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INTERNAL AND EXTERNAL DIMENSIONS OF RUSSIAN ENERGY POLICY BETWEEN 2000-2012

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INTERNAL AND EXTERNAL DIMENSIONS OF RUSSIAN ENERGY POLICY BETWEEN 2000-2012

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Approval of the Graduate School of Social Sciences

_____

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I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

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This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

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ABSTRACT

INTERNAL AND EXTERNAL DIMENSIONS OF RUSSIAN ENERGY POLICY BETWEEN 2000-2012

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Master of Science in Eurasian Studies
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This thesis aims to examine internal and external parameters influencing Russian energy policy between 2000 and 2012. In this respect first energy policy of the Soviet Union and Russian Federation in 1990's are evaluated. In this framework it is assumed that old experiences and structures have influence on 2000's Russian Energy Policy. Russian energy profile is accepted not only a strength of Russia but also a source of limitation in Russian energy policy, it influences domestic and foreign energy policies of the country. Following the energy profile of Russia domestic energy policy of Russia is analyzed. In this respect, elite level perception on energy and use of hydrocarbon rents are important points taken into account. In addition to that, major Russian energy companies are analyzed, because they do not cross border drawn by Russian Administration. About Russian foreign energy policy, important actions and patterns about use of energy rent are evaluated; key countries for Russian energy resources are analyzed.

In this respect, it is regarded that contrary to views of some scholars who consider Russian energy policy as the by product of Russian foreign policy, this thesis argues that Russian energy policy has been determined by the characteristics of Russian energy structure and domestic politics in addition to Russian foreign policy priorities. As a result issues like Russian economy, domestic developments in Russia, Russian foreign policy and international developments like emergence of new suppliers and markets, have influence on Russian energy policy and because of harmonization of energy and foreign policy, Russian energy policy carries realist features.

Key words: Russia, Russian Energy Policy, Russian Energy Companies.

ÖZ

2000-2012 ARASI DÖNEMDE RUS ENERJİ POLİTİKASININ İÇ VE DIŞ BOYUTLARI

Yıldırım, Tankut
Yüksek Lisans, Avrasya Çalışmaları
Tez Yöneticisi: Doçent Dr. Oktay F. Tanrısever

Temmuz 2012, 144 sayfa

Bu tez çalışması, 2000-2012 yılları arasında Rus Enerji Politikasını etkileyen iç ve dış parametreleri ortaya koymaktadır. Bu kapsamda Sovyetler Birliği ve 1990'lardaki Rusya, deneyim ve eski yapıların 2000'lerin Rusya'sı üzerinde etkisi olduğu anlayışı ile değerlendirilmiştir. Rusya enerji profili Rusya'nın sadece güçlü olduğu bir yönü değil aynı zamanda Rus enerji politikasının da sınırlarını çizdiği kabul edilmiştir; bu kapsamda Rusya enerji profili ülkenin iç ve dış enerji politikaları üzerinde etkilidir. Rusya enerji profilini takiben Rusya'nın iç enerji politikası incelenmiştir. Bu kapsamda elit düzeyinde enerji konusundaki algılama, hidrokarbonlardan elde edilen rantın kullanımı değerlendirilen önemli hususlardır. Rus yönetiminin çizdiği sınırların dışına çıkmadıkları için, önemli Rus enerji şirketleri de burada incelenmiştir. Rus Dış Enerji Politikası ile ilgili olarak ise enerji rantının kullanımına dair önemli hareketler ve davranış kalıpları incelenmiştir; Rus enerji kaynakları açısından önem arz eden ülkeler değerlendirilmiştir.

Bu kapsamda Rus enerji politikasını Rus dış politikasının bir ürünü olarak gören pek çok akademisyenin aksine Rus enerji politikasının, ülkenin enerji yapısının ve iç politikasının dış politika önceliklerinin yanında etkilediği bu tezin iddiasıdır. Sonuç olarak Rus ekonomisi, Rusya'daki iç gelişmeler, Rus dış politikası ve yeni arz kaynaklarının ve pazarların ortaya çıkması gibi uluslararası gelişmeler Rus enerji politikasını etkilemektedir ve Rus enerji politikası ve dış politikanın uyumlu hale gelmesi nedeniyle Rus enerji politikası realist özelliklere sahiptir.

Anahtar Kelimeler: Rusya, Rus Enerji Politikası, Rus Enerji Şirketleri

To My Parents

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The author wishes to express his deepest gratitude to his supervisor Associate Prof. Dr. Oktay Fırat Tanrısever and Examining Committee Members Associate Prof. Dr. Fırat Purtaş and Tayfun Yener Umucu for their guidance, advice, criticism, encouragements and insight throughout the research.

