it, and commerce between Russia and NATO countries halted. By imposing fresh restrictions on oil exports, the United States took aim at Russia's refining industry. Russia's

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<sup>349</sup> Ibid

<sup>350</sup> Pulaski Report: The Real Cost of Nord Stream 2, *Biznes Alert*, 6 May 2019.

<sup>351</sup> Is Nord Stream 2 A Pipeline to Nowhere?, *Pipeline Technology Journal (Politics and Regulation)*, 15 June 2020.

efforts to upgrade its oil refineries were hampered by the latest round of sanctions declared by the White House. Some Russian banks were also cut off from the international banking network SWIFT by Washington and its allies. U.S. sanctions target "two key Belarusian state-owned banks, nine defence enterprises, and seven regime-connected officials and elites," among 24 other persons and organisations in Belarus. A prohibition on the sale of certain refining technology to Russia from Europe is one of many packages of sanctions imposed on Russia by the EU's 27 member states. The group also barred Russia's state-owned Russia Today and Sputnik news outlet.

The European Union has blocked the import of several goods from Russia's ally Belarus, including mineral fuels, tobacco, wood and lumber, cement, iron and steel. Both Russian President Vladimir Putin and Foreign Minister Sergey Lavrov have had their European assets frozen by the European Union. Along with the US and EU, Canada, Taiwan, Japan, the Czech Republic, the UK, Australia, South Korea, and New Zealand all joined forces to impose a set of sanctions on Russia. Gas flowing straight from Russia to Germany across the Baltic Sea would provide the Russians with extra power and an energy monopoly over the Europeans. Furthermore, this pipeline might boost Russia's naval presence in the Baltic Sea, causing the Baltic States to become uneasy.<sup>352</sup> NATO and allies are concerned about Russia's hybrid warfare against the latter. Russia has been implementing measures to isolate the economically weaker Russian ethnic sectors of the Baltic communities to rip away from their respective countries and join Russia, similar to how it targeted Russians in Crimea in Ukraine. After the Crimean experience, a referendum followed by Russian annexation of these regions cannot be fully ruled out.<sup>353</sup>

Europe is concerned that if ties between Europe and Russia deteriorate, the Russians might cut off gas supplies to Germany swiftly, as they did in Ukraine. It's worth noting that, since Merkel's election, Germany has become more alert to Russian threats to upset the geostrategic balance. When it comes to ties with Russia, Germany has always kept politics and economic concerns separate. With Navalny's (Putin's detractor) poisoning last year, however, this equation began to shift. Changes have begun to emerge as a result of the new Chancellor Olaf Sholz's government.

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<sup>352</sup> Mark Temnycky, **The Security Implications of Nord Stream 2 for Ukraine, Poland, and Germany**, *Focus Ukraine*, 17 March 2021.

<sup>353</sup> Bartosz Fraszka, **Baltic States Versus Russian Hybrid Threats**, *Warsaw Institute Special Report*, 26 October 2021.

Heiko Maas, the country's foreign minister for the previous three years and a vocal supporter of the Nord Stream 2 project, has been replaced by Annalena Baerbock, the Green Party's co-leader and an outspoken critic of Russia and China.<sup>354</sup> On the margins of the Eastern Partnership Foreign Ministers' Meeting in Brussels on November 15, 2021, the Foreign Ministers of Germany and France met with the Foreign Minister of Ukraine. Germany and France released a joint statement at the meeting, reaffirming their unwavering support for Ukraine's independence, sovereignty, and territorial integrity.<sup>355</sup>

#### **4.5 ECONOMIC COST OF THE DELAY**

The construction of NS-2 was extremely expensive, and now that it has been built but is awaiting German permission while simultaneously facing US sanctions, the wait is becoming excruciatingly costly to a pandemic-stricken, winter-looking Europe. Germany may have attempted to correct its path by signing a deal with the United States in July 2021, which includes a commitment to invest in green energy in Ukraine while also addressing worries about the geopolitical implications of possible dependency on Russian gas.<sup>356</sup> This agreement, however, must be accompanied by a more assertive US energy security strategy in Central and Eastern Europe. These kinds of decisions will take some time to bear fruit. Meanwhile, gas pipeline politics continue to imperil Ukraine's national security, further having a negative effect on the pandemic-ravaged European economy and sending its citizens into frenzy as winter approaches.

The pipeline is expected to become operational sooner rather than later, given the large financial stakes. Its political and economic implications, on the other hand, should encourage major European states to embrace a more comprehensive approach to energy security in general. The realization of overt reliance on Russian gas is unsustainable without, on the one hand, pursuing green energy sources and, on the other, pursuing gas supplies from Turkmenistan, which possesses the world's fourth biggest natural gas reserves that have yet to be used by Europe.<sup>357</sup>

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<sup>354</sup> Wolfgang Münchau, **The Many Challenges Facing Germany's New Chancellor**, *The Spectator*, 4 December 2021.

<sup>355</sup> Ukraine-Joint Statement-France/Germany, *Joint Statement by France and Germany* (Permanent Representation of France to the OSCE), 15 November 2021.

<sup>356</sup> Sammy Westfall, **What is the Nord Stream 2 Pipeline, and Why is it Controversial?**, *The Washington Post*, 21 July 2021.

<sup>357</sup> Vanand Meliksetian, **Can Turkmenistan Become a Serious Gas Player in Europe?**, *Oil Price*, 27 July 2021.

The geo-economic engagement with Turkmenistan would be tough to negotiate with China, but it would be worthwhile for a gas-hungry Europe.

The economists and political observers who take on the issue tend to project the political danger usually associated with a position of reliance onto economic relationships, emphasizing the risk of market dominance coming from a claimed monopoly. The list of potential economic concerns connected with increased Russian gas exports to Europe is vast, whether correctly or incorrectly: encircling of the European market by building northern (Nordstream or North European Gas Pipe-Line) and southern (Blue Stream) supply routes; agreement with Turkey to discourage the construction of direct supply lines for Caspian gas to the European market. There are concerns that by refusing to align its gas market laws with Europe's free-market legislation and sign the European Energy Charter, which would harmonise legislation, Russia is taking unfair advantage of trade with Europe while refusing to play by the rules.

After gaining a monopoly, Russia would be able to boost market pricing, especially since it would be able to force the European market to compete with Asian and North American markets. However, there is no guarantee that this understanding of economic risk will aid in the hunt for a deal that includes stable laws controlling gas trade between Russia and the EU. However, politicians, the media, and many government experts, such as D. Clark (2006)<sup>358</sup>, a former British government advisor, are today guided by this perspective. Other renowned analysts, such as J. Stern (2005<sup>359</sup>, 2006<sup>360</sup>), provide a far less dramatic reading of the Russian government's political and economic policy on gas exploitation and sales to Europe. However, such viewpoints receive little consideration.

Some member states, as well as the European Commission in its March 2006 Green Paper (EC, 2005)<sup>361</sup>, have advocated a widespread campaign to force Russia to sign the European Energy Charter and establish a common negotiating authority by establishing a "single buyer" for all contracts to be signed with external vendors, with the Russian vendor in the lead. These measures, which aim to challenge Gazprom's market strength, go hand in hand with others aimed at reducing the political risks associated with short-term supply security. In an understandable

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<sup>358</sup> Clark D. (2006), Putin's power struggle: We cannot let Russia use its domination of energy supplies. The Guardian, November 29, 2006

<sup>359</sup> Stern J. (2005), The Future of Russian Gas and Gazprom, Oxford, Oxford University Press.

<sup>360</sup> Stern J. (2006), Is Russia a threat to energy supplies?, Oxford institute for Energy Studies, August 2006, p. 3-4.

<sup>361</sup> EC (2005), Competition DG, Inquiry on competition in energy sector, Preliminary report, Brussels, Feb. 2006



attempt to address the issue of community security, the second category of actions attempts to organize a mutual support system for storage. The economic risk does not need a direct response from states; rather, initiatives to simplify gas trade and competitiveness among significant EU gas exporters are needed.

### **Two opposing worlds**

The state of the globe as a whole is a crucial determinant in what happens in the global oil and gas business, according to the history of international and regional energy markets (J.G. Clarke, 1990)<sup>362</sup>. It is difficult to comprehend Russia-EU gas ties without first understanding Russia's history and the nature of the Russian state as it emerged from the Soviet era. It raises the question of whether a country that is rebuilding and striving to reclaim its previous power can be quickly integrated into a multilateral regime that restricts access to its infrastructure and energy resources. The EU, on the other hand, is not a traditional state, as it lacks actual diplomatic and military strength. It tends to regard itself primarily as a force promoting multilateral integration systems on the world stage.

### **Russia: A proclaimed 'Energy Superpower'**

The present administration seeks to exploit Russia's oil and gas resources to reinforce its control after a decade in which the country's state machinery crumbled and its international standing was weakened. Russia's goal is to become an 'energy powerhouse' and a crucial geopolitical player by placing itself as a main supplier for major regional energy markets and organizing rivalry among nations and regions to increase its prominence. This power game centered on a hydrocarbons industry organization including a few large businesses in which the government has a majority stake. The firms are the state's primary source of oil and gas money, which is used to pay the state budget and economic growth. They also support international policy objectives, and their actions are not limited to Russian resources and the domestic market. They are taking action in Russia's 'near abroad,' where they are attempting to gain control of recently exploited deposits and exports.

It also includes rich European governments eager to participate in downstream operations in order to strengthen their hold on energy revenues across the whole value chain. The Russian

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<sup>362</sup> Clarke J.G. (1990), *The political economy of world energy: A twentieth century perspective*. Wheatsaf, Harvester.

government is not afraid to take companies to court in order to protect the country's energy resources and guarantee that they are properly utilized. Since 2001, the oil and gas sectors have been shaken, allowing the development of production, transportation, and exploitation resources to be re-organized under direct governmental supervision.<sup>363</sup> Private enterprises continue to play a role, often in collaboration with international companies vying for market dominance, such as BP's TNK-BP joint venture and Conoco's Lukoil (in which it holds a 20 percent share).

The public or semi-public sector, on the other hand, now has the upper hand and may construct institutional regulations to its liking in order to maintain control over resources, replace private or foreign investments with public-private partnerships, and pursue the political executive's interests. As a result, the publicly owned industry's perimeter will only be stable until the Russian state reclaims direct or indirect control over resources created by multinational businesses, as evidenced by threats to enterprises exploiting the Sakhalin gas reserves in fall 2006. Only the president's agreement will secure foreign investments, not market norms or international law. The adoption of this model indicates the institutions' weakness in Russia (Tompson, 2006).<sup>364</sup> To govern, within the framework of private enterprise, a sector earning large money and involving a limited number of highly powerful individuals, the only ones capable of supporting and developing production, a powerful state and a strong legal system would be required. However, because Russia's state capacity is limited, with little regard for the law and a lack of political accountability, (quasi-)nationalization is the most effective manner of utilizing resources in order to develop the nation's political and economic strength.

The lack of openness in the decision-making process and system administration is a drawback of this institutional framework. Since 2001, this tendency has coincided with the Russian political system's rising centralization of power and authoritarian tendencies. On a global scale, this goes hand in hand with a policy of confirming Russian authority and a style of power diplomacy for nations within its immediate zone of influence (Gomart, 2006).<sup>365</sup> The finest example of a significant firm serving the Russian state's political and economic power goals is Gazprom. As a

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<sup>363</sup> Semi-state control has taken the place of the free market ideas that once prevailed. The free marketeers tried several times to reform energy prices, deregulate access to the gas and electricity network and organise competition in sales to industry, in keeping with the recommendations of international and EU bodies

<sup>364</sup> Tompson W. (2006), Un Venezuela du froid ? : la malédiction des ressources et la politique russe, *Politique Etrangère*, n°1, 2006, p.37-50.

<sup>365</sup> Gomart T. (2006 ), *Politique étrangère russe: l'étrange inconstance*, *Politique Etrangère*, 1/2006

vertically integrated gas monopoly, Putin has tightened his control. Gazprom is also the most worldwide firm, capable of competing with top oil companies in terms of reserves and output, thanks to the Russian government's 51 percent stake.

Its stock market valuation is ranked third in the world, and it is in a position to acquire control of other significant oil and gas businesses. It is destined to hold positions farther downstream in affluent nations, as is currently the case for Russian oil corporations, capturing a bigger portion of oil and gas income obtained from distribution, storage, and sales in the global oil market and regional gas markets. It is attempting to gain control of privately held production at home by buying Northgas and a 20 percent stake in Novatek, two businesses that are only involved in gas production (Stern, 2006)<sup>366</sup>.

Finally, it has formed a joint venture with Lukoil (as well as Rosneft) to cover its gas output. With the purchase of Sibneft, it is also diversifying into the oil business, as well as upstream (equipment and construction sector) and downstream industries (electricity, petrochemicals). It spent €14 billion on these initiatives in 2003-5, accounting for a third of its total investments. Gazprom may potentially use its wealth to modernise the power industry and fund new nuclear reactors, as the government urged in 2005. Gazprom is in control of gas acquisitions in Russia's sphere of influence. To limit political and economic competition from the former Soviet states of Central Asia and the Caucasus, Russia intends to maintain tight control over how gas from the Caspian is exported to Europe and Asia. As a result, Gazprom's international strategy must be seen in the perspective of Russian foreign policy.

This form of semi-public firm allows Russia to be more visible in strategic or priority sectors. In the case of Gazprom, this implies that the Putin administration is urging the company to expand in Central Asia and to provide advantageous conditions for gas sales to nations inside its area of influence. The goal is to reassert its political influence through close economic integration, as well as reclaim control over nations striving to separate themselves from Moscow (Ukraine, Georgia, and so on) by abruptly withdrawing favorable tariffs. The state is utilizing hydrocarbons to organize its connections with its important partners and its entry into the world

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<sup>366</sup> Stern J. (2006), Is Russia a threat to energy supplies?, Oxford institute for Energy Studies, August 2006, p. 3-4.

arena, thanks to Gazprom and Lukoil and their growing international relevance (Boussena et al, 2005<sup>367</sup>; Locatelli, 2005<sup>368</sup>).

Russia, in general, aims to develop a leading position and guarantee that it is a prominent player in the various markets, with control over the conditions of sale. Gazprom is in control of gas acquisitions in Russia's sphere of influence. To limit political and economic competition from the former Soviet states of Central Asia and the Caucasus, Russia intends to maintain tight control over how gas from the Caspian is exported to Europe and Asia. As a result, Gazprom's international strategy must be seen in the perspective of Russian foreign policy. This form of semi-public firm allows Russia to be more visible in strategic or priority sectors.

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### **European Union and its Energy Relations with Russia**

The European Union and its member states differ from Russia in terms of their relative lack of energy resources, notably gas, and the resulting dependency, as well as their multilateral approach to international relations. Energy dependence (for all kinds of energy) will rise from 52 percent in 2004 to over 75 percent in 2030, according to European Commission estimates (EC Green Paper, 2003)<sup>369</sup>. Gas production, which met 43% of demand in 2005, will barely meet 25% of demand by 2030, with Russian supply playing a crucial role in European imports. Gas and oil resource management has always been a governmental responsibility within the

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<sup>367</sup> Boussena S., Locatelli C. (2005), Towards a more coherent oil policy in Russia ?, *Opec Review*, XXIX (2), juin, p. 85-105.

<sup>368</sup> Locatelli C. (2006), The Russian oil industry between public and private governance: obstacles to international oil companies' investment strategies. *Energy Policy*, vol. 34, n° 9, p. 1075-1085

<sup>369</sup> EC (2003). The Green Paper towards a European Strategy for the Security of Energy Supply, Communication from the Commission Energy Infrastructure and Security of Supply (COM (2003) 743). Brussels

institutional framework established by European treaties. The EU does not have direct power over energy policy under the European Treaty. Through the coordination of strategic reserves, the International Energy Agency (IEA) is in charge of ensuring the security of short-term oil supply. There is no one-size-fits-all solution to the gas problem. Each country created its own gas market, entrusting the negotiating of import contracts to a national monopoly or a market leader. This body was required to divide imports among numerous seller nations and to accumulate operational reserves. Member states continue to rely on incumbent operators to reduce the risk of gas reliance and develop supplies.

It is unable to undertake a strong foreign policy due to a lack of considerable diplomatic or military resources. Member states' interests and opinions frequently disagree, and divisions have widened with the addition of new members. In a world still organised around a geopolitical balance of power based on diplomatic and military dominance, the EU is attempting to become a de facto super-state with traditional power qualities, despite its lack of the tools to enforce its own sovereignty. To compensate for this weakness in its relations with other international powers, Europe uses 'soft power,' seeing its reliance as interdependence (Ladi, 2006).<sup>370</sup> It attempts to shape reality 'by attempting to implement on a wide scale standards capable of organizing the world, providing discipline to the market place, and making behavior more predictable (Ladi, 2006). It elaborates the sort of inter-state connections that its own members have established with one another in an attempt to create integration through the market, which, as Majone (1993)<sup>371</sup> points out, is the only way to achieve greater political integration in Europe. In the energy sector, the European Commission wants the EU to establish a common foreign policy to communicate and negotiate with energy-producing nations and the enterprises they control with a single voice on behalf of European governments and companies. The Green Paper from March 2006 outlines this strategy (EC, 2006). Because they rely nearly entirely on Russia for their gas supply, the necessity for a common energy strategy has grown even more critical since ten additional countries joined the Union in May 2004 (and Bulgaria and Romania in January 2007). The Russian gas supply problem in January 2006, which was exacerbated by a halt in deliveries to Ukraine, heightened these fears.

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<sup>370</sup> Laïdi Z. (2006), *La norme sans la force, l'énigme de la puissance européenne*, Paris, Editions des Presses de Sciences Politiques

<sup>371</sup> Majone G.D. (1993), *Deregulation or re-regulation ? : Regulatory reform in Europe and United States*, London, Pinter

Without a common energy foreign policy and the institutional and geopolitical tools, the EU is forced to manage its member states' growing energy dependency. It has considerable authority under the Trans-European Networks strategy to provide financial assistance for the establishment of large transit and import facilities that contribute to better diversity, justifying a coordinating role in this matter. Otherwise, it operates through interfering with the institutions of other nations. The EU is also attempting to develop a unified regulatory environment.

The European Energy Charter was established at the beginning of the 1990s by the EU to encourage harmonization of rules on energy investment in former Soviet bloc nations, particularly Russia. The EU's underlying goal was to ensure Europe's long-term energy security. This was to be accomplished by making it easier for foreign enterprises to set up a base, obtaining investments, and organising energy product trade through liberalizing access to transportation networks. Unfortunately, despite the fact that this international agreement has been ratified by 46 nations, the Russian government continues to refuse to allow parliament to ratify it, in order to maintain the maximum possible margin of manoeuvre in the hydrocarbons sector (Walde, 1995<sup>372</sup>; Locatelli, 2005). In general, the EU establishes requirements for partnership and cooperation agreements with foreign nations, requiring progressive changes in their legislation to bring them into compliance with EU norms. Norway and countries in southeastern Europe that have applied to join the EU and through which gas transits are already part of this area in the energy industry. It may soon include nations along the Mediterranean's southern shore. The EU has also created a Neighborhood Policy, which includes action plans for transit countries like Ukraine, as well as plans for the energy sector, which the Commission views as a tool to regulate the circumstances impacting the flow of gas into Europe. With a country like Russia, which is still a traditional power, uses diplomacy backed by force to reassert its influence in its 'near abroad,' and is determined to use its energy resources to exert geopolitical influence, the limits to the effectiveness of this international approach are all too obvious. Russia rejects the concept of matching its laws with market standards advocated by the EU and other foreign organizations like the International Monetary Fund. When Russia demands complete freedom to take control of gas companies in European countries, the Commission

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<sup>372</sup> Walde T. (1995), « International investment under the 1994 energy charter treaty-legal, negotiating and policy implications for international investors within Western and Commonwealth of Independent states/Eastern European Countries, *Journal of World Trade*, Vol 29, n° 5, octobre, p. 5-71.

responds that such takeovers would be perfectly acceptable if Russia aligned its gas industry rules with the principles for open access to its infrastructures and resources, and ratified the Energy Charter.<sup>373</sup> Things don't get any better when Russia promotes the benefits of aligning of various parties by trading distribution assets in Europe for gas production assets on a bilateral basis, as it has done with a number of European firms.

Given Russia's unwillingness to adopt this multilateral framework, a Russian state-owned company's dominating position in the European market necessarily turns supplies from Russia into a political issue, raising concerns about the durability of long-term contracts. The breakup of the Soviet Union increased the number of transit nations, raising the political and financial risks of buying gas from this region of the world. To make matters worse, transit nations who have not yet joined the EU are unable to make any credible commitments, putting them at risk of conflict with Moscow.

The Russian belief that it can utilise its energy wealth to gain influence is ingrained in a world dominated by a balance of diplomatic and military might, in which American unilateralism reigns supreme and political and regional blocks vie for dominance (Correlje and van der Linde, 2006<sup>374</sup>). It is a future in which the emergence and maintenance of integrated global markets will be challenging. It is a world that does not allow for a European strategy based on market integration and a multilateral approach to international relations. It is a world in which national and international security concerns, military conflicts, bilateralism, and excessive regionalism obstruct international economic integration based on the general control of commodities, capital, and labour movements. In the pursuit of its imperial history, Russia is attempting to take advantage of, and even promote, this worldwide power game. By rejecting multilateralism in the gas market, it is taking this approach to European countries. It is simple for it to exploit the EU's weaknesses as a power with limited diplomatic and military capabilities. It has the option of taking a bilateral strategy, negotiating directly with major European nations and national corporations. Understandably, the EU is considering if it should not establish a true supranational body to oversee energy ties, particularly to balance the Russian seller's market dominance and collectively negotiate gas contracts.

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<sup>373</sup> See the letter from the European Commission, dated 2 May 2006, to the Russian minister of economy quoted in *Financial Times*, 4 May 2006.

<sup>374</sup> Correljé A., van der Linde C.(2006), Energy supply security and geopolitics: A European perspective, *Energy Policy*, Vol. 34, p. 532-543.

## **Russia's Dependence on Exports to Europe**

Russia is Europe's primary supplier, notably the European Union. Its exports to this zone (excluding the CIS and Baltic nations) were 154 Bcm per year in 2005, with 126 Bcm going to the EU (excluding the Baltic countries), accounting for approximately 90% of its total gas exports. Given the current quality of its infrastructure and the terms of sale for its gas on multiple markets (Russia, CIS, and Europe), Europe will remain Russia's primary, if not only, export market between now and 2020, as evidenced by the key objectives it has set for its gas exports. Total exports will climb from 217 Bcm in 2000, with 60 percent going to Europe, to 245-275 Bcm by 2010, with 71 percent going to Europe, and 270-275 Bcm by 2020, with 74 percent going to Europe, according to the long-term Energy Plan of 2003 (Mintopenergo, 2003).<sup>375</sup>

## **The economic stakes for sales to the European market**

Gazprom is the only operator handling gas exports to Europe due to its network and export monopolies. Because of the terms impacting domestic tariffs, it needs to keep a firm grip on exports to Europe. Its diversification opportunities are limited by the high cost of growing exports to other markets. Exports provide for about 70% of Gazprom's earnings, although accounting for just around 30% of production. Similarly, they are an important source of revenue for the Russian government. Exports are critical to Gazprom's profitability and capacity to make expenditures that supports its numerous goals, including diversification into oil, worldwide expansion, and, of course, production and transportation infrastructure development. The cash flow necessary to build production and infrastructure is not generated by sales to a largely governed domestic market (with regulated pricing and quotas). Despite recent hikes, domestic gas prices remain undervalued in comparison to Gazprom's projected production costs, and they represent significant cross subsidies from export income to Russian consumers.

Despite a dramatic decrease in the frequency of unpaid gas bills during the 1990s<sup>376</sup>, many parts of the domestic market remain unprofitable (Tarr et Thomson, 2004<sup>377</sup> ; Ahrend et Tompson,

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<sup>375</sup> Mintopenergo (2003), Energy Strategy of Russia for the period ending 2020 : Main provisions, Moscow, novembre.

<sup>376</sup> Non-payments for domestic sales have dropped steeply compared with 1999, when monetary payments only represented 18.5% of Gazprom's domestic sales.

<sup>377</sup> Tarr D, Thomson P (2004), « The Merits of Dual Pricing of Russian Natural Gas, World Economy, Vol 27, n° 8, août, p. 1173-1195.



2004<sup>378</sup>). Because gas prices are linked to oil prices in export contracts, the relative level of Russian domestic prices (€40 to €50 per 1,000 m<sup>3</sup> for industry in 2005 and 2006, and much less for households) was five or six times lower than export prices in 2006. This was due to the steep rise in the price of exported gas from €150 to €250 per 1,000 m<sup>3</sup> in 2006.

- The constraints affecting diversification into other regional markets

Gazprom and the Russian government have made no secret of their desire to diversify its exports to nations in eastern Asia and the United States, therefore reducing their reliance on the European market. This decision, which would coincide with a shift in production to the east, fits into the larger picture of the world gas market's future development, which has seen China and India emerge as major importers. This tendency would also include the United States. Its output is already in decline, and it imports 20% of the gas it consumes. The Russian government wants to send a third of its exports to Asia by 2010, but given the challenges of developing new gas reserves and building the infrastructure needed to service new markets, this can only be a long-term strategy.

The development of production on the Sakhalin 1 and 2 fields in Russia's far east, which is set to begin in 2007, is the first step in this new direction. The output will be sent to markets in Japan, South Korea, and maybe China (in the form of liquefied natural gas in the case of Sakhalin 2). Without Gazprom, the project began ten years ago as part of agreements to share output with huge foreign firms (Shell, Exxon) that possessed the requisite expertise. However, this encouraged Gazprom to try to purchase its way into the Sakhalin 2 and Zapolarnoye fields through a stock swap with Shell. The Russian government pushed for this by questioning licence agreements on the grounds of non-compliance with environmental regulations. Shell sold 27.5 percent of its stock to Gazprom in December. Mitsui has a 12.5 percent share, whereas Mitsubishi has a 10% share. TNK-BP is now developing the Kovykta field in central Siberia, and a similar plan has formed to secure a presence there. This time, the pressure came in the shape of tax evasion claims.

Several factors must be met in order for the growth plan into Asian markets to be successful. First, gas pipelines will need to be built to transport gas from eastern Siberia and the far east across large distances. The best sequence for operations aimed towards China and maybe South

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<sup>378</sup> Ahrend R., Tompson W. (2004), Russia's Gas Sector : The Endless Wait For Reform ?, OECD Economics Department Working Papers, n° 402, 37 p.

Korea would be to develop the Kovykta field near Irkutsk, followed by the fields in the Sakha Republic (Chayandinskoye, Talakanskoye), which might be connected to the gas pipeline planned to run from central Siberia to China (Boussena et al, chap. 4, 2006)<sup>379</sup>. However, the fact that Gazprom is not actively participating in the development of eastern Siberian gas reserves might support the development of a pipeline from western Siberian gas fields (Altai project).<sup>380</sup> However, as recent events have demonstrated, Gazprom is plainly eager to expand its manoeuvring room.

Second, given the significant uncertainty still impacting China's gas consumption growth<sup>381</sup>, this plan entails significant, risky financial commitments. Finally, the restrictions involved with establishing pipelines and developing gas fields linked with the first big contract would put out the initial supplies beyond 2020 in any realistic scenario, assuming a positive outcome to discussions before 2010. (Stern, 2005, p.168).<sup>382</sup> This will surely be the case for the fulfillment of the letter of intent agreed by the Russian and Chinese governments in March 2006, which covers the supply of 30 to 40 Bcm of Russian gas per year from western Siberian fields, with many specifics, including gas rates, yet to be worked out.

The development of LNG exports, which has yet to be addressed by Gazprom policy, is the only method to achieve the medium-term goal of market diversification. This was the concept for exports to the US market from the massive Shtokman field in the Barents Sea, but in October 2006, Gazprom opted for a project including exports to the European market through a gas pipeline. However, expanding LNG sales necessitates the deployment of technology that requires a significant investment, as well as being a new direction for Gazprom and time-consuming to implement. It demands collaboration with major corporations capable of supplying the necessary technology and resources to expand the field and infrastructure. Gazprom sought to do so by creating a cooperation with companies from the United States (ConocoPhillips and Chevron), Norwegian (Norsk Hydro and Statoil), and France (Total).

### **Adapting to the priority of European sales**

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<sup>379</sup> Boussena S., Pauwels J.-P., Locatelli C., Swartenbroekx C. (2006), *Le défi pétrolier : questions actuelles du pétrole et du gaz*, Paris, Vuibert, 394 p.

<sup>380</sup> Development licenses for gas fields in Eastern Siberia are currently controlled by Russian oil companies, in particular BP-TNK, as regards the Kovykta field

<sup>381</sup> Such development is limited, in industry by prices that give coal the advantage, and in households by the inadequacy of the urban distribution network, unable to support sustained market penetration by natural gas.

<sup>382</sup> Stern J. (2005), *Ukraine : EU Neighbourhood and natural gas security*, Oxford : OEIS.

The focus given to European sales forced Gazprom to break free from the Ukraine transit monopoly and take a different strategy to sales, which had previously only been covered by long-term contracts with national gas firms. The shift in approach was prompted by the liberalization of the European market, which opened up new sales potential. Gazprom also adopted a more flexible approach to the development of new production initiatives as a result of the importance of European sales, a change from the Soviet tendency to maximize volume.

- Adapting export and transit infrastructure to suit the European priority

The significance of the European market necessitated a significant effort to secure export channels. The collapse of the Soviet Union and the Comecon<sup>383</sup> disrupted the export system (Soyuz and Euro-Siberian gas pipelines), which all went through Ukraine in 1989 before entering Czechoslovakia. Since then, the Soviet republics have acquired independence, and the Comecon nations, some of which were or are transit countries (Slovakia, which concentrates all gas going via Ukraine, the Czech Republic, and Poland), are no longer under Russian influence.

With the Yamal 1 gas pipeline, which runs via Belarus and Poland, Russia swiftly quadrupled the number of transit options to Europe. By broadening export channels, Gazprom is still growing transport capacity (now around 145 Gm<sup>3</sup> per year). The commissioning of the Blue Stream pipeline through the Black Sea to Turkey completed this procedure. Plans for a southern European expansion, including Greece and Italy, are coming together. The Nordstream (previously North European Gas Pipeline) beneath the Baltic to Germany<sup>384</sup> will be finished by 2010, completing the final step in the diversification process. It will be the first direct pipeline to Europe, bypassing the need to pass through other nations, thanks to an agreement signed in 2005 by Gazprom, BASF, and E.ON. The Yamal 2 project, which will double the capacity of Yamal 1, allowing Russia to boost transport capacity from 66 to 77 Bcm per year, should also be included. Gazprom has attempted to negotiate the elimination of debts incurred for past gas purchases in exchange for a majority share in the pipeline operator in Belarus and Ukraine, where the stakes are high and relations are under significant political pressure. It came close to

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<sup>383</sup> The Comecon (Council for Mutual Economic Assistance) organised the Soviet Union's economic relations with countries with control economies in central and eastern Europe

<sup>384</sup> The cost of this route, almost twice that of land-based options (Yamal 2, refurbishing and enlarging the gas pipeline through Ukraine) is the price to pay for independence. To build the pipeline Gazprom, BASF and E.ON set up a joint venture, 51% of which is owned by Gazprom. Gasunie will also be taking a share. The first 27 Bcm a year slice should open in 2010. The pipeline should carry a third of Russian exports to Europe, with capacity culminating at 55 Bcm a year by 2015

achieving this goal in its dispute with Belarus in 2004, but came up short in 2005 and 2006<sup>385</sup> when it came to Ukraine (Stern, 2006).

- A strategy of downstream diversification

Gazprom has solidified its downstream diversification strategy, which it has been pursuing since the 1990s, in order to preserve its outlets in now-competitive national markets and collect a larger share of gas revenue (Locatelli and Quast, 1997).<sup>386</sup> This approach is centered on establishing marketing subsidiaries, acquiring local company interests, and building joint ventures in transportation, distribution, and trade with national partners. Gazprom established Wingas in Germany in the mid-1990s as a joint venture with BASF-Wintershall to transport and sell gas directly.

It was able to gain a 13 percent share of the wholesale market as a result of this. Since then, Gazprom has expanded into new EU member states – former Soviet republics (Baltic nations) or ex-Communist republics (Poland, Hungary, Czech and Slovak Republics) by using the gas industry's privatisation. Its stated goal is to keep its outlets open in countries that rely largely on its gas. It is currently employing the same strategy in significant European countries, aiming to take control of major national or regional distributors, as seen by its interest in Centrica or Scottish Power in the United Kingdom in 2006. It may be interested in acquiring a stake in Belgium distributor Distrigaz and bolstering its presence in Germany by buying local distributors. It forms alliances by exchanging assets in sales and distribution on the one hand, and production on the other. For example, a 2006 deal between BASF and Gazprom would give the former a 25% stake in the enormous Yuzhno-Russkoye gas field in return for the latter is position in Wingas (which will raise from 35 percent to 50 percent) and WIEH, a marketing business. Gazprom is pursuing similar goals through its framework agreement with E.ON-Ruhrgas signed in July 2006, as well as an agreement with ENI that provides for direct sales of 3 billion cubic metres per year by 2010 and the possibility of Gazprom acquiring a 10% stake in ENI power.

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<sup>385</sup> Agreement on a consortium involving Gazprom and the Ukrainian state company Naftogaz with possible participation by German companies to manage and refurbish the gas network crossing Ukraine was reached before the Orange revolution, but has been queried since, constituting a major factor in the dispute between Russia and Ukraine in late 2005 and early 2006.

<sup>386</sup> Locatelli C. (1997), « Transition économique et 'résilience' organisationnelle : les enseignements de l'industrie du gaz en Russie », *Revue d'Etudes Comparatives Est-Ouest*, (4), déc., p. 115-140.

- An adaptable production strategy in line with the European priority

Consumer nations, particularly the International Energy Agency (IEA, 2006)<sup>387</sup>, have questioned Russia and Gazprom regarding future gas production growth and their capacity to meet their export promises beyond 2010, as stated in the long-term Energy Plan of 2003. After 2010, Russian output may not be enough to cover the contracts negotiated for shipments to Europe and the CIS. Although its reserves are undeniable, Gazprom appears to be dragging its feet in developing new gas fields, particularly the Yamal field, despite the fact that the three large reserves of Medevhze, Urengoy, and Yamburg, which began production under the Soviet Union, have reached their peak and will soon begin to decline. Independent producers presently account for 14% of total output (90 Bcm), but they have little motivation to invest due to a lack of profit margins.

They are denied direct access to global markets due to existing regulations, especially Gazprom's export monopoly. Similarly, because of the discretionary restrictions of access to networks for third parties, Gazprom's monopoly of the transport network restricts them from selling to the domestic market. As a result, they have no choice except to sell their production to Gazprom at nationally controlled pricing. The only other option is to negotiate with Gazprom for access to the transport network in exchange for selling their product on 'free' gas markets, where tariffs are already lower than on the export market. As a result, the challenge of production development may be summarised as follows. Three additional oilfield have already been developed: Zaporlarnoye, Pestovoye, and Tarkosalinskoye. They can simply be linked to the current infrastructure as satellites of the three 'super-giants.' The new fields will compensate for the expected drop in output from the super-giants until 2009-10. However, the outlook after that date is less certain. Gazprom will need to install new production capacity comparable to 70 Bcm by 2015, and 180 Bcm by 2020, if it wants to maintain its present level of output (547 Bcm) (Stern, 2005). At the moment, Gazprom is only devoting 30% of its resources on expanding production.<sup>388</sup> Only for Bovanenkovskoe, the business recently proposed a timeline for the start of production on the Yamal fields in 2011. (Gas Matters, November 2006).

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<sup>387</sup> IEA, (2006), *Optimising Russian Natural Gas. Reform and Climate Policy*, Paris, OECD/International Energy Agency.

<sup>388</sup> According to data provided by Gazprom, the proportion of its investments devoted to production actually dropped from 31% in 2002 to 28% in 2004.

Gazprom has highlighted contingent risks as a reason for delaying investment in gas fields destined for the European market. The first source of uncertainty, which is arguable given Gazprom's resources, is the liberalisation of the company's principal export market. Long-term contracts inked in the 1980s are coming to an end, while market liberalisation in Europe is causing more uncertainty in terms of outlets, according to the report. Short contracts are a result of the liberalisation. Furthermore, if spot market prices became the contract's base price, the price clause would offer less risk management flexibility than the existing system, in which prices are linked to oil prices. Gazprom will probably succeed in obtaining new long-term contracts with the major national operators, similar to those agreed with E.ON, ENI, and GDF in 2006. However, it continues to believe that overall liberalization is diminishing the assurance of long-term outlets and, by extension, stable pricing.

The second source of uncertainty is the domestic market's demand outlook, which will be influenced by future changes. The domestic market is still primarily ruled by a command economy, which is guided by strictly controlled low gas prices. As a result, quotas established directly between Gazprom and big consumers must be used to manage supplies. A major rise in domestic prices might significantly restrict demand growth while also providing additional export capacity without requiring a massive increase in supply. Higher domestic pricing may also encourage independent producers and Russian oil firms with large reserves to increase output. According to Gazprom, which was started by the IEA in 2004, gas output might reach 150 to 270 Bcm by 2020 if only oil firms were included. If this is the case, large-scale development of provinces like Yamal may not be justifiable in the short future in order to avoid a gas glut. Gazprom's choice to delay investment, on the other hand, may be regarded as a demonstration of market dominance. In terms of European markets, running up against the limitations of what it can export to Europe owing to a lack of investment would make it simpler to sustain high prices on the spot markets and in new contracts. Gazprom has two options for meeting its contractual obligations in the European market and attempting to boost sales: it can rely on low-cost supplies from Central Asian countries, or it can limit deliveries to domestic markets, either by raising prices or by limiting supplies on a basis negotiated with large consumers.

In the first scenario, Gazprom chose to buy massive volumes of inexpensive gas from Central Asian nations (Kazakhstan, Turkmenistan, and Uzbekistan), partially to fulfill local demand and

partly to meet contractual obligations on the export market. It can sustain its monopoly over purchases for resale to nations that want to buy gas directly from Central Asian countries by maintaining its monopoly control over its transportation network. Gazprom authorised Ukraine to sign an arrangement with Turkmenistan in 2003 to sell less Russian gas to Ukraine, with the gas business serving as a go-between for purchase and resale.