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Finally the author of this thesis thanks to his family who supported him during his whole life.

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LIST OF ABBREVIATIONS

bcm	billion cubic meter
b/d	barrel per day
GAN	GasAtomNadzor (Russia's nuclear inspection agency)
GDP	Gross Domestic Product
IEA	International Energy Agency
EIA	Energy Information Agency
E&P	Exploration and production sides in oil industry, upstream
EU	European Union
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
Mtce	million tonnes of coal equivalent
MinAtom	Russian Ministry of Atomic Energy
NATO	North Atlantic Treaty Organization
tcf	trillion cubic feet
Tcm	trillion cubic meter

CHAPTER 1

INTRODUCTION

1.1 Scope and Objectives

Russia is very rich in its natural resources. The country has a developed hydrocarbon industry and knowledge of management inherited from the Soviet Union. As the result of this combination, the country uses its resource base not only for economic growth but also to gain power in international arena. In this context the scope of this paper is to shed lights to the internal and external dimension that have impacts on Russian energy policy.

This study starts from the first term of Putin as president until the reelection of Putin in March 2012. However to analyze issue more comprehensively, first Soviet oil industry and then developments of 90's will be analyzed. Following this chapter, Russian energy profile and key features of Russian energy base are analyzed. Then Russian hydrocarbon industry in domestic and international field - Russian energy diplomacy in general terms will be analyzed. Finally general assessment on Russian energy industry is regarded.

1.2 Literature Review

Energy is the fuel of economies of countries and energy policy is a key issue for all countries to find optimal energy mix for development. In this respect almost all literature on energy policy focus on some certain points: first of them, "availability"

is related to existence of natural resources; second, “accessibility is related to geopolitical closeness to resources; third, “affordability” refers to economic elements mainly price of the energy resources and finally “acceptability” of energy resources are related to environmental and social elements.[1]

Environmental parameters are included in recent years with the increasing sensitivity on environment. Mainly these parameters are evaluated as subjects of energy security; different parameters also have effects on these four aspects: for instance time is an important parameter to meet the energy need when it is needed; also amount of investment for transportation of energy resources for long term; geopolitical factors, cooperation.[2] A lot of studies evaluate energy security issue as mathematical formulation or figures as regarded below:

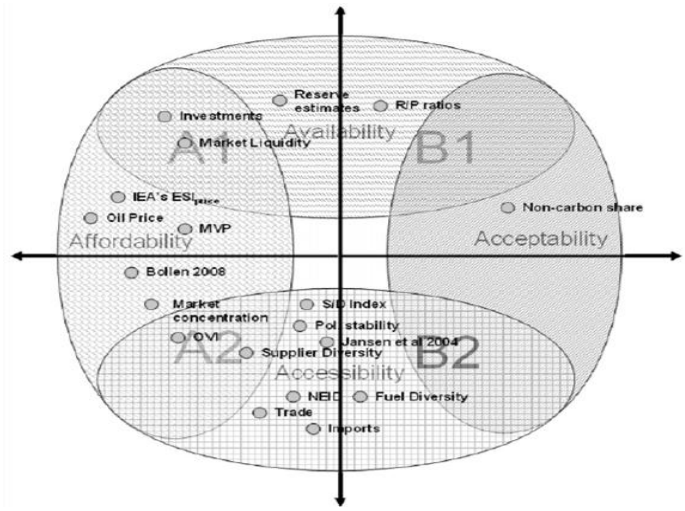

Figure 1. A Sample of Used Methods for Energy Security

Source: Bert Kruyt, D.P.vanVuuren, H.J.M.deVries , H.Groenenberg, (2009). Indicators for energy security, Energy Policy 37, 2166–2181., p. 2167.

For energy policy, there are also some models that are mainly implemented by authorities and authors to analyze energy policies of countries. These models which

[1] Bert Kruyt, D.P.vanVuuren, H.J.M.deVries , H.Groenenberg, (2009). *Indicators for energy security*, Energy Policy 37, 2166–2181., p. 2167.