The second deal, signed in 2005 with Turkmenistan, marked the beginning of this approach. Imports from this zone are expected to increase dramatically, from 19 billion cubic metres in 2005 to 90 billion cubic metres in 2007. Kazakhstan and Uzbekistan, the other two nations, might soon be shipping the same amount to Russia (Hubert and Ikonnikova, 2003).<sup>389</sup> Russia's purchases of 150 Bcm in 2010, according to J. Stern (2005), are comparable to the present level of exports to Europe.<sup>390</sup>

They may make it possible to delay the commencement of production on new gas fields that would otherwise necessitate significant expenditure. For this approach to function, Gazprom must keep its monopoly on access to its transportation and transit network, as well as export routes from Central Asia, as well as its monopoly on the purchase and resale of Caspian gas. The proposed Nabucco pipeline, which would stretch from Turkmenistan's border via Turkey and into the Balkans and Central Europe, would jeopardise this monopoly. The South Caucasus Pipeline (SCP), which would connect to the proposed TransCaspian Gas Pipeline, would also pass Azerbaijan, Georgia, and Turkey (Erzerum) (under the Caspian). Because of the stakes in gas and energy, Russian foreign policy is pursuing tighter economic connections with these nations. Turkey has also been targeted by Russian diplomacy and Gazprom in the hopes of convincing it not to create alternative infrastructure for the transportation of gas shipments from the Caspian to Europe.

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<sup>389</sup> Hubert F., Ikonnikova S. (2003): Investment Options and Bargaining Power in the Eurasian Supply Chain for Natural Gas, Humbolt University, Working paper

<sup>390</sup> It may be noted in passing that alongside this strategy of supporting production in the Caspian area to maintain and expand sales to European markets, Gazprom is developing a new strategy of alliances with other companies in gas producing countries to develop gas fields there with a view to supplying European markets that are particularly far from Russia. This is one of the objectives of the framework agreement signed in August 2006 by Gazprom and Sonatrach. It provides for joint or separate development of gas fields in Algeria, as permitted by new legislation introduced there in 2004. The aim would be honour Gazprom's contractual commitments for instance for eventual sales to large buyers in Spain, which is the country furthest from Russia. In October 2006 Gazprom signed a protocol of agreement with the Spanish oil company Repsol, covering joint developments outside Spain, with the same objective.

This might lead to a plan to expand the capacity of the Blue Stream gas pipeline beneath the Black Sea. However, Gazprom's long-term policy of depending on inexpensive gas from Central Asian republics is fraught with economic hazards. The nations may attempt to generate money equivalent to what Gazprom obtains from exports to the EU and, increasingly, the CIS. Kazakhstan obtained a \$140 per 1,000 m<sup>3</sup> fee for its supply in July 2006, while Turkmenistan has been requesting a comparable rate since October 2006. (Stern, 2006) The second method Gazprom might acquire more flexibility is to play with the amount of gas it provides to the domestic market.

It has consistently refused to arbitrate in favour of its domestic market, which it regards as a top priority. Setting aside households, as J.Stern (2006) points out, Gazprom might make a number of modifications to deliveries to major industrial purchasers and the electrical sector if necessary to meet its contractual obligations. Poor gas prices on the domestic market (\$43 per 1,000 m<sup>3</sup> in 2005) promote low efficiency and long-term demand growth, especially in the power sector. Gazprom should create a programme of agreed rationing to regulate the amount of gas given and to encourage major purchasers to get supply from the small open market, where prices are substantially higher.

#### **4.6 GAZPROM AND THE EUROPEAN MARKET RELATION**

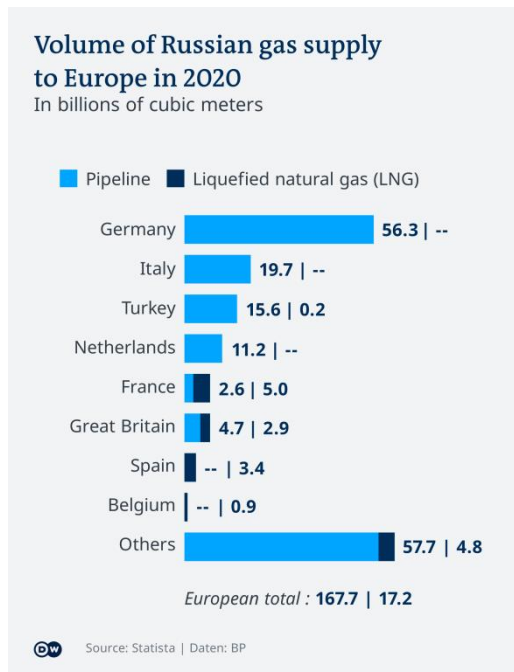
In Europe, Gazprom dominates the market because to its monopolistic position. Pipelines utilised for export are legally Gazprom's exclusive responsibility in Russia. For many years, it has been the EU's primary source. According to Eurostat, the EU statistics agency, around 43% of the natural gas used in the EU originates from Russia, with the remaining 57% coming from Norway, the Middle East, the United States, and North Africa.<sup>391</sup>.

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<https://www.dw.com/en/why-the-eu-needs-russian-energy-giant-gazprom/a-60674774#:~:text=Gazprom%20is%20EU's%20biggest%20gas%20supplier&text=It%20has%20been%20the%20biggest,the%20US%2C%20and%20North%20Africa.>





**Source** Statista Daten: BP

On the other hand, the proportion of the EU gas market that is supplied by Russia varies substantially across individual member states. Germany, the EU's largest energy user, receives over 55% of its gas from Russian energy giants. This is consistent with the generalisation that the farther east a nation is located, the more likely it is to rely on Russia. The energy analyst Georg Zachmann from the Brussels-based Bruegel think tank told DW that Gazprom ‘uses its market dominance by influencing pricing via the quantity of gas it delivers to Europe.’

### **Competition between EU regulators and Gazprom**

Over the last decade, the European Union has worked to create a more united gas market by enacting legislation that require Gazprom to provide gas to the bloc's borders so that it may be traded across member states.

It is possible for Germany to import Russian gas and resell it to Poland and Ukraine. Gazprom has a vested interest in maintaining a high level of dependence among its customers, therefore it serves its interests to enter into direct contracts with people who will be using the gas.

Zachmann noted that there is conflict between European authorities seeking to establish a market with uniform pricing and Gazprom's efforts to impose various prices in different nations. Zachmann said that Gazprom was selling less gas to the market under short-term contracts, despite the company's insistence that it had met all of its long-term supply agreements. According to Zachmann, the importance of the short-term market has grown in recent years as a

result of efforts to reduce reliance on Gazprom. Recently, European Commission President Ursula von der Leyen said, ‘Gazprom is honouring their obligation, that’s true, but only at the lowest level of its pledges.’ In response to the skyrocketing demand and record pricing, she stated that other suppliers had boosted their shipments.

Since more gas wasn't being delivered despite strong demand, von der Leyen said Gazprom was acting strangely. She told the German newspaper Handelsblatt that suspicions were aroused since the firm was owned by the Russian government. Nearly every EU country has a local or regional energy supplier in which Gazprom has an interest. Its German affiliate, Astora, possesses the largest underground gas storage facility in western Europe. It is a buffer between supply and demand and is located near Rehden, Lower Saxony.

## CHAPTER 5

### ENERGY AS A FACTOR IN RUSSIA'S FOREIGN POLICY

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#### 5.1 INTRODUCTION

Russia's energy strategy aims to maintain economic development, improve quality of life, and fortify the country's international economic positions via the most efficient use of the country's natural energy resources and the energy sector's potential. The Strategy lays out the long-term vision for the Russian energy sector, its priorities and guidelines, and the state-level energy policy procedures that will be put in place to make sure those goals are met. Included are rules and standards for energy policy at the state level, as well as a focus on bolstering research and development and offering strategic development aid. The plan calls for a 56% decrease in energy intensity by 2030 (compared with 2005). In order to achieve this goal, a three-pronged strategy will be implemented: first, a comprehensive revision of the energy sector; second, an emphasis on efficiency gains via new technologies in the fuel and energy sectors; and third, a focus on energy efficiency throughout the whole economy.

Foreign policy is a set of pre-determined strategies for managing a country's ties with other countries that are created and implemented in a systematic manner. They're a set of rules that govern international political relations. Governments design foreign policies in order to cope effectively with international issues. Depending on the country's interests, these policies have varied purposes. Its goal is to govern how the country interacts with the rest of the world, ensuring that internal matters are appropriately protected from outsiders and that foreign objectives are met. Foreign policy is developed to promote a country's core objective, which might be an economic, social, or political agenda, as well as to gain supporters and improve worldwide awareness and involvement.

It also establishes boundaries between allies and foes by increasing or contracting ties with each. The foreign policy encompasses a wide range of topics, including immigration regulations, international trade, war and military conflicts, international organizations, and international law, to name a few<sup>392</sup>. In today's world, no country can avoid being involved in international affairs. This involvement must be systematic and based on a set of guidelines. The foreign policy of a country reflects its principles and goals. The importance of foreign policy is widely acknowledged, and it essentially determines a country's approach to other countries. A foreign

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<sup>392</sup> Ageev, A. iLoginov, E. (2014), Snijenje Mirovih Tsenna Neft: ViderjitliRossiya? Vektor Peremen

policy should safeguard the country's territorial integrity as well as the interests of its citizens both inside and outside the country. In general, nations want to maintain the status quo for this purpose. When a state follows a policy that attempts to change the status quo, it is branded as revisionist, and other members of the international community view it with distrust. For the sake of maintaining its status, it must safeguard the interests of its inhabitants both inside and beyond the country.

Second, foreign policy should aim to maintain ties with other members of the international community and to pursue a strategy of conflict or cooperation with them in order to further its own objectives. Furthermore, a country's foreign policy should aim to promote and advance the country's national interests. Each state's principal concerns are the protection, security, and well-being of its population. Frequently, the interests of several states clash and the states have their own interests in mind.

At the same time, foreign policy should attempt to promote the country's economic interests. Because a state's economic standing is so important, it tries to pursue a foreign policy that will contribute to its economic development and, as a result, enable it to play a more effective role in international politics. The majority of treaties and agreements negotiated by a state with other members of the international community are primarily intended to safeguard and advance these governments' economic interests. Finally, foreign policy tries to increase the state's power by expanding its sphere of influence or reducing the other state to a position of reliance.

The Foreign Policy Concept adopted in 2016 reflects Russia's perspective on the modern world, as well as its goals and objectives (EC 2007). It assesses the global situation and examines the processes that are taking place across the world and in its areas. The country's foreign strategy has been developed on this foundation, in full acknowledgement of the world's fundamentally changing geopolitical situation.

As a new polycentric world order emerges, the international relations system is in flux. We are witnessing the emergence of a fundamentally new global paradigm characterized by increased rivalry in all domains, including social and economic growth, as well as moral ideals. Evidently, Russia is well positioned to consolidate its role as one of the new multi-polar system's centers, and to actively influence the global situation in order to improve it, strengthen security and stability, and create favorable external conditions for the country's internal development to ensure long-term economic growth and, as a result, a higher quality of life for Russian citizens.

Russia's autonomous foreign policy, guided by current trends and long-standing traditions, is in great demand across the world, drawing a diverse spectrum of partners from Asia, Africa, Latin America, and Europe. Russia has long advocated for an inclusive and constructive strategy that aims to strengthen rather than weaken international connections.

Europe – which includes the European Union, Norway, Switzerland, the Balkans, and Turkey – imports around three-quarters of its natural gas by pipeline and the rest via liquefied natural gas (LNG). Despite the fact that LNG's percentage of overall imports will grow, pipeline gas will continue to outperform LNG in the long run. Pipeline delivery establishes a European regional gas market dominated by a few non-European providers, most notably Russia and Algeria, with Iran having the potential to become the third largest supplier.

As a result, the issue of gas dependency on firms and countries outside of Europe is more pressing than concerns about oil and hard coal, which are sold globally.

Because natural gas output in Europe will decline as consumption rises, the requirement for imports will increase. The extent of this rise will be determined by a variety of factors, including political actions. This is why future import dependence declarations are only conditionally valid. 'Reliance on gas imports is predicted to expand from 57 percent to 84 percent by 2030,' the European Commission (EC, 2007)<sup>393</sup> notes in its primary paper on European energy strategy. Two premises constrain this proposition: First, it relates to the EU-27 (the EU without Norway), however if Norway were classified as a European country, Greater Europe's import reliance would be reduced.

Second, this document assumes a 'business as usual' strategy, notwithstanding the EU's plans to boost energy efficiency and employ renewable energy sources. If this approach works, European import reliance will rise far less than 'conventional prognoses' predict. The EC (2007) concludes that rising import reliance poses 'political and economic dangers.' It considers some energy-exporting countries to be politically untrustworthy, but does not specify. The EC, which refers to the International Energy Agency (IEA), sees a widening energy supply deficit as the most serious economic concern. The EC seeks to justify an uniform European energy policy and an external energy strategy for enhanced energy security using this fairly weak danger analysis.

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<sup>393</sup> EC (Commission of the European Communities) (2007). Communication from the Commission to the European Council and the European Parliament: An energy policy for Europe. COM(2007)1 final, January 10. Brussels: EC. <eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007\_0001en01.pdf> (accessed May 26, 2008).

The European foreign energy strategy is stated in the EU action plan under the title ‘Solidarity among Member States and oil, gas, and power supply security’ (EC, 2007). In the event of a supply crisis, this statement argues for further diversity of energy imports as well as solidarity mechanisms. EU nations have been urged to make it easier for their businesses to access vital gas storage facilities across borders and to encourage the building of LNG terminals. In addition, a network of ‘energy experts’ has been established, and four European coordinators for interregional infrastructure projects, including one for the Nabucco pipeline, have been named. The EU-Russia and EU-Ukraine energy dialogues will be supplemented by dialogues between the EU and other nations.

To offset Gazprom's market power, the European Commission wants the EU to speak on behalf of European governments and enterprises with energy-exporting nations and corporations ‘with a common voice.’ When it comes to their international economic relations with Russia, major Member States such as Germany, France, and Italy see no actual benefit in giving additional authority to the EU (Finon and Locatelli, 2008).<sup>394</sup> Similarly, the EU's efforts to build a ‘southern gas corridor’ (the Nabucco project) expose the EU's external energy policy's limitations and flaws. They are quite likely to have prompted Russia's Gazprom to announce the building of a second offshore pipeline over the Black Sea, the ‘South Stream’ pipeline to Romania, in addition to extending its ‘Blue Stream’ gas pipeline to southern Europe.

Europe and Russia are both reacting to perceived threats in the same way, producing even greater hazards on both sides. They are caught in a ‘perception trap,’ resulting in a ‘diversification race’ between the EU and Russia (Monaghan, 2005).<sup>395</sup> Simultaneously, both parties have overlooked the reality that, despite governmental intentions, the choice of pipeline routes should be left to interested firms, who must balance profitability and risk. As a result, the European Commission's existing approach of defining priorities for new transportation infrastructure and forming them as quasi-governmental projects should be called into question.

### **Russia's foreign energy policy**

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<sup>394</sup> Finon, D. and C. Locatelli (2008). Russian and European gas interdependence: Could contractual trade channel geopolitics? *Energy Policy* 36: 423-442.

<sup>395</sup> Monaghan, A. (2005). Russian oil and EU energy security. Russian Series 05/65. November 15. Wilts, UK: Conflict Studies Research Centre. <[www.defac.ac.uk/colleges/csrfc/document-listings/russian](http://www.defac.ac.uk/colleges/csrfc/document-listings/russian)>. [[www.weltpolitik.net/attachment/0644a930ba1074b5cca2acd4809cbed5/373956960a10cfad6e3d072770efc2b6/05%2865%29.pdf](http://www.weltpolitik.net/attachment/0644a930ba1074b5cca2acd4809cbed5/373956960a10cfad6e3d072770efc2b6/05%2865%29.pdf)] (accessed May 26, 2008)]

Forecasts of future gas consumption are full of uncertainty, owing to weak assumptions about the evolution of gas prices and the forming of climate policy, among other things. If the existing pricing mechanism remains in place, gas prices will be heavily influenced by oil prices (Energy Charter Secretariat, 2007).<sup>396</sup> The stronger the substitution of coal and renewable energy for natural gas, the higher the price of natural gas will be. Natural gas will be viewed as a relatively CO<sub>2</sub>-poor substitute fuel for coal and crude oil, or it will be replaced by renewable energy, depending on climate policy initiatives.

The Energy Information Administration (EIA, 2007) and the International Energy Agency (IEA), as well as Andreas Seeliger (2006)<sup>397</sup> in his global gas world model, predict a virtually linear growth in gas consumption in OECD Europe. Nonetheless, studies on the European gas market conducted on behalf of the EU predict a lower growth rate of gas demand beyond 2010 in their fundamental scenarios (Mantzios and Capros, 2005<sup>398</sup>; Hafner, 2006).<sup>399</sup> The scenarios predict a standstill of gas consumption beyond 2015, assuming increased efficiency and the adoption of more renewable energy (Mantzios and Capros, 2005; Hafner, 2006; Booz Allen Hamilton, 2007<sup>400</sup>).

If demand grows at a linear rate, gas consumption will increase by 300 billion cubic metres (bcm; 1 bcm = 109 cubic metres) from 2004 to 2030. Forecasts, on the other hand, which require a shift in energy policy, predict a demand rise of just 50 bcm in the next decades. The difference between the two methodologies' forecasts is comparable to the volume of gas exported by either Russia or Africa, and so has significant implications for Europe's supply position. But what are

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<sup>396</sup> Energy Charter Secretariat (2007). Putting a price on energy: International pricing mechanisms for oil and gas. Brussels: EnergyCharter Secretariat. <[www.encharter.org/fileadmin/user\\_upload/document/Oil\\_and\\_Gas\\_Pricing\\_2007\\_ENG.pdf](http://www.encharter.org/fileadmin/user_upload/document/Oil_and_Gas_Pricing_2007_ENG.pdf)> (accessed May 26, 2008).

<sup>397</sup> Seeliger, A. (2006). Entwicklung des weltweiten Erdgasangebots bis 2030. Schriften des Energiewirtschaftlichen Instituts, vol. 61. Munich: Oldenbourg Industrieverlag.

<sup>398</sup> Mantzios, L. and P. Capros (2005). European energy and transport trends to 2030. Update 2005. <[www.ec.europa.eu/dgs/energy\\_transport/figures/trends\\_2030\\_update\\_2005/index\\_en.htm](http://www.ec.europa.eu/dgs/energy_transport/figures/trends_2030_update_2005/index_en.htm)>

<sup>399</sup> Hafner, M. (2006). Gas Corridors between EU and neighbouring countries: Long-term trends, priority infrastructures and policy options. Presentation at Final ENCOURAGED Meeting: \_EnergyCorridors between the EU and Neighbouring Countries, Brussels, December 12. Petten: Energy research Centre of the Netherlands (ECN). <[www.ecn.nl/en/ps/research-programme/energy-markets/encouraged/final-meeting](http://www.ecn.nl/en/ps/research-programme/energy-markets/encouraged/final-meeting) and <[www.ecn.nl/fileadmin/ecn/units/bs/ENCOURAGED/WP/ENCOURAGED-report-WP2.pdf](http://www.ecn.nl/fileadmin/ecn/units/bs/ENCOURAGED/WP/ENCOURAGED-report-WP2.pdf)> (accessed May 26, 2008).

<sup>400</sup> Booz Allen Hamilton (2007). International gas market: Growth forecast too optimistic. Press release, May 4. <[www.boozallen.com/capabilities/Industries/industries\\_article/35214301](http://www.boozallen.com/capabilities/Industries/industries_article/35214301)> (accessed May 26, 2008).

the justifications for the lower demand forecasts? The quantity of future natural gas consumption for power production, which is dependent on gas prices and emission certificates, is a huge uncertainty in the calculations. Some particular studies on the electrical industry predict a slight increase in gas consumption for electricity generation. For example, according to Anouk Honoré (2006)<sup>401</sup>, current investment plans call for a significant expansion in gas power capacity in Spain and Italy, but not in the rest of Europe. High gas costs, according to consulting company Booz Allen Hamilton (2007), will make new gas power plants and the operation of existing ones unprofitable, forcing coal facilities to take their place.

Similarly, according to EU energy assessments, gas demand for power production will only expand moderately in comparison to 2005 as a result of an aggressive energy-saving policy and a steady shift to renewable energies. According to all projections, Europe's domestic natural gas output will decline. If Norway is included, European gas output totaled approximately 300 bcm in 2005, accounting for roughly 60% of European gas consumption.

Due to the depletion of North Sea resources, natural gas output will drop to 200-250 bcm by 2030. LNG from Africa and the Middle East would be transferred to North America and Southeast Asia as a result of low European import demand. Investment in new LNG terminals would slow, and the future of the proposed pipelines between the Caspian area and Iran (Nabucco) might be called into question.

### **Alternatives to Russian Gas Supply**

In the normal demand scenario, Russian gas will not be sufficient to meet Europe's increasing gas demand. Aside from Russia, other nations will supply Europe with increasing amounts of natural gas. Gas imports from Africa, in particular, will increase, reaching levels comparable to those from Russia, partially in the form of LNG. Imports from the Caspian area, on the other hand, will only play a minor and indirect role in European gas supply, since they will be swapped for Russian gas on the domestic market.

Greater regional diversification of imports will result from the increased percentage of gas imports from Africa and the Middle East. Russia's proportion of global imports will fall from 60% to less than 40%.

### **Forecasts of Russian Gas Production and Gas Export Potential**

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<sup>401</sup> Honoré, A. (2006). Future natural gas demand in Europe: The importance of the power sector. Oxford: Oxford Institute for EnergyStudies. <[www.oxfordenergy.org/pdfs/NG10.pdf](http://www.oxfordenergy.org/pdfs/NG10.pdf)> (accessed May 26, 2008).



Russian gas output has preliminarily reached a milestone at the time of the Soviet Union's disintegration, it was almost 650 bcm. In the 1990s, it fell by roughly 10% owing to organisational changes. During the changeover period, as well as afterward, there were a number of issues. In former Soviet nations, there is a transitory decrease in gas consumption. But it hit 656 bcm in 2006, breaking the previous high of 1991. It is impossible to forecast the future of Russian gas output but must be based on output potential (resources that have been proven and estimated) as well as on the opening up this potential as quickly as possible .Due to the fact that the potential for production is dependent on assumptions about the environment. It comprises a likelihood of the volumes of individual gas deposits, as well as a probability of the volumes of individual gas deposits. There is a significant subjective component. As a result, it's unsurprising that the resources available are limited. Russia's gas potential is estimated differently in the long run significantly.

The vast majority of Russian gas production takes place in western Siberia and the European section of the country, whereas production in eastern Siberia and the Far East is only getting started. To sustain production in West Siberia, additional fields must be put into service, particularly on the Yamal Peninsula and in the Barents Sea. Yamal's development is critical for Europe since it contains Russia's greatest, still-untapped gas reserves. In 2011, Gazprom expects to begin industrial production on Yamal, starting with the massive Bovanenkovo field. By 2028, production on Yamal and the Kara Sea shelf is expected to reach 250 bcm (OAO, Gazprom, 2007b).<sup>402</sup>

Due to poor soil conditions, gas production and transportation on the Yamal Peninsula, with its many rivers and shallow lakes, is difficult. Additional challenges may arise as a result of global warming, since permafrost soil may thaw, requiring better foundations for gas facilities and pipes. For all of these reasons, it's doubtful that the large-scale development projects on Yamal and in the Barents Sea (Shtokman) will proceed as anticipated. If they are delayed by five years, for example, gas output in western Siberia, including Shtokman and Yamal, would remain stagnant or perhaps decline, making an increase in exports to Europe unlikely .

Production installations will cost US\$25 billion, while pipeline expenditures would cost US\$39 billion, bringing the total investment for the Yamal development to US\$70 billion when adjusted

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<sup>402</sup> OAO Gazprom (2007b). Firm Magazine 1-2: 6-9. (accessed May 30, 2008). Moscow: OAO Gazprom

for inflation (Pirani, 2004).<sup>403</sup> Up to US\$440 billion (2005 prices) will be invested in Russia's entire gas industry from now until 2030, including up to US\$195 billion for pipelines, US\$142 billion for production facilities, US\$38 billion for exploration, US\$58 billion for gas processing installations, and US\$7 billion for gas storage (Mazneva and Reznik, 2007).<sup>404</sup> This equates to a cost of US\$18 billion every year. This amount appears to be sustainable just as long as oil and gas prices remain high.

### **Imports and domestic natural gas consumption**

Turkmenistan, Kazakhstan, and Uzbekistan are the three Central Asian CIS nations that Russia now purchases natural gas from. After then, it's sent to Belarus, Ukraine, and Moldova. However, Russian gas imports are in risk because China and Europe will eventually become Central Asian gas competitors. As a result, some predictions predict a drop in Russian gas imports. Gazprom is committed to maintaining and expanding its gas imports, particularly from Turkmenistan. Turkmenistan is required to provide 50 billion cubic metres per year between 2007 and 2009, and up to 90 billion cubic metres per year thereafter, according to the 2003 '25-year-treaty.'

Turkmenistan, on the other hand, wants to export up to 30 billion cubic metres per year to China via a pipeline that will be operational in 2009. Turkmenistan's gas exports are also attractive to Iran, Pakistan, and India. To meet demand, Turkmenistan's gas output will have to be significantly increased. Russia's gas export potential is heavily reliant on the growth of its domestic gas consumption. Russia uses over two-thirds of its massive gas production, while barely exporting one-third. As declared in the 1980s, this is the result of a reorientation of energy use to gas at the cost of coal and oil.

This 'gas break' was intended to be a temporary remedy, but it has persisted since gas is cheaper on the internal market than coal and oil. Another factor contributing to the excessive gas consumption is the poor use of gas in old power plants and heating systems. Furthermore, associated gas, a by-product of crude oil extraction, is flared in the amount of 60 billion cubic metres per year, wasting gas and emitting CO<sub>2</sub> (IEA, 2006).<sup>405</sup> The growth in gas consumption

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<sup>403</sup> Pirani, S. (2004). The \$69 billion question: When and how to go ahead with Yamal. October. <[www.quintessential.org.uk/Simon\\_Pirani/gm-oct04.html](http://www.quintessential.org.uk/Simon_Pirani/gm-oct04.html)>

<sup>404</sup> Mazneva, E. and I. Reznik (2007). Gazoviki napisali sebe investprogramm. Vedomosti, April 16.

<sup>405</sup> International Energy Agency (IEA) (2006). Optimising Russian natural gas: Reform and climate policy. Paris: IEA. <[www.iea.org/textbase/nppdf/free/2006/russiagas2006.pdf](http://www.iea.org/textbase/nppdf/free/2006/russiagas2006.pdf)> (accessed May 26, 2008).

might be limited to 500 bcm in 2010 and 550-600 bcm in 2030 only if the administrated internal gas price rose substantially. This will not imply a price adjustment to the export price, but rather the adoption of the 'European' price formula, which connects gas prices to the cost of alternative fuels, most notably crude oil. However, there are concerns that rising gas prices on the Russian internal market would result in lower gas exports to the West (Spanjer, 2007).<sup>406</sup> However, these concerns appear to be unjustified, since higher internal prices would limit the volume of internal gas consumption, making export a more appealing choice for Gazprom.

### **The Russian gas export potential**

The US Energy Information Administration (EIA) and the International Energy Agency (IEA) assess Russia's gas export potential differently. While the EIA forecasts a very optimistic export potential based on its optimistic production prediction, the IEA expects a situation where Russian gas exports are close to standstill. Gas exports are expected to rise from over 200 billion cubic metres in 2005 to 300 billion cubic metres in 2030, according to the forecasts.

Gas exports are also expected to be reallocated. Currently, all Russian gas exported is directed to the CIS and Europe, but in the future, part of it will be routed to China and Southeast Asia. However, because to the huge pipeline network currently in place, the majority of Russian gas exports will always travel west, whilst pipelines to the east have yet to be developed.

### **The Legend of the 2010 Gas Deficit**

Both rising Russian domestic gas consumption and rising gas export commitments raise concerns about the Russian gas balance's long-term viability. Some analysts, like Vladimir Milov, the former Russian deputy energy minister, have predicted a 126 billion cubic metre gas shortfall in 2010. (Milov et al., 2006)<sup>407</sup> Alan Riley, a competition law lecturer at the London City Law School, published Milov's views in a paper of the Brussels-based Centre for European Policy Studies (Riley, 2006<sup>408</sup>; Riley and Umbach, 2007<sup>409</sup>). Nonetheless, Milov and his allies'

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<sup>406</sup> Spanjer, A. (2007). Russian Gas Price Reform and the EU-Russian Gas Relationship. Incentives, Consequences and European Security of Supply. Energy Policy 35 no. 5. 2889–2298. [http://www.law.leidenuniv.nl/general/img/AS2007%5B1%5D%2E01\\_tcm11-11387.pdf](http://www.law.leidenuniv.nl/general/img/AS2007%5B1%5D%2E01_tcm11-11387.pdf) (accessed May 26, 2008).

<sup>407</sup> Milov, V., L. Coburn, and I. Danchenko (2006). Russia's energy policy, 1992-2005. Eurasian Geography and Economics 47, no. 3: 285-313. [www.i.umich.edu/UMICH/ceseuc/Home/ACADEMICS/Research%20Projects/Energy%20Security%20in%20Europe%20and%20Eurasia/Russia's%20Energy%20Policy,%201992-2005.pdf](http://www.i.umich.edu/UMICH/ceseuc/Home/ACADEMICS/Research%20Projects/Energy%20Security%20in%20Europe%20and%20Eurasia/Russia's%20Energy%20Policy,%201992-2005.pdf) (accessed May 26, 2008).

<sup>408</sup> Riley, A. (2006). The coming of the Russian gas deficit: Consequences and solutions. CEPS Policy Brief 116. Brussels: Centre for European Policy Studies (CEPS). <[shop.ceps.be/BookDetail.php?item\\_id=1389](http://shop.ceps.be/BookDetail.php?item_id=1389)> (accessed May 26, 2008).

argument for an impending Russian gas shortage is unconvincing. Despite Milov's repeated references to the importance of independent gas producers and oil firms' gas output in Russia (Heinrich and Kuszmin, 2005)<sup>410</sup>, he overlooked their contribution –which will contribute 120-140 billion cubic metres in 2010– in his commonly quoted deficit calculation. Even though he fixed this error in a later publication, he computed a gas shortfall of 96 billion cubic metres inaccurately since he expects exceptionally low gas production while still having an extremely high export requirement (Milov, 2006a-b). But Milov isn't the only one who assessed a Russian gas shortfall incorrectly.

The French Ministry of Defense's Christophe-Alexandre Paillard (2007)<sup>411</sup> likewise anticipates a gas shortfall of 63-200 billion cubic metres in 2012, excluding Russian gas imports from Central Asia and/or the participation of independent gas producers. At the same time, the International Energy Agency IEA (2007) expressed worry about a lack of investment in Russian gas production facilities, while declining to issue its own Russian gas balance prediction. While Russian gas was formerly seen as a secure alternative to Middle Eastern energy imports, subsequent talks have given the perception that Russian dominance and influence endangers European energy security (Larsson, 2007<sup>412</sup>; Baran, 2007)<sup>413</sup>.

The supposed 'asymmetric reliance' of Europe on Russia in the gas sector is one of the key justifications. Natural gas is procured via pipelines, which limits the ability to switch providers. As a result, a disruption in delivery would have significant effects for users. However, there is a two-way dependency: Both the provider and the recipient are unable to alter their relationships. As a result, stopping delivery would be damaging to both parties. Because Europe accounts for more than 90% of Russian gas exports, but Russia accounts for only around 60% of European

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<sup>409</sup> Riley, A. and F. Umbach (2007). Out of gas: Looming gas deficits demand readjustment of European energy policy. *InternationalePolitik – Global Edition* (Spring): 83-90. <[en.dgap.org/midcomserveattachmentguid-68f263b0de9311dbbc30f38bb154c874c874/IPTIP+Russian+Gas+Shortage+1-07.pdf](http://en.dgap.org/midcomserveattachmentguid-68f263b0de9311dbbc30f38bb154c874c874/IPTIP+Russian+Gas+Shortage+1-07.pdf)> (accessed May 26, 2008).

<sup>410</sup> Heinrich, A. and J. Kuszmin (2005). Independent gas producers in Russia. KICES Working Papers 2/2005. Koszalin, Poland: KoszalinInstitute of Comparative European Studies (KICES). <[www.kices.org/downloads/KICES\\_WP\\_02.pdf](http://www.kices.org/downloads/KICES_WP_02.pdf)> (accessed May 26, 2008).

<sup>411</sup> Paillard, C.-A. (2007). Gazprom, the fastest way to energy suicide. *Russie.Nei.Visions* no. 17. Paris: Russia/NIS Center. <[www.ifri.org/files/Russie/ifri\\_Gazprom\\_paillard\\_anglais\\_mars2007.pdf](http://www.ifri.org/files/Russie/ifri_Gazprom_paillard_anglais_mars2007.pdf)> (accessed May 26, 2008).

<sup>412</sup> Larsson, R. L. (2007). Nord Stream, Sweden and Baltic Sea security. FOI Report 2251. Stockholm: Swedish Defence Research Agency (FOI). [www.foi.se/upload/english/reports/foir2251.pdf](http://www.foi.se/upload/english/reports/foir2251.pdf) (accessed May 26, 2008).

<sup>413</sup> Baran, Z. (2007). EU energy security: Time to end Russian leverage. *The Washington Quarterly* 30, no. 4 (Autumn): 131-144. <[www.twq.com/07autumn/docs/07autumn\\_baran.pdf](http://www.twq.com/07autumn/docs/07autumn_baran.pdf)> (accessed May 26, 2008).

gas imports, with a declining trend, the negative effects for Russia would be more severe than for Europe (Guillet, 2007)<sup>414</sup>. One rebuttal to this claim is that Gazprom has the ability to temporarily forego gas export revenues, but its clients do not. However, the complaint completely misunderstands the business objectives of the organisation. Gazprom's image as a dependable provider is crucial, and it will not risk it for short-term gains or a (unspecified) Russian energy policy. In reality, an arbitrary delivery halt would have disastrous ramifications for Gazprom and the Russian economy as a whole. Because natural gas competes with coal and renewable energies in Europe, a protracted supply shortage would force European power plants and industrial users to convert to those alternative energy sources. Gazprom would almost certainly lose all of its major markets indefinitely. The company's and Russian budget's repercussions would be disastrous. As a result, the 'asymmetric reliance' argument is disproved.

### **Russia could end Gazprom's monopoly over piped gas exports**

By March 1st, 2022, the Russian government plans to have proposals ready for Rosneft to export 10 bcm of pipeline gas to Europe. While Gazprom presently has a monopoly on gas exports through pipelines, two of those routes—through Ukraine and the Yamal pipeline—are underutilised, allowing Rosneft to potentially gain export rights via those routes. The idea of breaking up Gazprom's export monopoly through pipeline has been kicked about for a while, and in December 2013, other oil and gas firms were given permission to export LNG. From 199 bcm in 2019 to 175 bcm in 2020, including 135.7 bcm to Western Europe, Gazprom's natural gas shipments to Europe (including Turkey) fell by 12%. With 46 bcm in 2020 (-14% from 2019), Germany remained Gazprom's largest market in Western Europe, followed by Italy (21 bcm (-6% from 2019), Turkey (16 bcm), and Austria (13 bcm). With 39.1 bcm of gas exported, including 9.7 bcm to Poland, 8.6 bcm to Hungary and Slovakia, and 5 bcm to the Czech Republic, the company maintained its leadership position in Central Europe. Gazprom must be interested in expanding its spot market transactions in Europe.

This scenario requires the establishment of a European gas spot market or the use of short-term transactions. This, however, is not the case. On the European market, spot trading represents for less than 5% of total trade volume. After the creation of the UK market, which followed the

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<sup>414</sup> Guillet, J. (2007). Gazprom as a predictable partner: Another reading of the Russian-Ukrainian and Russian-Belarusian energy crises. *Russie.Nei.Visions* no. 18. Paris: Russia/NIS Center.<[www.ifri.org/files/Russie/ifri\\_Gazprom\\_guillet\\_anglais\\_mars2007.pdf](http://www.ifri.org/files/Russie/ifri_Gazprom_guillet_anglais_mars2007.pdf)> (accessed May 26, 2008).

formation of multiple competitive North Sea gas producers, there has been no extension of spot markets (Finon and Locatelli, 2008).<sup>415</sup> Furthermore, Gazprom is not interested in making short-term sales in Europe. Gazprom has always said that long-term contracts are preferred. In 2006, it renewed 20- to 30-year contracts with major European gas firms (E.ON, Wintershall, OMV, ENI, and others). Investors such as Gazprom are hesitant to engage in capital-intensive gas fields or LNG pipelines without long-term contract guarantees on quantity and pricing. As a result, spot markets on the continent are unlikely to be established enough to serve as reference markets for contractual pricing (Finon and Locatelli, 2008).

Some remarks made by the presidents of Iran and Russia about the prospect of forming a cartel of gas-producing countries comparable to OPEC concerned EU institutions and the general public. The thus-far negligible Gas Exporting Countries Forum's May 2007 resolution, which stated the goal to enhance cooperation among its members, heightened such anxieties even more. Only when its members collaborate to alter output in order to affect gas pricing does a gas cartel become effective. A reduction in output, in particular, tries to stabilise or raise gas prices. However, a strategy to reduce output would be more expensive to execute than in the oil business, because the gas industry has far larger fixed costs and hence less effective incentives than the oil industry. As a result, gas prices in Europe and most other areas of the globe are decided by long-term contracts, in which gas prices are tied to indexes that reflect, above all, oil prices. As a result, gas prices are not subject to the whims of gas producers, and an OPEC-like cartel would be ineffective.