[2] Bert Kruyt, D.P.vanVuuren, H.J.M.deVries , H.Groenenberg, (2009). *Indicators for energy security*, Energy Policy 37, 2166–2181., p. 2167.

are called as “sustainable development based energy policy making frameworks” are mainly used for decision making processes in energy policies. PSR (pressure-state-response) is one of the sustainable development based energy policy making frameworks and it is used by OECD for analyzing environmental issues, DSR (driving force-state-response) is developed from PSR model; both models includes a parameter that triggers state to take action or use energy resources in energy policy, in PSR model this parameter is called as pressure and in DSR model it is called as driving force.[3]

IAEA developed “Indicators for Sustainable Energy Development” (ISED), member countries use ISED to monitor energy systems and develop new strategies. ISED consists of three categories - environmental, social and economical and various sub categories. H.Meyar-Naimi and S.Vaez-Zadeh give examples from the use of ISED model from different countries:

> “European Union energy policy are improving the security and efficiency of energy supply because the economy of these countries is threatened by high dependency on import energy objectives. In this regard, United Kingdom (UK) focuses on increasing the share of nuclear and Res especially wind energy. Moreover, Italy tries to enhance the energy security by making long term contracts and diversifying the energy resources. Turkey also focuses on the wind and hydro-electric energy and on increasing the efficiency of power system and somehow tends to have nuclear energy Estonia national energy policy dictated that the share of RE should be increased up to 10% Development of Res and increasing the efficiency, diversification of energy supply and reducing the Co_2 emission are the main goals of energy policy committee in Poland.(....)In Asia, studies based on ISEDs show that Jordan and Pakistan are completely dependent on the imported oil and natural gas, respectively. So, the main goals of energy policy in these countries are exploring secure and sustainable energy resources and diversification of energy mix by renewable energies. China’s national energy policy focuses on increasing the accessibility of electrical energy, decreasing Co_2 emission and increasing the share of REs. In order to enhance energy conservation, the Saudi Arabian standards organization adopted several standards to limit the penetration of inefficient electrical appliances into the market. In addition, increasing the share of solar power has been taken into account as a policy.”[4]

[3] H.Meyar-Naimi, S.Vaez-Zadeh, (2012). *Sustainable Development Based Energy Policy Making Frameworks a Critical Review*, Energy Policy 43, 351–361., p.352.

[4] H.Meyar-Naimi, S.Vaez-Zadeh, (2012). *Sustainable Development Based Energy Policy Making Frameworks a Critical Review*, Energy Policy 43, 351–361., p.353.

In 1999, the European Commission modified PSR model via EEA and Eurostat and constructed DPSIR framework; this model was used first for environmental problems, then EEA and Eurostat adopted a number of energy indicators that aims energy security and efficiency of EU member countries.[5] However the model is used for environmental issues, then DPSEEA model was developed that also used for environmental issues.[6]

All these frameworks focus on sustainable development and mainly used for developing countries. However these models are issue based and not comprehensive as Meyar-Naimi expresses.[7] Also these models cannot reflect social structures, specificity of regions, perceptions of decision makers and historical background of states.

More comprehensive models for energy policy are found in books of James M.Griffin "A Smart Energy Policy", and Raphael Amit and Mordecai Avriel (ed.) "Perspectives on Resource Policy Modeling". In the book of Raphael Amit and Mordecai Avriel, D.W.Jorgenson, analyzes the relation among domestic industries and their energy consumption trends; he uses an econometric model for energy field and explains relations between industries and their impact on energy demand. Authors focus on American economy, and have some recommendations for American economy.[8]

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[5] H.Meyar-Naimi, S.Vaez-Zadeh, (2012). *Sustainable Development Based Energy Policy Making Frameworks a Critical Review*, Energy Policy 43, 351–361., p.353.

[6] H.Meyar-Naimi, S.Vaez-Zadeh, (2012). *Sustainable Development Based Energy Policy Making Frameworks a Critical Review*, Energy Policy 43, 351–361., p.355.

[7] H.Meyar-Naimi, S.Vaez-Zadeh, (2012). *Sustainable Development Based Energy Policy Making Frameworks a Critical Review*, Energy Policy 43, 351–361., p.357.

[8] Raphael Amit and Mordecai Avriel, (1982). *Perspectives on Resource Policy Modeling*, Ballinger Publishing Company, Massachusetts, p.9-81.

According to James Griffin there are three conflicting goals of energy policy: first of them is cheap energy that is called as the lifeblood of a growing economy. His example is cost of energy for Americans, particularly low-income groups pay 10 per cent of their income. Also the use of energy determines life quality in developing countries and states subsidize the cost of energy to prevent inflation in their economy. However subsidies do not make energy truly cheaper, it just appears cheaper.[9]

Second goal of energy policy is "clean energy" especially affluent societies attach importance to this parameter. In this respect developed nations make regulations on environmental protection and emissions.[10]

Third goal is "securing energy". It is very important for national security of countries (especially for consumer countries that have no resource). This issue mainly refers to oil supply security.[11]

Both of books focus on American economy, give examples from American economy and consumer countries. In addition to that the only thing that these books establish their model on resource scarcity, so finding appropriate energy with optimal mix is the key priority for consumer countries in these books.