Existing long-term contracts would be cancelled if a cartel formed. However, no major gas producer is currently exploring such a move. Furthermore, because the economic and political interests of Russia, Iran, and Qatar, the three major gas-producing countries, are so dissimilar, it is highly unlikely that a gas cartel would arise in the future (Finon, 2007).<sup>416</sup> Norway abides by all of the EU's competition rules. International gas and oil corporations with operations in Qatar and Africa would never submit their long-term gas strategy to a producer-state monopoly's decisions. Finally, if oil prices remain high for a long period and the gas export price is fixed to

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<sup>415</sup> Finon, D. and C. Locatelli (2008). Russian and European gas interdependence: Could contractual trade channel geopolitics? *Energy Policy* 36: 423-442

<sup>416</sup> Finon, D. (2007). Russia and the 'Gas-OPEC': Real or perceived threat? *Russie.Nei.Visions* no. 24. Paris: Russia/NIS Center. <[www.ifri.org/files/Russie/ifri\\_RNV\\_ENG\\_Finon\\_opepdugaz\\_sept20\\_07.pdf](http://www.ifri.org/files/Russie/ifri_RNV_ENG_Finon_opepdugaz_sept20_07.pdf)> (accessed May 26, 2008).

oil, tactics to limit short-term gas supply will not bring any further benefits to gas producers (Finon and Locatelli, 2008).

### **Gazprom's Diversification Strategy and European Pipeline Policy**

For exporting Russian natural gas outside of the CIS, two types of transport systems are now available: transit pipes and direct pipelines. LNG pipelines are also being built on Sakhalin and along the Barents Sea's coast. The oldest and largest pipeline branch (Brotherhood) runs via Ukraine, Slovakia, and the Czech Republic before arriving in Germany. By means of Moldova, Romania, and Bulgaria, offshoots reach Hungary as well as Turkey. On its journey to Germany, the so-called Jamal-Europe pipeline, which was finished in 2005, passes via Belarus and Poland. Because they are not completely separated from the gas pipelines and storage facilities needed to feed the transit nations, these 'transit pipelines' offer a 'transit problem.' As a result, gas transit is harmed when authorities in transit nations conduct arbitrary gas withdrawals in reaction to price disputes for domestic use (Götz, 2007).<sup>417</sup>

The Blue Stream offshore pipeline over the Black Sea to Turkey, the Nord Stream offshore pipeline across the Baltic Sea to Germany, the proposed South Stream offshore pipeline across the Black Sea to Bulgaria, and a short pipeline to Finland are all gas pipelines that avoid transit nations. Other direct routes include the Altai pipeline to China, which will run through Kazakhstan and Mongolia and cross the short Russian-Chinese border. A second pipeline connects eastern Siberia and China.

After obtaining the exclusive right to export Russian gas ('unified export channel') in 2006, Gazprom intends to diversify its export routes in two ways: on the one hand, by building 'direct' offshore pipelines, Gazprom is attempting to create alternatives to transport routes through transit countries; on the other hand, it intends to export more to the east as a substitute for supplying Europe. The capacity of the transit pipeline to Europe is predicted to remain stable at around 200 bcm, while direct pipeline capacity is expected to expand to the same level. The overall capacity of pipelines to Europe will therefore increase from 200 bcm to almost 500 bcm. Because future gas shipments to Europe would only barely exceed 200 billion cubic metres, this

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<sup>417</sup> Götz, R. (2007). Ukraine and Belarus: Their energy dependency on Russia and their roles as transit countries. In Daniel Hamilton and Gerhard Mangott (eds.), *The New Eastern Europe: Ukraine, Belarus, and Moldova*, 149-170. Washington D.C.: Center for Transatlantic Relations.

expansion will inevitably result in a significant overcapacity in westward pipelines. Gazprom's diversification plan appears to include creating overcapacity.

However, the plan is costly since it relies on relatively expensive offshore technology rather than the less expensive multiplication of existing onshore pipes. At the same time the growth of Gazprom's internal gas network ('gasification of the regions'), as well as the costly and complicated connection of new gas fields on the Yamal Peninsula to long-distance pipelines, are putting a strain on the company's financial and engineering resources. The most common argument is political: Gazprom is functioning as a Kremlin arm. It threatens and punishes CIS countries who want to break free from Russian dominance. However, this line of reasoning ignores the company's autonomy. Despite the fact that the Russian government has a majority stake in Gazprom, the firm is not obligated to preserve the country's interests. Gazprom is already supporting state goals (and the interests of some sectors, such as the fertiliser and steel industries) by supplying the domestic market at low costs. Aside from that, it appears that Gazprom utilises its connections with the state bureaucracy to promote its own economic interests (as well as the interests of its private shareholders, such as E.ON of Germany). In reality, several of Gazprom's most conspicuous initiatives, such as raising gas prices in Ukraine in early 2006 and Belarus a year later, have gone against Russia's objective of reintegrating post-Soviet nations. Such actions clearly benefit the company's bottom line.

Gazprom's diversification plan, on the other hand, is financially prudent. Offshore pipeline capital and operational expenses are, in fact, significantly greater than onshore pipeline costs (Hubert and Ikonnikova, 2003).<sup>418</sup> Alternatively, transit fees are either non-existent or low (they are only payable if the pipeline passes through a country's economic zone), which can balance the greater capital expenses in the long term. As a result, the 'direct' offshore pipelines are primarily a tool for Gazprom's corporate strategy.

Gazprom attempted to lock off the Turkish gas market to competitors from the Caspian area through the Blue Stream project (especially Turkmenistan). Plans for a massive pipeline from Iran to Europe (the Nabucco pipeline) were also thwarted at the same period. The present intentions by Gazprom to expand the Blue Stream pipeline and/or build the South Stream

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<sup>418</sup> Hubert, F. and S. Ikonnikova (2003). Investment options and bargaining power in the Eurasian supply chain for natural gas. Discussion paper. <[www.infraday.tu-berlin.de/fileadmin/documents/infraday/2003/papers/hubert\\_ikonnikova\\_2003-paper-eurasian\\_supply\\_chain\\_for\\_natural\\_gas.pdf](http://www.infraday.tu-berlin.de/fileadmin/documents/infraday/2003/papers/hubert_ikonnikova_2003-paper-eurasian_supply_chain_for_natural_gas.pdf)> (accessed May 26, 2008).



pipeline are a continuation of this strategy, which aims to dominate the market and drive out rivals.

The proposed Baltic pipeline (Nord Stream) and the Jamal-Europe pipeline are part of a new strategic strategy. Both provide alternatives to Ukraine's large transit pipeline infrastructure. They weaken Ukraine's negotiating position in transit fee discussions and help Gazprom buy Ukraine's gas transportation system. Belarus is under comparable strain from the Baltic pipeline. The presence of transportation options, according to theoretical work based on game theory, prevents transit nations from demanding excessive transit costs or 'recontracting' them. The availability of different transportation routes offers the provider a competitive advantage in negotiations and improves his profit share. According to a model estimate, the existence of the Yamal pipeline boosts Gazprom's profit share from gas sales to 55 percent. The Nord Stream pipeline will increase Gazprom's profit share to 80%, while the transit nations will be obliged to accept a 20% share (Hubert and Ikonnikova, 2003).

When additional suppliers (such as Turkmenistan and Iran) or transit nations (such as Azerbaijan and Georgia) are considered, the centre of negotiating power moves depending on the coalitions created. Russia's bargaining leverage will be undermined if Turkmenistan or Iran cooperates with the southern transit nations (excluding Russia) and the Trans-Caspian Pipeline (TCP) across the Caspian Sea is completed. <sup>8</sup> The TCP, on the other hand, will not be developed if Russia and Turkmenistan collaborate, and Turkmenistan will only supply Russia and China through the Nabucco pipeline, while Russia constructs the Nord Stream pipeline, expands the Blue Stream pipeline, and adds the South Stream pipeline. Currently, there is an overabundance of investment in very expensive strategic pipelines (direct pipelines), whereas there is an underabundance of investment in relatively inexpensive transit pipelines (Ikonnikova, 2006).<sup>419</sup>

Gas-producing countries want to make the most money possible. As a result, when a transit country's trustworthiness is put into doubt, gas producers change their preference to direct pipelines. Having excess capacity in those direct pipelines allows them to put pressure on transit nations. The second strategic goal is to alter the allocation of earnings from gas exports to Gazprom's benefit by modifying the bargaining position of gas producers with transit nations.

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<sup>419</sup> Ikonnikova, S. (2006). Games the parties of Eurasian gas supply network play: Analysis of strategic investment, hold-up and multinational bargaining. Discussion paper, first draft. <[www.necsi.org/events/iccs6/viewpaper.php?id=277](http://www.necsi.org/events/iccs6/viewpaper.php?id=277)> (accessed May 26, 2008)

The third strategic goal is to improve the security of the gas market by seeking new customers outside of Europe. These include the Chinese/ Southeast Asian market, which may be accessible via pipelines in addition to the global LNG market. Until recently, the system of long-term contracts and pegging gas prices to oil prices has supplied Russian natural gas on the European market with a high level of market security.

However, a number of things are making the European market appear more vulnerable:

African providers (pipeline gas and LNG) are becoming more competitive. Contrary to widespread fears that Europe is becoming more 'dependent' on Russian natural gas (which is only plausible in a purely numerical sense), Russia's share of European gas imports is expected to fall from two-thirds to less than half due to a disproportionate increase in European imports from Africa and the Middle East. As Europeans grow increasingly conscious of climate issues, the usage of comparatively 'clean' natural gas is being reconsidered, with plans to switch to biogas, which is produced from biomass. Predictions for Europe's future natural gas requirements are getting more conservative. Europeans are rethinking their plans to build power plants as a result of high natural gas costs (which are in turn driven by high oil prices); coal, which is cheaper than gas, and biomass are becoming more appealing fuel sources.

While the need for more natural gas in the 'mature' European market has grown dubious, demand in China and Southeast Asia is almost definite. As a result, Gazprom and the Russian government have agreed to build two long-distance pipelines to China.

Thus, independent of any political considerations (which cannot be ruled out but should not be overstated), Gazprom's pipeline strategy stems from the company's genuine strategic aims. Controlling the market, pushing out rivals, strengthening Gazprom's negotiating position with transit nations, and securing markets are among them.

Gazprom's initiatives have worried CIS nations and, in particular, several eastern EU Member States, such as the Baltic republics and Poland, prompting calls for counter-measures in the name of 'energy security.' The proposed proposals vary from a 'EU energy strategy' based on cooperation to a 'Energy NATO.' Because the Baltic pipeline weakens both current and potential transit countries' negotiating positions with Gazprom/Russia, the Baltic countries, Poland, and other Baltic Rim countries, such as Finland and Sweden, are attempting to postpone the project

or actively lobbying for its cancellation (Larsson, 2007).<sup>420</sup> Such measures, however, stand little chance of succeeding and only serve to exacerbate tensions between Russia and its western neighbours.

Instead, European counter-strategies should focus on improving Gazprom's confidence in the security of European transit routes and the European gas market. In this perspective, for Gazprom/Russia to embrace a 'energy security' strategy, it would have to address concerns like secure delivery, safe distribution, and consistent demand while ignoring other criteria like the economic viability/efficiency and sustainability/eco friendliness of the energy supply. The EU-Russian energy discussion should include this broadened term of 'energy security (Larsson, R. L. (2007)).'

### **Institutionalizing energy relations**

Europe is particularly interested in institutionalizing its energy interactions because it is concerned about its energy security. The 'Energy NATO' and the 'Energy OSCE' (Organization for Security and Co-operation in Europe) are two suggestions in this respect that are based on the concepts of collective security. Unlike the Polish proposal for a 'Energy NATO,' which would include only European energy consumer states and aim to provide collective assistance in the event of a supply crisis, the German Foreign Minister Frank-Walter Steinmeier's 'Energy OSCE' would include producer and transit states and serve as a forum for international energy dialogue (Geden et al., 2007).<sup>421</sup> Both concepts, however, have flaws. Whereas the 'Energy NATO' has limited support in the EU since it is clearly intended against Russia, the 'Energy OSCE' has little support because it essentially repeats the Energy Charter Treaty (ECT).

Following the gas crisis between Russia and Ukraine in 2006, the EU sought once more to persuade Russia to implement free-market laws in the energy sector, and therefore to ratify the ECT. A massively developed framework of energy relations standards exists thanks to the ECT and its Transit Protocol. This pact has been signed and ratified by nearly all Western and Eastern European countries. The ECT was also signed by Russia in 1994, but the Russian Duma has yet

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<sup>420</sup> Larsson, R. L. (2007). Nord Stream, Sweden and Baltic Sea security. FOI Report 2251. Stockholm: Swedish Defence Research Agency (FOI). [www.foi.se/upload/english/reports/foir2251.pdf](http://www.foi.se/upload/english/reports/foir2251.pdf) (accessed May 26, 2008).

<sup>421</sup> Geden, O., A. Goldthau, and T. Noetzel (2007). 'Energie-Nato' und 'Energie-KSZE' – Instrumente der Versorgungssicherheit? Die Debatte um Energieversorgung und kollektive Sicherheitssysteme. SWP Discussion Paper. Berlin: Stiftung Wissenschaft und Politik (SWP). <[www.swp-berlin.org/de/common/get\\_document.php?asset\\_id=3959](http://www.swp-berlin.org/de/common/get_document.php?asset_id=3959)> (accessed May 26, 2008).

to approve it. Russia has said that it will apply the ECT temporarily as long as it is compatible with Russian legislation and the Russian constitution. Its case is bolstered by the fact that other major energy producers, such as Norway and Australia, have yet to ratify the ECT, and the US has yet to sign it.

In the meanwhile, several of Russia's claims against the ECT have shown to be false. As a result, it is now clear that the ECT will not question current long-term gas contracts or seek higher domestic gas pricing in Russia. Nonetheless, Gazprom's top lobbyist, Valeri Yazev, claims that the ECT and its Transit Protocol allow Central Asian gas exporters to utilise Russia's gas transportation infrastructure, putting Russia's gas exports to the west in jeopardy. However, according to the Energy Charter Secretariat (Mernier 2006)<sup>422</sup>, the ECT will not compel Russia to open its pipelines to rival nations. The ECT will not let foreign firms unrestricted access to its energy resources. The ECT, on the other hand, simply safeguards current investments. Furthermore, because the Transit Protocol prevents the halting of transit flows, Russia will benefit from its provisions.

Russia correctly points out that the ECT has not included nuclear fuel trade until now, despite the fact that the Partnership and Co-operation Agreement (PCA) had previously addressed the matter in 1997, resulting in Russia's nuclear fuel trade restriction on the European market. Furthermore, Russia opposes the ECT's 'Regional Integration Clause,' which exempts energy transmission inside the EU from the Transit Protocol's rules.

President Putin has said unequivocally that Russia would not ratify the current version of the ECT, and there are no indications that his successor will do so. Putin did say that Russia would be willing to incorporate some of the ECT's concepts into the PCA, which is up for renewal, although it's unclear if this would provide meaningful benefits to international investors and trade partners. Instead, including the ECT's dispute resolution process within the PCA would be more beneficial (Energy Charter Secretariat, 2004).<sup>423</sup> In order to obtain Russian support for the ECT, the EU should reconsider its position on nuclear material trade and the Transit Protocol's 'Regional Integration Clause.' In any event, the prospects for a change in Russia's posture are

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<sup>422</sup> Mernier A. (2006). The Future Role of the Energy Charter Treaty. [http://www.encharter.org/index.php?id59&id\\_article=18&L=](http://www.encharter.org/index.php?id59&id_article=18&L=)

<sup>423</sup> Energy Charter Secretariat (2004). The Energy Charter Treaty and related documents: A legal frame for international energy cooperation. Brussels: Energy Charter Secretariat. <[www.encharter.org/fileadmin/user\\_upload/document/EN.pdf](http://www.encharter.org/fileadmin/user_upload/document/EN.pdf)> (accessed May 26, 2008).

dim. Russia has no aspirations to join a European shared political and economic area as a sovereign nation. As a result, it has little urgent interest in harmonising its rules with European law (Finon and Locatelli, 2008).

### **Enlarging the Energy Mix with Biomethan**

Clearly, increasing the usage of renewable energies or intensifying nuclear energy in the respective national energy mixes will reduce reliance on imported fossil fuels. Biomethan, which may be derived from biogas or biosynthetic gas, can be used to replace natural gas (Bio-SNG).

If biomethan is under the required pressure, it may be fed into the gas pipeline network. If manufacturing costs could be decreased, European biomethan might theoretically be used to replace imported natural gas in large amounts. If this happens, biomethan might provide up to 300 billion cubic metres to Europe's gas supply by 2030 (Thrän et al., 2007).<sup>424</sup> Furthermore, employing idle pipeline capacity, nations like Ukraine, Belarus, and Russia may possibly supply biomethan to Europe.

### **Improving Energy Efficiency**

Numerous methods relating to energy generation, transportation, transformation, and consumption may be taken to increase energy efficiency. In each case, the investment would pay for itself by lowering consumption and minimising environmental damage. It would be conceivable to build broad collaboration if participants in such initiatives included not just European consumer nations, but also energy producers like Russia and transit states like Ukraine, Belarus, and Moldova. The EU's energy efficiency action plan aims to attain this goal (EC, 2006).<sup>425</sup> In this regard, the EU might benefit from the expertise of national energy agencies that have worked for many years to increase energy efficiency in Eastern Europe and the CIS.

### **Supply Security and Energy Dialogs**

The unpredictability of future European gas demand, as well as the development of LNG trade, both represents challenges to Russian gas production and investment plans. Europeans, on the

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<sup>424</sup> Thrän, D., M. Seiffert, F. Müller-Langer, A. Plättner, and A. Vogel (2007). Möglichkeiten einer europäischen Biogaseinspeisungsstrategie. Teilbericht I. Leipzig: Institute for Energy and Environment. <[www.oeko.de/service/bio/dateien/ie2007biogas\\_osteuropa\\_teilbericht\\_1.pdf](http://www.oeko.de/service/bio/dateien/ie2007biogas_osteuropa_teilbericht_1.pdf)> (accessed May 26, 2008).

<sup>425</sup> EC (Commission of the European Communities) (2006a). Action plan for energy efficiency: Realising the potential. COM(2006)545final, October 19. Brussels: EC. <[ec.europa.eu/energy/action\\_plan\\_energy\\_efficiency/doc/com\\_2006\\_0545\\_en.pdf](http://ec.europa.eu/energy/action_plan_energy_efficiency/doc/com_2006_0545_en.pdf)> (accessed May 26, 2008).

other hand, are unclear if Russia's gas export capability will ever be sufficient to meet supply agreements. Neither worry is readily dispelled.

Future EU initiatives on energy conservation, efficiency, and greenhouse gas reduction will have a substantial impact on European import demand. The more Europeans employ renewable energies (including biomethan), nuclear energy, or zero-emission coal power stations, the less natural gas they will consume and need to buy from Russia. As a result, gas demand estimates might become a hot subject in the EU-Russia energy conversation.

The speed with which the Yamal gas reserves are developed will determine the future of Russian gas supply capability. While Europeans have little control over this process, they may demand more information from Gazprom regarding its investment intentions. This should also be discussed in the EU-Russia energy dialog. The EU's external energy strategy might be bolstered by this dialogue, which would be supported by EU discussions with transit nations. It should focus on sharing knowledge and initiating actual, long-term energy efficiency programmes. Around 40% of the EU's natural gas imports came from Russia in 2018 (Foy, 2018).<sup>426</sup> Gazprom, Russia's state-owned gas monopoly provided 200.8 billion cubic metres of gas to European countries in the same year, with 81 percent of that going to Western Europe (Gazprom, 2018).<sup>427</sup> Despite the fact that both parties are reliant on each other, the connection is far from beneficial. Apart from the apparent historical grudges, especially between the bloc's eastern member states and Russia, current geopolitical developments, such as the 2014 Crimean crisis, have worsened relations. Sanctions on Russia were imposed by the EU, the US, and a number of other countries, with a focus on the banking and energy sectors (Spiegel, 2014).<sup>428</sup> However, given the EU's reliance on Russian gas, they were restricted to the oil industry. This small element reveals a fascinating interaction between the two.

Because of pre-existing historical worries as well as a greater reliance on Russia, the Eastern member states feel particularly vulnerable. Prior to the launch of the Klaipeda LNG terminal in

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<sup>426</sup> Foy, H. (2018, January 3). *Russia's gas exports to europe rise to record high*. Financial Times. <https://www.ft.com/content/7b86f4be-f08e-11e7-b220-857e26d1aca4>

<sup>427</sup> (2018). *Gazprom export*. Газпром экспорт. <https://www.gazpromexport.ru/en/statistics/>

<sup>428</sup> Spiegel, P. (2014, July 25). *Brussels chiefs urge eu states to approve tough curbs on russia*. Financial Times. <https://www.ft.com/content/0ae68c40-142a-11e4-9acb-00144feabdc0>

2015, the Baltic States had to import all of their natural gas from Russia (Chyong & Teherneva, 2015).<sup>429</sup>

In light of this, the EU-Russia relationship resembles an unhappy union. Russia requires the European Union at this moment, and the European Union requires Russia. Europe's energy requirements are met. Russia's hydrocarbon exports bring in a significant amount of money for the government, accounting for more than half of the consolidated budget (Bogoviz, Lobova, Ragulina, & Alekseev, 2018, p.1).<sup>430</sup>

The unsettling factor is that they are and will continue to be natural geopolitical adversaries. The union's expansion to include certain eastern European countries has exacerbated the conflict. These countries are seen by Russia as natural spheres of influence. The EU's wealth, influence, and security are all threatened by its reliance on Russian gas. This is mostly accurate, given Russia's politicized energy policy and the difficult state of relations between the two countries. Insulting Russia's Western partner is not in Russia's best interests. The European Union should strive to diversify its supply channels in the long run. However, for three reasons, it will stay tied to Russia in the medium term: geographical closeness, existing infrastructure, and Russia's energy quantities.

Following the 2014 Crimean crisis, the European Union has been more concerned about Russia's trustworthiness as an energy supplier. It brought up memories of the gas disputes between Russia and Ukraine in the 2000s and early 2010s. Ukraine, like most post-Soviet countries, relies on Russia for the majority of its energy needs. This gives the latter considerable political clout at the negotiating table. Russia insisted that Ukraine repay its energy bills in 2014, and when it refused to do so, Russia shut off Ukraine's gas supply (Larrabee et al., 2015, p. 13).<sup>431</sup> Despite the fact that the supply restrictions were restricted to Ukraine, they caused difficulties in numerous other European nations. This is referred to as 'structural scarcity' by Amineh and Crijns-Graus, which is supply induced scarcity caused by the purposeful action of a big power or non-state entity,

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<sup>429</sup> Chyong, C., & Teherneva, V. (2015, March). *Europes vulnerability on russian gas*. European Council on Foreign Relations. [https://www.ecfr.eu/article/commentary\\_europes\\_vulnerability\\_on\\_russian\\_gas](https://www.ecfr.eu/article/commentary_europes_vulnerability_on_russian_gas)

<sup>430</sup> Bogoviz, A., Lobova, S., Ragulina, Y., & Alekseev, A. (2018). Russia's energy security doctrine: Addressing emerging challenges and opportunities. *International Journal of Energy Economics and Policy*, 8(5), 1-6.

<sup>431</sup> Larrabee, F. S., Wilson, P. A., & John Gordon, I. (2015). The geopolitical roots and dynamics of the ukrainian crisis. In *The ukrainian crisis and european security: Implications for the united states and us army* (pp. 1-50). RAND Corporation.

such as a major oil firm (Amineh & Yang, 2018, p. 149).<sup>432</sup> This is the source of concern inside the European Union. Natural gas supply disruptions can have a significant impact on commercial and residential activities.

The EU responded by enacting extensive laws on the internal energy market for electricity and natural gas, as well as a rule on gas supply security (European Commission, 2017).<sup>433</sup> Given the importance of energy to contemporary businesses and homes, the EU has taken significant steps to ensure that supply routes are not disrupted. An energy union is being proposed, which would ‘provide EU customers — homes and enterprises – with secure, sustainable, competitive, and inexpensive energy’ (European Commission, n.d).

Despite the fact that environmental concerns are at the heart of the EU's new energy policy, the most pressing aim is to minimize reliance on a single foreign supplier. Given the demands of contemporary economies, disruptions in Russia's energy supply represent a severe danger to Europe. However while this hypothetical scenario is feasible, the likelihood of it occurring is remote. This is not to say that the European Union should be complacent, for the entire basis of IR, at least from a realist standpoint, is that states can never be assured of the intentions of other nations (Mearsheimer, 2001, p. 100).<sup>434</sup> As a result, the EU should make every effort to reduce its reliance on Russian energy.

With little over 5% of GDP, Gazprom, a state-owned Russian energy giant, is by far the largest supplier of oil and gas to Europe (Soldatkin, 2019).<sup>435</sup> In 2014, Europe received 71% of Russian gas (European Commission, 2014).<sup>436</sup> Given Russia's fundamental reliance on energy earnings and the European market, meddling with supply route interruptions would be counterproductive. Its capacity to continue energy exports is crucial to its socioeconomic stability. As a result, refusing to sell at all, particularly to Europe, would be both economically and politically suicide.

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<sup>432</sup> Amineh, M. P., & Yang, G. (2018). China's geopolitical economy of energy security. *African and Asian Studies*, 17(1-2), 9-39.

<sup>433</sup> European Commission. (n.d.). *Shedding light on energy on the eu: What is the energy union about?* <https://ec.europa.eu/eurostat/cache/infographs/energy/bloc-1.html>

<sup>434</sup> Mearsheimer, J. J. (2001). *The tragedy of great power politics*. W.W. Norton & Company.

<sup>435</sup> Soldatkin, V. (2019, April 29). *Record russian gas sales to europe help gazprom profits double*. Reuters. <https://www.reuters.com/article/us-gazprom-results/record-russian-gas-sales-to-europe-help-gazprom-profits-double-idUSKCN1S51DU>

<sup>436</sup> European Commission. (2014, May 28). *European energy security strategy*. <https://www.eesc.europa.eu/resources/docs/european-energy-security-strategy.pdf>



The energy connection between Russia and Europe is fundamentally different from the relationship between Russia and Ukraine. Apart from the evident power dynamics between the EU and Ukraine, Russia is financially more dependent on the latter. In terms of geopolitics and economics, this puts the EU in a better position than Ukraine.

In essence, Russia poses a threat to the United States. That is without a doubt the case. However, these fears are exaggerated. Russia and the EU do not have a one-sided energy relationship. If it falls apart, both parties stand to lose something. A closer look at the Russian-Ukrainian relationship reveals a far more balanced power structure. All of the chips are in Russia's favour. It can afford to put supplies on hold for a while. Ukraine is a minor piece in Russia's European gas puzzle, but it accounts for 60% of Ukraine's natural gas demand (Larrabee et al., 2015, p. 12).<sup>437</sup> The relationship with the EU, on the other hand, is far more balanced. The European Union is Russia's largest consumer, a position that emphasises the importance of the European Union to the Russian economy. However, there is at least one area where the EU and Russia's power balance is less clear: physical power. The EU lacks the cohesiveness needed to use military and economic force to ensure energy supply security (Goldthau & Sitter, 2015, p. 951).<sup>438</sup> The EU's lack of hard power instruments (i.e., an army) puts it at a disadvantage in comparison to Russia. A 'expectations-capability gap' exists as a result of a lack of instruments as well as political will or consensus (Goldthau & Sitter, 2015, p. 944). When the Crimean crisis occurred in 2014, the EU agreed on sanctions, but it took time to reach an agreement.

Despite this, Goldthau and Sitter argue that the EU's soft power with a harsh edge continues to be its strength. It has the potential to constrain the ways in which the Russian government may employ its state-owned enterprises. Gazprom clause empowers 'national authorities to consider security of supply issues when certifying third-country firms' purchase, ownership, and operation of transmission networks, and ultimately to deny certification' to them (Goldthau & Sitter, 2015, p. 955). At the same time, it is unable to change Russia's geopolitical actions (Goldthau & Sitter, 2015, p. 960). Simply defined, the European single market's strength stems from its economic

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<sup>437</sup> Larrabee, F. S., Wilson, P. A., & John Gordon, I. (2015). The geopolitical roots and dynamics of the ukrainian crisis. In *The ukrainian crisis and european security: Implications for the united states and us army* (pp. 1-50). RAND Corporation.

<sup>438</sup> Goldthau, A., & Sitter, N. (2015). Soft power with a hard edge: Eu policy tools and energy security. *Review of International Political Economy*, 22(5), 941-965.

appeal, both to those seeking to enter it and to those seeking to trade with it (Goldthau & Sitter, 2015, p. 947). Despite the lack of typical physical power, this is the case.

As a result, rather than Russia's pipeline diplomacy, the EU's main worry should be its reliance on a single big supplier. In other words, given the significance of the EU market to Russia, the latter is unlikely to meddle with the supply side. Even still, reliance on Russia for the majority of its energy requirements exposes it to frequent infrastructure failures, which might immobilise families and halt economic activity. This reliance should prompt a look for alternatives. It can restrict Russia's influence in its energy markets and the severity of future infrastructure breakdowns by diversifying its imports.

The European Union, for example, may source natural gas from the Middle East. It has more than 43% of the world's proven natural gas reserves (Houshisadat, 2015, p. 17).<sup>439</sup> The Middle East, on the other hand, has political and geographical issues. Politically, the Arab states are particularly vulnerable to turmoil, whether that unrest is caused by social dissatisfaction or by foreign power intervention. As a result, supply security is jeopardised. In terms of geography, the distance between the EU and the Middle East means that the former will incur higher costs. Russia is still the cheapest alternative in Europe. Nonetheless, the EU should turn to the Middle East to diversify its supply, reducing its reliance on Russia. Around 62 percent of natural gas resources are yet untapped, implying that Europe might become a major LNG destination in the future (Houshisadat, 2015, p. 18). These reserves, however, have yet to be mined. The Eastern Mediterranean provides another option for the European Union. Off the coasts of Egypt, Israel, Cyprus, and Lebanon, gas deposits have been discovered. Domestic natural gas consumption forecasts for the years 2017-2042 suggest that huge natural gas reserves will be made available for export, potentially helping the EU diversify its natural gas supply (Ruble, 2017, p. 351).<sup>440</sup> LNG from the United States should be examined. However, it comes with prices and politics, much like the preceding examples.

The energy produced in the United States is insufficient to cover all of Europe's energy requirements. It makes no difference whether or not it is logistically feasible. The EU would be similarly vulnerable if its reliance was transferred to the US. Though all of the instances above

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<sup>439</sup> Houshisadat, M. (2015). Persian gulf gas and lng in the eu's goals for security of gas supply by 2030. *Polish Quarterly of International Affairs*, 24(1), 7-27.

<sup>440</sup> Ruble, I. (2017). European union energy supply security: The benefits of natural gas imports from the eastern mediterranean. *Energy Policy*, 105, 341-353.

demonstrate the availability of other sources, they also highlight that they are not without political dangers and cost increases. As a result, for the time being, the European Union will be dependent on Russia.

Russia can assure demand from the east, namely China. This aim is reflected in the recent development of the Power of Siberia pipeline. It is the world's first pipeline to transport Russian gas straight to China, with a capacity of 38 billion cubic metres (Gazprom, n.d.).

China and Russia have similar energy requirements. China requires energy to fuel its expanding economy. Russia is in desperate need of a new, dependable consumer. Its structural reliance on energy earnings, along with the EU's intention to lessen its gas reliance, forced a policy shift. Nonetheless, the Chinese market will not be a full-fledged substitute. Russian energy security would be jeopardized if it shifted its reliance to China. Indeed, relations have improved. It is, nevertheless, fundamentally a pragmatic partnership. China is likewise interested in limiting the penetration of Russian energy in its markets.

Despite this shift, Russia is moving through with two additional European natural gas pipeline projects: Nord Stream 2 and Turk Stream. Given this, Russia's reorientation toward China is only partial. Importers and exporters have differing ideas about what it means to be 'energy security.' Energy importers, for example, prioritise supply security, whereas energy exporters prioritise demand security as well as the further growth of their hydrocarbon resources. Diversification, on the other hand, is a common denominator. The EU desires and should seek gas from a variety of sources. Russia's petroeconomy follows global trends and, as a result, has turned to China to supply rising demand. Simultaneously, it seeks to maintain a solid hold on its European market share.

Finally, Russia's energy relationship with the European Union might be described as an acrimonious union. Despite their geopolitical rivalry, they are mutually reliant. Both parties' departure costs are very large. The EU's energy needs are met by Russia. Russia's revenue is reliant on the EU. Its economy is based on energy exports, hence its societal well-being is dependent on its capacity to ensure hydrocarbon demand. The European market provides such safety net.

Despite the lack of conventional physical power, it has been suggested that the European Market's economic weight counteracts a Russian supply threat. The parallel to Ukraine is frequently used to demonstrate Russia's capabilities and readiness to exert structural pressure

(Johnson, 2015<sup>441</sup>; Olearchyk & Belton, 2007<sup>442</sup>; Wiener-Bronner, 2014).<sup>443</sup> The EU-Russia energy nexus, on the other hand, is fundamentally different from the Russo-Ukrainian connection, as demonstrated here. Simply said, the former has more economic clout and geopolitical clout. At the same time, the danger is undeniable. However, the chances of that happening are little to none.

To prevent such a threat, the European Union should make diversifying its supply channels and developing alternative energy sources a top priority. The Middle East has a lot of gas reserves that aren't being used. Although finds have been made in the eastern Mediterranean, infrastructure has yet to be built.

Russia's turn to China should not only focus minds in Brussels, but also speed up the diversification and renewable energy development process. Russia's reorientation, on the other hand, is just partial. The European market still accounts for the majority of its revenues, and it will continue to do so for the foreseeable future. Despite its desire to obtain significant proportions of China's energy mix, political forces are likely to assure the opposite. A substantial Russian involvement in China's energy markets is unwelcome. Russia's energy connection with Europe is likely to have taught it a thing or two.

## **5.2 RUSSIAN ENERGY POLICY AND ITS CHALLENGE TO WESTERN POLICY MAKERS**

The disruption of natural gas and oil supplies to Central Europe by Gazprom in 2006/2007 raised awareness in Europe and the United States of Moscow's success in using its energy resources as political leverage in Europe and to undermine the new democracies that have recently emerged after decades of Kremlin control. The recent high hikes in natural gas prices to Ukraine, Georgia, Belarus, Bulgaria, Armenia, and Moldova, as well as Russia's influence over important European gas pipeline networks, have reignited worries about Russia's foreign economic policy and the security consequences for Europe. Russia's energy policy further raises the stakes in terms of

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<sup>441</sup> Johnson, K. (2015, February 24). *Putin's ukrainian power play*. Foreign Policy. <https://foreignpolicy.com/2015/02/24/putins-ukrainian-power-play-natural-gas-gazprom-naftogaz/>

<sup>442</sup> Olearchyk, R., & Belton, C. (2007, October 2). *Gazprom threatens ukraine with gas cuts*. Financial Times. <https://www.ft.com/content/96dd0330-70eb-11dc-98fc-0000779fd2ac>

<sup>443</sup> Wiener-Bronner, D. (2014, June 16). *Russia cuts off gas supplies to ukraine*. The Atlantic. <https://www.theatlantic.com/international/archive/2014/06/russia-cuts-off-gas-to-ukraine/372818/>

America's rising energy import reliance, and should cause the US to rethink its assumptions that Russian gas and oil supplies will contribute to America's energy security.

Unfortunately, the United States and Western Europe have largely overlooked this issue until lately, in part because Russia's coercive petro-politics have been restricted to East Central Europe and Central Asia. Russian energy control is an old concern for several new EU member states, such as Poland, Latvia, and Lithuania, as well as for emerging democracies, such as Ukraine, Georgia, and Moldova. Attempts by Central Europeans to highlight this matter in Western capitals have been brushed aside until lately. The EU Commission's hasty approval of the Russian-German undersea gas pipeline project in 2005 was a major blunder that exposed Europe's failure to adopt a united foreign and security policy. Long before the Ukraine problems in early 2006, the Central Europeans' worries should have rung warning bells in Brussels and European cities.

The EU's support for the Nord Stream pipeline between Russia and Germany, as well as its willingness to collaborate with EU member states to build the South Stream pipeline, both of which jeopardise the EU's energy diversification policy, will only increase Russian influence over Europe's key economies. The sluggish response from the West has given Russian state-owned enterprises time to negotiate new bilateral agreements with Western governments eager to assist their corporations in gaining a foothold in Russian energy production. The peculiar reality that Russia plays a major position in the EU's own Energy Treaty Commission may make a reexamination of EU strategy more difficult (ETC). Despite Moscow's refusal to execute the Energy Charter, notably the draught Transit Protocol that is part of the Treaty, this is the situation. The execution of this agreement in Russia would have increased competition in the energy transportation industry. Russia was required to bring the deal into force at the time of signing under Article 45 of the Energy Charter, but it has successfully persuaded most Europeans that it is free to disregard the treaty unless it is ratified by the Duma. Despite EU efforts to execute the Charter, Gazprom's Deputy CEO Alexander Medvedev has described it as a 'stillborn document.' Because of rising global oil costs and political instability in Middle Eastern, African, and South American producing countries, Gazprom feels its bargaining position now surpasses that of the West. In any event, the long-term political and security importance of the Putin government's strong energy policy necessitates a far deeper examination by Western countries, including the US.

In certain areas in the United States, there is an erroneous assumption that Russian natural gas supplies from the Russian Far East or off-shore in the Barents Sea would replace the gaps left by declining US and Canadian production and political unrest in Latin America, Nigeria, and the Middle East. The fact is that Russian oil and gas exports are not rising at the same rate as they were three to four years ago, and corporations like Gazprom will struggle to meet their existing gas delivery obligations with Europe. Investment in Russian exploration and development has decreased since the deliberate destruction of Yukos began in 2003, as well as the current Kremlin Administration's intensified attempt to centralise control of nearly all oil and gas resources.<sup>444</sup>

### **Intelligence Officers Making Energy Policy**

Former intelligence officers (siloviki) in the Putin administration and Russian energy businesses have a significant influence in shaping national energy policy. The CEO of Rosneft is a former KGB ally of President Putin who assisted in the breakup of Yukos and the capture of Yukos' most valuable assets by his business.