Anita Orban evaluates the issue from a different perspective and adopts international relations theories "especially realism" for expansion of Russian companies. She evaluates realist theory from Morgenthau to neoclassical realist approach. Generally it is assumed that Russian companies are apparatus of state for power acquisition. In

[9] James M. Griffin, (2009). *A Smart Energy Policy: an economist's Rx for Balancing Cheap, Clean and Secure Energy*, Yale University Press, New Haven&London., p.16, 17.

[10] James M. Griffin, (2009). *A Smart Energy Policy: an economist's Rx for Balancing Cheap, Clean and Secure Energy*, Yale University Press, New Haven&London., p.18.

[11] James M. Griffin, (2009). *A Smart Energy Policy: an economist's Rx for Balancing Cheap, Clean and Secure Energy*, Yale University Press, New Haven&London., p.20.

this respect realist theory does not fit properly because of the priority of military power in the theory. However neoclassical realist theory which attaches importance to domestic components of power reflects Russian energy expansion better.[12]

According to neoclassical realists, the scope and ambition of a country's foreign policy is driven first and foremost by its place in international system and specifically by its relative material power capabilities; impact of power capabilities on foreign policy is indirect and complex, because systemic pressures must be translated through intervening variables at unit level. Also perception and mobilization of their human and material resources by statesmen are very important.[13] States respond to uncertainties of international anarchy by seeking to control and shape their external environment rather than seeking security.[14]

According to Orban, resources of Russian state and perception of decision-makers for these resources have great importance for enhancement of power. Russian companies are apparatus for enhancement of power. Enlargement of EU and NATO caused reaction in Russia and after the 1998 economic crisis and increased opportunities of Russia for reactions.[15]

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[12] Anita Orban, (2008). *Power, Energy and the New Russian Imperialism*, (1.ed) Westport,Praeger Security International. p.8-23.

[13] Anita Orban, (2008). *Power, Energy and the New Russian Imperialism*, (1.ed) Westport,Praeger Security International. p.21.

[14] Anita Orban, (2008). *Power, Energy and the New Russian Imperialism*, (1.ed) Westport,Praeger Security International. p.21.

[15] Anita Orban, (2008). *Power, Energy and the New Russian Imperialism*, (1.ed) Westport,Praeger Security International. p.22.

1.3 Argument

My thesis focuses on Russian energy policy in 2000's and finishes with the reelection of Putin as president for the third time in 2012. Domestically Russia's energy sector is not transparent to hardly attract investment for its hydrocarbon resources. However it is not appropriate to refer directly realism; using its natural resources at its own to get the added value is called as "resource nationalism" in literature.[16] The term "resource nationalism" refers to state control in natural resource extraction sector to control the profit of the sector. It may be via direct nationalization, or increasing control through modifications in fiscal policy and applying legal difficulties such as redefinition in the reserves. However a clear legislation may also provide the added value for resource rich country.[17]

All the resources that I have read focus on energy policies of consumer countries that have little resources for their development. Only Orban's approach is different and she uses international relations theory for Russian energy policy. Perception of elites and their mobilization capacity for their resources are also used. Because of this reason it can be used better in a study about Russian energy policy. It is obvious that energy policy of a resource rich country is different from a country with resource scarcity. In this respect, Russia is a resource rich country and it has also technology for development of its basic infrastructure where it is not developed enough like East Siberia. In this context Russia differs itself not only from consumer countries but also most of OPEC countries.

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[16] Halina Ward, (2009). *Resource nationalism and sustainable development: a primer and key issues*, p.8, 9. available at: <http://pubs.iied.org/pdfs/G02507.pdf> (accessed on June 9, 2012).

[17] Interview with Tayfun Yener Umucu on July 23, 2012.

In this framework, as a resource rich country Russia seeks demand security or demand guarantee rather than supply security. Russia wants to sign long term contracts with consumer countries to guarantee its income. In addition to that disruption of energy supply in transit countries or Russia, may cause loss of income, in this context pipelines from Russia directly to consumer countries have great importance for the continue of this income. It is obvious that Russian energy diplomacy uses sometimes situations as chances like in Ukrainian case; Russia decreased volume of natural gas in winter and forced Ukraine to increase prices and in this case Russian hydrocarbon rent also decreased when Ukraine used the gas with low level in pipeline.