Most of the country's main energy businesses include former KGB and GRU personnel on their boards. In an attempt to give behind-the-scenes help to Lukoil's discussions with the Lithuanian government and America's Williams Company, Moscow sent a former KGB/FSB officer as ambassador to Lithuania in 1999. The ambassador was the FSB's official contact officer with Lukoil before taking the role in Vilnius. Several former intelligence operatives hold progressive viewpoints. The bulk of this group, on the other hand, is opposed to the state weakening as a result of the rise of a transparent, independent private sector, and finds it difficult to embrace the notion of a win-win energy contract with a Western corporation. Most former Russian intelligence officers believe that giving a Western energy company significant control will jeopardise Russia's national security interests. The employment of Matthias Warnig, a former East German Stasi official who is now a Dresdner Bank executive, to put together the funding and administration of the Nord Stream pipeline system has reinforced to suspicions that the project is more strategically than financially driven, possibly unjustly. Mr. Warnig, who was previously suggested by Gazprom to join its board, is supervising the Nord Stream gas pipeline project directly under former Chancellor Schroeder.

### **Ceding Too Much Control to Gazprom**

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<sup>444</sup> Keith C. Smith (2008), Russian energy policy and its challenge to western policy makers. Center for Strategic and International studies., Washington DC.

Gazprom has secured secretive agreements with Austria, Hungary, Slovakia, and Bulgaria, ensuring Russia's exclusive control of Europe's gas and oil pipelines. NATO should examine these agreements more seriously for their security implications for Europe. NATO countries have always utilised the Alliance to look at issues that aren't just about military defence.

Part of the Kremlin's current strategy is to rapidly raise prices to weak neighbouring states in the hopes that they will accumulate large debts, be unable to pay for the gas, and eventually be forced to hand over control of their domestic gas pipelines to Gazprom or Transneft in order to pay off the arrearages. This is what occurred in Belarus, Armenia, and Moldova, and it is happening (again) in Ukraine.

### **Ukraine Needs to Act to Strengthen its Own Hand**

Ukraine's leaders, on the other hand, bear a large share of the guilt for the country's current state. Kiev has enabled well-connected oligarchs to maintain control over Russian gas supply as well as many of the country's domestic oil and gas resources. The lack of movement by the Ukrainian government in building fair and reasonable conditions for both domestic and foreign energy investors will be much more harmful in the long term. A few strong individuals, most of whom have close links to Russia, have once again effectively kept out Western competition. Rapid changes that allow open auctions for energy exploration rights and a friendly environment for legal international energy investors might significantly lessen Ukraine's reliance on Russia. Seismic studies show that the nation has significant gas reserves on onshore, in the Black Sea, and perhaps in the Sea of Azov. In the whole energy industry, the country continues to lack openness. Russian corporations already hold two-thirds of Ukraine's refineries, which process three-quarters of the country's oil. Russian-owned enterprises create nearly all of the refined products that are exported. Nuclear power reactors in Ukraine rely on Russian nuclear fuel rods. Victor Chernomyrdin, the former Russian Prime Minister and CEO of Gazprom, has served as Moscow's ambassador to Kiev for many years. He has successfully supported Russian near-monopoly and thwarted Western corporations' attempts to develop a larger presence in Ukraine. The EU should take the lead in building a more secure network of power interconnectors linking Western, Central, and Eastern European nations.

The EU might assist foreign banks such as the EBRD and EIB in acquiring equity stakes in Ukraine's, Bulgaria's, Moldova's, and Poland's pipeline networks. This would aid in the modernization of these nations' pipelines. It would also establish a 'neutral' party that may

prevent non-transparent Russian corporations from controlling pipelines and ensure gas and oil transportation competition. International funding for the projected NABUCCO natural gas pipeline from Azerbaijan, as well as the construction of the Odessa-Brody oil pipeline system, would provide Central Europe with much-needed energy security.

The US should reconsider its long-term energy partnership with Russia. American investment in Russia's energy resources prohibit from demanding more transparent energy policy and a level playing field for global companies. A weakening of Russia's monopoly pipeline system and a demand from Moscow for direct access to Western markets for Central Asian energy exporters can be expected. Unfortunately, they are distrustful of America's goals in Central Europe and Central Asia, believing that the US and NATO are attempting to 'neutral' Russia with unfriendly governments as part of a broad plan by the West to keep Russia economically weak and isolated in international affairs.

By disregarding the monopolistic and noncompetitive nature of this energy connection, the world does Russia a favor. Meanwhile, neither the EU nor the US should allow Moscow to endanger Europe's security, particularly the young democracies of Central Europe, by failing to confront the Kremlin's new imperial attitude. 'Yes, Russia needs something from you,' Yuri Schmidt, a well-known Russian human rights lawyer, told audiences in Brussels.<sup>445</sup> The collapse of the Berlin Wall in 1989 and the disintegration of the Soviet Union in 1991 indicated significant changes in the institutional make-up of economic and political ties on the European/Asian continent, laying the groundwork for a dramatic shift in the international system's power balance. These reforms had an impact on the energy trade and diplomacy throughout the area. East European nations that had been part of the Soviet Union's sphere were included to the EU and NATO. Following the fall of the Soviet Union, the European Union invited Central and East European countries to apply for membership at the European Council Summit in Copenhagen in June 1993. However, due to its own transition period challenges, Russia tended to underestimate the impact of the EU's impending eastward enlargement during the 1990s. With the exception of Switzerland and Norway, the entire European continent now exists as a single entity under the Russian Federation.

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<sup>445</sup> Keith C. Smith (2008), Russian energy policy and its challenge to western policy makers. Center for Strategic and International studies., Washington DC.



### 5.3 THE PARTNERSHIP AND COOPERATION AGREEMENT (PCA) BETWEEN RUSSIA AND EU

The PCA, agreed by President Boris Yeltsin and European leaders in Corfu in 1994, has governed the EU-Russia relationship since December 1997, and is set to expire in 2007 or be automatically renewed yearly under the treaty's terms.<sup>446</sup> The goal of signing this agreement was to utilise economic tools to replace Russia's state-planned economy with a market one and help the country's post-communist transformation.<sup>447</sup> The PCA establishes a legal framework for continued political interaction between Russia and the EU on a range of issues, including energy.<sup>448</sup>

The agreement's goals were to establish Russia's integration and to create the necessary conditions for the future establishment of a free trade zone between the European Community and Russia, including freedom in the formation of companies, foreign policy, cross-border trade in services, and capital movements.<sup>449</sup> The renegotiation of the EU-Russia PCA, which was the most important for re-examining institutional norms on energy sector investment and trade, ended twice in Russian reluctance to address Gazprom's export monopoly and third-party access to networks during the EU-Russia Summit in Sochi in May 2006. Russia demonstrated that it saw itself as a sovereign state with no ambitions to join a European common political and economic space or to bring its rules into compliance with European legislation.<sup>450</sup> Putin stated that West European corporations would only have greater access to Russian oil and gas reserves if Russian companies were permitted to buy gas distribution companies and other downstream assets in the major EU nations.<sup>451</sup>

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<sup>446</sup> Cynthia A. ROBERTS: (2007) 'Russia and the European Union: the Sources and the Limits of Special Relationships', Strategic Studies Institute (STI) February 2007, p.22, Available on site <http://www.StrategicStudiesInstitute.army.mil/> (Accessed 21 June 2008).

<sup>447</sup> TIMMINS, p.360-361, Danam S. HAGHIGHI: (2007) Energy Security, The External Legal Relations of the European Union with Major Oil and Gas Supplying Countries, Hart Pub., p.343.

<sup>448</sup> Amelia HADFIELD: (2008) 'European-Russia Energy Relations: Aggregation and Aggravation', Journal of Contemporary European Studies, 16:2, p.233.

<sup>449</sup> Sergey SELIVERSTOV: (2009) 'Energy Security of Russia and the EU: Current Legal Problems', IFRI, April, p.4

<sup>450</sup> Dominique FINON and Catherine LOCATELLI: (2007) 'Russian and European Gas Interdependence, Can Market Forces Balance Out Geopolitics?', LEPII-EPE, No.41, Universite de Grenoble, January, p.24.

<sup>451</sup> Katinka BARYSCH: (2006) 'The EU and Russia: From Principle to Pragmatism?', Centre for European Reform, Policy Brief, 10 November, p.4 Available on site [http://www.cer.org.uk/pdf/EU\\_russia\\_barysch\\_final\\_10nov06.pdf](http://www.cer.org.uk/pdf/EU_russia_barysch_final_10nov06.pdf) (Accessed on 22 September 2009).

## **The Common Strategy Paper of EU**

The German government pushed through an initiative for a single approach on Russia, which was agreed with at the Vienna Council conference in December 1998, in reaction to Russia's unilateral participation in Kosovo and its internal economic crisis. The Common Strategy on Russia was announced in June 1999, following the Cologne European Summit. It was the first indication of the EU's desire to boost its foreign policy profile, and it was situated within the EU's emerging notion of 'strategic partnership' with Russia.<sup>452</sup> The document identifies the EU's objectives, which include the consolidation of democracy, the rule of law, and public institutions, Russia's integration into a common European economic and social space, including WTO membership, and increased cooperation to strengthen Europe's stability and security.<sup>453</sup> It was also released by the EU as a unilateral foreign policy tool intended to clarify the European Council's vision and aims in relation to Russia.<sup>454</sup>

## **The EU-Russia Energy Dialogue**

When it became evident that the Energy Charter Treaty would not perform as expected in respect to Russia, the EU proposed the EU-Russia Energy Dialogue in 2000 as a second attempt to ensure its energy supply.<sup>455</sup> Furthermore, it was established on the initiative of Presidents Chirac and former President Putin, as well as Commissioner Prodi, to provide a platform for the discussion of all issues of mutual concern in the energy sector and to strengthen ties between Russia and the EU.<sup>456</sup>

The Common Strategy spawned the EU-Russian Energy Dialogue.<sup>457</sup> The two sides announced a regular energy conversation to allow for the 'definition and arrangements for an EU-Russia Energy Partnership,' as well as to break the impasse created by Russia's continued rejection of

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<sup>452</sup> TIMMINS, p.363

<sup>453</sup> Christopher PRESTON: (2003) 'Russia in the EU or the EU in Russia? Approaches to Kaliningrad', in Julie Smith and Charles Jenkins (ed.) 'Through the Paper Curtain', Chatham House Papers, Blackwell Pub., p.150.

<sup>454</sup> HADFIELD, p.234

<sup>455</sup> Pami AALTO and Kirsten WESTPAL: (2008) 'Introduction', in Pami Aalto (ed.) The Europe-Russian Energy Dialogue, Europe's Future Energy Security, Ashgate,p.12

<sup>456</sup> Andrew MONAGHAN: (2006b) 'Russia-European Relations: An Emerging Energy Security Dilemma', Pro et Contra, 10:2-3, Summer, p.2

<sup>457</sup> Susan HANDKE and Jacques J. DE JONG: (2007) 'Energy As a Bond: Relations With Russia in the European and Dutch Context', Clingendael International Energy Programme, The Hague, CIEP, 02/2007, p.59

the ECT.<sup>458</sup> Although both sides appear to accept the sectoral Energy Dialogue, Moscow officials have criticised the PCA on multiple times, claiming it is too ‘bureaucratic’ and slows to generate results (Jackie Gower and Graham Timmins: (2009)).<sup>459</sup> According to Alto and Westpal, the goals of the EU-Russia Energy Dialogue are as follows:

1. The major goal of the energy dialogue is to facilitate energy trade and investment flows by establishing a political and institutional framework for boosting EU-Russia energy commerce. The strong interdependence established by the EU's need to secure its supply from Russia and Russia's need to ensure its energy demand from the EU, where it sells about 60% of its exports, drives both sides.<sup>460</sup>
2. On the EU's side, the energy dialogue is a way of adjusting EU member states' diverse viewpoints in Russia's energy trade. However, the lack of a Constitution prevents the establishment of instruments for coordinating energy policy along the lines that the EU has established in other sectors.<sup>461</sup>
3. For the Russian side, the EU-Russian energy discussion is at least a potential source of investment in order to sustain and eventually grow the country's energy exports, update its ageing energy infrastructure, and improve economic circumstances.<sup>462</sup>

### **Energy Charter Treaty**

Ruud Lubbers, the Dutch Prime Minister, proposed a European Energy Community in mid-1991. The ECT has its origins in a political declaration on East-West energy cooperation. The political statement on the Energy Charter was signed in December 1991.<sup>463</sup> ECT was a crucial vehicle for the EU in bringing Russia's pipeline network under multilateral laws and putting the monopoly of Gazprom to the test. Russia signed the pact in 1994<sup>464</sup>, but refuses to ratify it because of the

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<sup>458</sup> HADFIELD, p.237, SELIVERTSTOV, p.10, ‘...The reason for that was basically the refusal of the Russian Federation to ratify the ECT.’

<sup>459</sup> Jackie GOWER and Graham TIMMINS: (2009) *Russia and Europe: In the Twenty-First Century, Uneasy Partnership*, Anthem Press, p.261

<sup>460</sup> AALTO and WESTPAL, p.13.

<sup>461</sup> Ibid, p.13

<sup>462</sup> Ibid, p.14, STERN, 2005, p.134.

<sup>463</sup> HANDKE and DE JONG, p.51.

<sup>464</sup> Richard YOUNGS: (2009) *Energy Security, Europe's New Foreign Policy Challenge*, Routledge, p.80.

Transit Protocol, which is one of the treaty's fundamental components.<sup>465</sup> Russian critics of the ECT claim that it is a tool used by the EU to impose too many harsh conditions on Russia, while Russian energy companies will get minimal benefits when the Treaty is ratified. Furthermore, the United States, Algeria, and Norway either did not engage in the entire process or have not yet signed the Treaty.<sup>466</sup>

The EU, on the other side, argued that Russia refused to follow market principles and abandon its control over the Caspian pipelines. The main energy businesses in Russia did not warmly welcome ECT.<sup>467</sup> Transneft and Gazprom, for example, were against ratification, claiming that it would force them to 'open their network to lower-cost gas from Central Asian nations that became ECT members.'<sup>468</sup> One of the reasons Russia has yet to ratify the ECT is the politicisation of the gas connection.<sup>469</sup> First, Gazprom stated that the ECT would make third-party access to the Russian pipeline network essential. Second, approval would jeopardise the system of long-term gas supply contracts to Europe. Third, several aspects of Article 7 of the Treaty were unclear and needed to be clarified. This includes a demand that energy flows in transit be treated equally favourably on a national level as domestic transportation.<sup>470</sup> Finally, Moscow has managed to persuade the EU for more than a decade that it is free to go its own way as long as the Duma does not approve the agreement.<sup>471</sup>

### **Russian Federation Middle Term Strategy towards EU (2000-10)**

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<sup>465</sup> AALTO and WESTPAL p.12.

<sup>466</sup> HANDKE and DE JONG, p.52.

<sup>467</sup> YOUNGS, p.80, HAGHIGHI, p.323; 'Article 7 of the ECT on transit of energy products, materials and equipments is one of the most controversial articles in the treaty. Article 7 of the treaty ECT obliges contracting parties to take 'necessary measures' to 'facilitate transit'. In doing so, they shall apply the principle of freedom of transit and they should not distinguish between materials, products and equipments as to origin, destination, ownership, and pricing, and they should allow transit without imposing any unreasonable delays, restrictions or changes.'

<sup>468</sup> Ibid, p.348-349.

<sup>469</sup> Miklos LOSONCZ: (2009) 'Some Institutional Factors of the EU's Logistics in the EU-Russia Natural Gas Relations', in Kari Liuhto (ed.) 'The EU-Russia Gas Connection: Pipes, Politics and Problems', Pan-European Institute, 8/2009, p.154.

<sup>470</sup> HANDKE and DE JONG, p.57, Andrey KONOPLYANIK: (2008) 'Regulating Energy Relations: Acquis or Energy Charter?', in Katrina Barysch (ed.) Pipeline, Politics and Power – The Future of EU-Russia Energy Relations, Centre for European Reform, October, p.107.

<sup>471</sup> Keith C. SMITH: (2010a) 'Managing the Challenge of Russian Energy Policies, Recommendations for US and EU Leadership', CSIS, November, p.17.

‘During the period under review, partnership between Russia and the EU will be based on treaty relations, i.e. without an officially stated objective of Russia's accession to or ‘association’ with the EU,’ according to the document, which was published in 1999 .Russia should retain its freedom to determine and implement its own domestic and foreign policies as a world power situated on two continents, leveraging its status and advantages as a Euro-Asian state and the largest country in the CIS, regardless of its position and activities in international organisations.<sup>472</sup>

According to the document, the primary goals are to protect national interests and improve Russia's role and image in Europe and the world by establishing a reliable pan-European collective security system, as well as to mobilise the EU's potential and managerial experience to help Russia develop a socially oriented market economy.<sup>473</sup>

Helm believes that there was a lot of hope about Russia's willingness to interact positively with the West during Putin's first term in power. However, by the 2004 election and the start of Putin's second term, this confidence had faded. The Dialogue and the PCA have the Energy Charter and the Transit Protocol as their preferred basis.<sup>474</sup> There are two reasons for this progress: first, Russia has increasingly desired to be treated as an equal with the EU, and thus the PCA no longer matches Russia's expectations as to its status, and second, the Dialogue and the PCA have the Energy Charter and the Transit Protocol as their preferred basis. Leonard and Popescu categorize of all EU members’ policy approach towards Russia are: ‘Trojan Horses’ (Greece and Cyprus) who frequently defend Russian interests in the EU system and are willing to veto common EU positions, ‘Strategic Partners’ (France, Germany, Italy, and Spain) who enjoy a special relationship with Russia and occasionally undermine common EU policies, and ‘Friendly Pragmatists’ (Austria, Belgium, Bulgaria, Finland, Hungary, Luxembourg, Malta, Portugal, Slovak Republic) who enjoy a special relationship with Russia and occasionally undermine

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<sup>472</sup> Christer PURSIANEN: (2007) ‘Theories of Integration and the Limits of European-Russian Relations’, Paper presented at the International Studies Association Convention, USA, March 1, p.8.

<sup>473</sup> Andrei MELVILLE and Tatiana SHAKLEINA: (2005) *Russian Foreign Policy in Transition Concepts and Realities*, Central European Uni. Press, p.165

<sup>474</sup> Dieter HELM: (2007) ‘The Russian Dimension and Europe’s External Energy Policy’, Oxford Uni. September 3, p.47-8 Available on <http://www.dieterhelm.co.uk/node/655> (Accessed 10 January 2011).

Monaghan<sup>475</sup>, on the other hand, claims that the EU's stance toward Russia is divided into two camps: 'Friends of Russia' and 'Russia Realists.'

The first group, which includes France, Germany, Spain, Italy, Portugal, and Greece, aspires to maintain positive relations with Russia. The second group takes a more critical stance toward Moscow. However, only the United Kingdom may be placed in the middle.<sup>476</sup> Furthermore, Youngs divides energy dependency into three categories: low dependence, which includes Spain, Sweden, the United Kingdom, the Netherlands, Portugal, Belgium, and Ireland (emphasis added: Cyprus, Malta, and Luxembourg); medium dependence, which includes France, Italy, and Germany; and high dependence, which includes Austria, the Czech Republic, Greece, Hungary, Poland, Romania, Slovenia, Finland, and Lapland.<sup>477</sup> The average number of them was chosen as the fundamental classification procedure in this study after analysing the EU-27 import and dependency on oil, natural gas, and oil from Russia in 2009,766. In truth, most countries have the ability to import oil from other sources; however, this is not the case with natural gas.

#### **5.4 CONSTRAINTS ON RUSSIA'S FOREIGN ENERGY POLICY**

Perceptions of Russian foreign policy are regularly shaped by major events. The gas confrontations with Ukraine between 2006 and 2009 sparked substantial scholarly and media analysis attributing Russian activities to strategic concerns, a desire for profit, corruption, and even a series of opportunistic measures lacking any coherent overall plan. A more successful strategy is to recognise that the Russian leadership has a legitimate set of political and economic objectives, but that it is limited by the means at its disposal. In reality, Russia's limited toolbox for dealing with other countries shapes its conduct and the character of its interactions with EU and former Soviet Union countries. Other analyses of Russia's foreign policy ignore the influence of these limits and their implications for Russia's policies, making it impossible to understand Russia's actions. How to explain the mix of political and economic aims in Russian policy is a key question in the debate of Russian foreign policy. Some claim that Russia is attempting to re-establish some type of empire, while others focus on the 'Russia, Inc.' model, which highlights the country's leadership's desire to maximise profit. While Russia strives to

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<sup>475</sup> Mark LEONARD and Nicu POPESCU: (2007) 'A Power Audit of EU-Russia Relations', ECFR, Policy Paper, November, p.2.

<sup>476</sup> Andrew MONAGHAN: (2005) 'From Plans to Substance: EU-Russia Relations During the British Presidency', *Russie.Nei.Visions*, IFRI; August, p.2

<sup>477</sup> YOUNGS, p.80-1.

achieve both political and economic objectives, its limited foreign policy instruments force it to make sacrifices. As a result, Russia will occasionally forego economic benefit in order to exert political power, and vice versa.

As a result, a system of behavioural patterns emerges that repeat themselves over time. Russia's conduct might appear unreasonable unless you grasp the restricted nature of its foreign policy options. For example, after six years of attempting to de-politicize its energy connections with former Soviet Union countries in order to maximise profits, Russia in 2010 gave Ukraine a 30% reduction on natural gas prices in exchange for an extension of the lease of the Sevastopol naval base. This issue may be explained by a thorough examination of Russia's foreign policy instruments, which explains why, after making significant headway in cutting subsidies, Russia has reverted to the old approach.

The Russian government is attempting to achieve a number of political and economic objectives. In terms of politics, Russian politicians strive to increase the state's authority while seizing chances as they arise in the international arena. Creating union states or customs unions with willing partners, locating military posts in key areas, and helping friendly governments or weakening unfriendly governments are all examples of such political ambitions. Russia's authorities want to maximise income from energy sales in terms of economics. This entails minimising Russian energy sales' exposure to transit nations, requiring all customers to pay a market-based price that reflects EU pricing levels, boosting ownership and control of energy infrastructure, and extending access to high-profit markets.

These economic and political objectives are sometimes complementary, but they can sometimes be incompatible. They were at their best following Ukraine's Orange Revolution, which brought a pro-Western, anti-Russia administration to power. Russia's political leadership and Gazprom's managers agreed that the moment had come to raise prices since they no longer wanted to help Ukraine with gas subsidies. When Russia's political and economic interests collide, policymakers must make decisions in the instruments at their disposal. Outside of military matters, Russia has limited tools to utilise in influencing international politics because oil and other commodity exports make up such a big percentage of its gross domestic product and exports. Shutting down gas pipelines or offering price subsidies are crude tools for attaining Russia's larger objectives, but they are the only options. As a result, Russia's energy tools determine its international behaviour patterns.

## CHAPTER 6

### CONCLUSION

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#### CONCLUSION 6.1

Gas and oil has been the mainstay of the Soviet and now Russian economy for decades. Russia's role as a major oil and gas exporter and the significance of energy to the Russian economy has unavoidably had an impact on Russia's foreign policy. This was nowhere more apparent than in the Caspian Basin in the 1990s, when abundant oil and gas deposits and rising interest from and investment of U.S. and international energy companies caused stark differences between Russia and the United States.

Energy transition is fueled by a variety of factors, including the need to increase energy security, technological advancements, and the availability of new technology solutions that can drastically improve the efficiency of the energy sector and transform its traditional way of operating. All countries also want to ensure the competitiveness of their national economies and promote the development of affordable energy. Addressing the three pillars of the energy transition the so-called three D's: decarbonization, decentralization, and digitization is necessary to accomplish these goals. This widely used schematization offers a practical tool for determining the extent of the energy transition penetration in various nations, including the Russian Federation. The following variables help to describe Russia's position on the energy transition:

Macroeconomics (including how hydrocarbon revenues affect the viability of its economic system, the rate of economic growth, the availability of investment, and the use of financial and technological sanctions); Energy sector institutional framework; climate policy; and technology policy

Russia is a good example of just "1.5 D" actually being relevant, as shown above: the climate agenda is not relevant in Russia, while the competitiveness of the national economy and energy security are already provided by abundant cheap hydrocarbons. The global "three D" drivers operate differently in various countries (primarily natural gas). The only real forces behind the energy transition in Russia, then, are technology policy and a desire to avoid the development of a wide technology gap. Decentralization and, to a lesser extent, decarbonization are now unpalatable to the government and other major players in the country, leaving digitalization as the main focus of investment in the country's energy industry. Nevertheless, despite this limited



motivation to further the Russian energy transition, there are several areas with enormous potential rewards that, if the right policies were in place, could generate significant value for the Russian economy and attract investments. Global energy transitions pose new difficulties for Russian energy exports: COVID-19 short-term effects and the longer-term increase in the share of Renewable Energy Sources (RES) constrain the growth of the global demand for fossil fuels, resulting in lower than anticipated export volumes for hydrocarbons. For economies that rely on fossil fuels, the creation of border carbon adjustments as a component of the carbon taxing system may eventually cause instability.

In addition, banks and other financial institutions are evaluating climate risks and are growing less willing to finance fossil fuel projects. This considerably restricts Russian energy businesses' access to financing for hydrocarbon projects, in addition to the existing financial sanctions imposed by the US and EU. As a result, the longer-term outlook for Russian energy resource exports, which are expected to peak in the 2030s and then decline, turns out to be fairly gloomy. As a result, climate change policies that aim to cut GHG emissions from hydrocarbons can have a significant impact on the Russian economy. In conclusion, the energy transition poses new long-term challenges for Russia as well as many other resource-rich and energy-exporting nations, raising concerns about the sustainability of the entire economy, which is heavily reliant on hydrocarbon export revenues.

Russian abundance in oil and gas, and the ways it could negatively affect long-term economic performance and institutional development is not a new debate. The impact of energy resources on the industrial structure of Russia is one of the main issues. Energy resources are often blamed for the low diversification of the economy, with an extensive resource sector and the dominant oil and gas export share.

One of the major economic policy concerns for the Russian government is diversification, and the necessity for "diversification" has been invoked in political debates to support an active industrial policy.

The policy actions required to counteract the impact of abundant energy resources on diversification and, more broadly, on economic development, however, may be highly reliant on the predominant channel via which resources have an impact on the economy. In particular, industrial policy may be ineffectual or even harmful in the context of an institutional resource curse mechanism, whereas active industrial policy may be justified as a remedy in the event of a

Dutch disease. It may be more effective to strengthen the institutional environment than to adopt active government initiatives impacting industry structures to counteract the resource curse effect on the Russian economy. The energy security of the member states is mostly the responsibility of the EU. Since a large number of post-Soviet republics have joined the EU, efforts to diversify energy imports from countries with other sources of energy, like the United States, the Middle East, and Central Asian nations, can lessen reliance on the Russian energy sector and ensure energy security. To integrate the energy markets of the post-Soviet states into the EU market, the European Union has however started a number of policies and programmes. To increase the supply of energy security for the member states, it has developed a common energy policy. The creation of a single energy market in the area is the main goal of the regional common energy policy.

It enabled the new member states to voice their opposition to threats to energy security. The EU also passed a third energy package in 2009 with the goal of integrating the energy sector and creating new energy interconnections. The Baltic Energy Market Interconnection Plan (BEMIP) was formed by the EU in 2009 for the Baltic States. The BEMIP's primary focus areas include internal market and infrastructure for gas, electricity market integration, electricity interconnections, and generation. Another significant strategy document that outlines the development requirements crucial for member states at the regional level is the EU Strategy for the Baltic Sea Region (EUSBSR). The completion of the Nord Stream pipeline between Germany and Russia, however, caused a rift amongst EU member states because Germany is one of the more powerful members of the Union.

All the countries who purchase Russian oil and gas are clearly at risk from Russia's "petro-power." This is undoubtedly true in particular for the former Soviet Union small, impoverished, and extremely dependent states, or what the Russians refer to as the "near-abroad." In an effort to reclaim control of the region, Russia has used its power to both reward and punish its allies. It has proven that it can be successful and even when it fails, it can still be very costly to those who dare to defy it.

However, the effects of Russia's actions go far beyond its close neighbors. Western Europe, for instance, has many reasons to be concerned right now. Although the EU is less reliant on Moscow than the former Soviet states were, Moscow's willingness to ruthlessly use its "petro-power" has caused great concern among EU member states. As a result, there have been

increased efforts to persuade Russia to sign an energy charter restricting its influence. The oil wealth of Russia is a concern for other nations as well, including the U.S. Although the United States does not directly rely on Russian oil and gas, many of its allies do. Russia has an impact on world pricing as well, particularly in the uneasy, anxious "seller's market" of today. It has recently tried to enhance this leverage by creating an organization of natural gas exporters, modeled on OPEC. Moscow's move to restrict production would immediately result in a rise in global prices.

Russia has turned to its energy because its population, economy, or military prevent it from acting credibly as a global superpower. The top energy exporter in the world is currently Russia. Russia's true energy power resides in natural gas because its oil reserves are insufficient and its coal and uranium exports can be easily supplied by other distributors. Due to the pipelines' significant dominance over Russia's gas exports, Russia's gas pipeline strategy has evolved into an integral component of its foreign policy. Russia is able to exert more influence in the EU and the post-Soviet region thanks to its gas exports and pipeline strategy. The former Soviet republics' foreign trading partner, Russia, is significant but not dominant. However, Russia is a regional energy superpower thanks to its energy exports. Energy is one of Russia's most effective foreign policy tools, thus it is used in this way. Even though Russia has the freedom to utilize its energy whatever it desires, certain of its foreign policy actions relating to energy have been at the very least doubtful, if not outright undesirable.

The enormous war chest of oil and gas money that Moscow has amassed is another another aspect of Russia's "petro-power" that the U.S. and other countries around the world are concerned about. By the beginning of 2008, Russia had over \$157 billion in its "Stabilization Fund," one of many "sovereign wealth funds" that have mushroomed around the world in recent years. Uncomfortably, these sovereign wealth funds are frequently owned by nations with weak commitments to democracy and free markets. Large wealth funds are also increasingly controlled by nations with regional or global geopolitical ambitions. Russia, Venezuela, and Iran are three countries that hold the most wealth funds, for instance.

In other words, a fundamental reallocation of wealth has occurred as a result of the rising price of oil and gas. This is demonstrated by the fact that in just four years, the balance of payments surplus of oil exporting countries increased from \$88 billion in 2002 to \$571 billion in 2006. Considerably with the present drop in oil prices, long-term forecasts are even more gloomier.

According to a recent research, sovereign wealth funds might increase from \$2.5 trillion in 2007 to \$27.7 trillion in 2022. There is cause for concern as the world anxiously observes the growth of politically ambitious "petro-states" like Russia. And everyone should be aware of the cynic's interpretation of the golden rule: "He who has the gold makes the rules," not just Estonia or Belarus.

### **Future direction**

It is difficult to predict the exact future direction of Russia's energy politics, as it will depend on a range of internal and external factors. However, it is likely that Russia will continue to focus on modernizing and diversifying its energy sector, while also maintaining its position as a major global energy supplier. This may involve increasing investment in renewable energy sources, such as wind and solar power, as well as exploring new technologies such as carbon capture and storage.

Externally, Russia's energy politics may be influenced by the evolution of global energy markets and the increasing demand for cleaner and more sustainable energy sources. Russia may also face challenges in relations with other countries, particularly in terms of its energy exports, as competition for energy resources continues to increase. In addition, Russia may need to navigate geopolitical tensions and changing political dynamics in the regions where it exports energy, such as Europe and Asia. Overall, the future direction of Russia's energy politics will depend on a complex interplay of internal and external factors, and will likely involve a balance between economic, political, and environmental considerations

**To summarise, I:-** In terms of hydrocarbon production and supply to the global market, Russia is one of the greatest nations. At the same time, the majority of the nation's resources are concentrated in its Arctic and northern regions. A sustainable supply of hydrocarbon raw materials for the economy is the most crucial aspect for the development of the economy for a number of international organizations and nations, which have interests in oil and gas resources. Numerous Russian oil businesses increased their export capacity. Due to its cold climate, large commutes, excessive raw material composition, poor financial management, and major technology lag, Russia has a high energy intensity GDP that is 1.5 times higher than the global average and double that of the top European nations. The main driving force behind Russia's involvement in renewable energy is technological policy, and the nation is currently

concentrating on expanding its production capacity. In order to get the maximum tariff rates, Russia has made a high percentage of local content a requirement. This is crucial to the long-term viability of many Russian renewable energy projects.

**II:-** The first decade of Russia's transition from a centrally planned to a market economy after the fall of the Soviet Union was disastrous: nominal GDP fell from USD 516 billion in 1990 to USD 196 billion in 1999, a decline of about 60%. In an effort to address economic unrest and implement IMF recommendations, the Soviet government made moves to privatize a number of Russian businesses in the 1990s. However, there were several notable outliers in the energy and defense sectors. Both Russia and Europe rely on one another for their energy needs. Europe is dependent on Russian oil and natural gas supply. In 2016, more than a third of the crude oil that the Organization for Economic Cooperation and Development (OECD) nations imported came from Russia. In 2016, Russia exported crude oil and condensate at a rate of over 5 million barrels per day. The vast bulk of Russian exports were received in the Netherlands, Germany, Poland, and Belarus (70 percent). Up until the global financial crisis of 2008, the two main economic drivers supporting the rapid growth of Russian industries were a booming domestic market, supported by rising terms of trade and rising export revenues, and a successful international performance of Russian products, despite rising prices, on markets like the Eurozone and the CIS nations.

**III:-** Boris Yeltsin established a new Russian Federation in 1991 as a result of the collapse of the Soviet Union and the Soviet Union's controlled economy. Since the fall of the Soviet Union in 1991, Russia has made an effort to create a market economy and achieve sustainable economic growth. Significant foreign investment and the privatization of state-owned enterprises were forced into place in the early post-Soviet years. Other crucial elements of the economy, like commercial banking and authoritative, thorough corporate rules, weren't present or were only partially so by 1996. Oil and gas are the two foundations on which the Russian economy is based. After Saudi Arabia, Russia is currently the second-largest oil producer and exporter in the world.

Gas exports, which are preferred as a more affordable and ecologically friendly energy source than oil, account for the majority of Russia's energy relations with Europe. Russian gas monopoly Gazprom has become a significant player in the European energy markets. Putin and

Russia's energy policy changed from survival and resurrection strategies to aggressive development as international energy prices increased and Russia's oil output increased. With the support of increased oil export revenues, which translated into considerable investment income, Russian state-owned and private businesses started expanding their operations throughout the former Soviet republics, Eastern Europe, and beyond.

After exerting and reclaiming state authority over resource management in 2006, Putin is unmistakably of the opinion that Russia's mineral resources, primarily its oil and gas reserves, are its strongest competitive advantage. He also acknowledges that hydrocarbon production and exports, both directly and indirectly, have contributed to the state's economic and political advancement. Under President Putin's leadership, Russia's influence in the energy sector reached new heights. A number of factors combined to get this outcome. First, from 2000 to 2008, Russia and other producers reaped significant benefits from the global oil and gas market. Despite the fact that prices have dropped as a result of the current global crisis, a return to the era of cheap oil in the 1990s seems unlikely. Second, Putin's administration attempted to take over the nation's oil and gas sector. This made it possible for Russia to employ its economic power for national advancement, which was crucial during the last Yeltsin years. Third, Russia has made a concentrated effort to increase its control over oil and gas assets outside of its borders, especially pipelines that transport its goods around the globe.

**IV:** The system of oil and gas pipelines is one of the largest infrastructure and logistics networks in the world. An undersea twin pipeline called Nord Stream 2 would carry natural gas directly from Russia to Germany. Russia is the backbone of the rapidly expanding Eurasian gas market, which includes Europe, North Africa, the Commonwealth of Independent States (CIS), the Caspian Sea region, and Northeast Asia. Russia has a unique transcontinental infrastructure in the heart of Eurasia (150,000 km of trunk pipelines). Due to its control over local transportation infrastructure and its vast gas reserves, Russia is a prominent player in this developing industry. "Central Asia, which is entirely landlocked, is Russia's temporary option to keep the gas coming. Russia currently imports gas from central Asian nations to replenish its depleting local supplies. After a decade in which the nation's state machinery disintegrated and its international position was undermined, the current administration is looking to take advantage of Russia's oil and gas resources to strengthen its hold. By positioning itself as the primary provider for the major

regional energy markets and organising rivalry among nations and regions to raise its significance, Russia hopes to become an "energy powerhouse" and a significant geopolitical role.

Regarding their relative lack of energy resources, particularly gas, and the dependence that results, as well as their multilateral approach to international relations, the European Union and its member states vary from Russia. The limitations of this global strategy are all too clear when dealing with a nation like Russia, which is still a conventional power, utilizes diplomacy backed by force to restore its dominance in its "near abroad," and is eager to exploit its energy resources to impose geopolitical influence. The idea of harmonizing its laws with market norms, as advocated by the EU and other foreign agencies like the International Monetary Fund, is rejected by Russia. When Russia requests complete freedom to take over gas companies in European nations, the Commission responds that such takeovers would be perfectly acceptable if Russia aligned its gas industry regulations with the principles for open access to its infrastructure and resources and ratified the Energy Charter.

**V:-** The most effective utilization of the nation's natural energy resources and the potential of the energy sector is the goal of Russia's energy policy, which aims to maintain economic growth, enhance quality of life, and strengthen the country's international economic positions. The Strategy outlines the priorities, principles, and state-level energy policy procedures that will be implemented to ensure that the long-term vision for the Russian energy sector is achieved.

Russia is in a good position to strengthen its position as a center of the emerging multi-polar system and to actively influence world events in order to improve them, boost security and stability, and foster enabling external environments for domestic growth. The potential for Russian gas exports is strongly correlated with the rise in domestic gas consumption. Over two-thirds of Russia's enormous gas production is used domestically, and just a third is exported. As stated in the 1980s, this is the outcome of a shift in energy use away from coal and oil and toward gas. This "gas break" was meant to be a temporary fix, but it has lasted because gas is less expensive than coal and oil on the domestic market. Poor gas utilization in outdated heating and power systems is reason causing excessive gas consumption.

Additionally, a reallocation of gas exports is anticipated. CIS and Europe currently receive all Russian gas exports, but in the future, some of it will go through China and Southeast Asia. The majority of Russian gas exports, however, will always go west due to the vast pipeline network already in place; pipelines to the east, on the other hand, have not yet been completed. After

obtaining the sole right to export Russian gas (the "unified export channel") in 2006, Gazprom plans to diversify its export routes in two ways: first, by constructing "direct" offshore pipelines, it is attempting to replace transport routes through transit nations; second, it plans to export more to the east as a substitute for supplying Europe.



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