Russia is not only a resource rich country but also a transit country that is on the route of Central Asian oil and natural gas and tries to forestall possible other routes for Central Asian hydrocarbons.[18] In addition to that incomes of Russian companies are quite sensitive to pricing dynamics of Central Asian hydrocarbons. In this respect emergence of China as a giant energy market has a direct impact on Russian energy diplomacy. Contrary to views of some scholars who consider Russian energy policy as the by product of Russian foreign policy, this thesis argues that Russian energy policy has been determined by the characteristics of Russian energy structure and domestic politics in addition to Russian foreign policy priorities. There are a lot of methods that Russia uses in energy diplomacy, these methods have similarities. However these similarities do not mean that Russia adopt a theoretical approach in its energy policy, it is obvious that Russian energy policy carries realist signs in this respect author of this thesis believes that neoclassical realism is better to explain Russian energy policy and Russian energy companies can be regarded as actors of Russian energy policy.

[18] Mark Mozur, (2011). *Turco-Russian Energy Relations: Interdependence and Prospects for Energy Security*. available at <http://www.thewashingtonreview.org/articles/turco-russian-energy-relations-interdependence-and-prospects-for-energy-security.html> (accessed on June 9, 2012).

1.4 Organization of Chapters

My thesis consists of six chapters including introduction and conclusion. Following the introduction chapter, the second chapter summarizes developments in Russia in 1990's. In this respect developments that have impacts on oil industry will be analyzed. In this framework two companies are important for state power these are Gazprom and Lukoil. However the main characteristic of this era is the rise of oligarchs and in oil industry it also happened.

In the third chapter, energy profile and composition of reserves of natural resources in terms of structure, amount and geography is analyzed. In this respect it is assumed that Russian resource composition brings not only advantages but also disadvantages like aging transportation infrastructure - technology and costs. Energy profile of Russia is the core of both domestic and international energy policy of Russia that creates constraints and advantages together.

In the fourth chapter, domestic energy policy of Russia is summarized. In this regard Putin's struggle against oligarchs and creation of "national champions" are main developments in this era, in addition to that developments in important Russian companies are summarized in this chapter. In this era it is quite visible that Russian companies consolidated their situation a lot and Putin supported Russian companies.

In the fifth chapter, international result of consolidation of Russian energy companies and implementation of Russian energy diplomacy are analyzed. In this respect it is regarded that Russian decision-makers adopt different strategies for different regions and in line with the implementation of Russian energy diplomacy the subject is divided into different subtopics. Finally, in the concluding part, the findings of this thesis are summarized.

CHAPTER 2

GENERAL STRUCTURE OF OIL AND GAS INDUSTRY BEFORE PUTIN'S ERA

2.1. Energy Sector in the Soviet Union

In the Soviet Union, petroleum industry had intensive relations with a lot of industries and supporting services. Developing technology on petroleum and natural gas production; extracting, transporting, processing crude oil and education of engineers were very important.[19] During Soviet era there were no vertical integrated oil and gas companies. Processes of oil industry; upstream, midstream and downstream functioned under the Soviet bureaucracy that had a rigid hierarchy and central planning structure. As a result, *Gosplan* was in the heart of this system.

The organization of ministries about oil and gas changed in line with the perception of each Soviet President. In Khrushchev era "*Sovnarkhoz* (regional economic councils)" reforms were implemented to restructure the over-centralized and vertical bureaucracy. However the reform process was unsuccessful because *sovnarkhoz* gave regional institutions to make more decisions with regional interests; this strengthened localism; and that was a threat to over-centralized system.[20]

[19] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.246.

[20] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.189-195.

In Brezhnev era the reverse of the process was regarded sovnarkhoz reform became unsuccessful and old structure survived; according to Robert Campbell "the industry trapped in a never-ending process of creating new organs and abolishing old ones, refining responsibilities and changing high-level personnel."[21]

CIA describes the structure of power in energy decision making in 1970's as follows:

> "In analyzing Soviet energy decision making it is useful to distinguish among three types of power: formal authority, operational command and influence. Each of these is based on certain resources and each is significant in its own way. The institutional reflection of this pattern of power is shown in the accompanying fold out chart. Formal authority attaches, above all, to the party Politburo – the highest policymaking body in the Soviet system of rule. Operational command is associated with the Central Committee Secreteriat and departments, the Presidium of the Council of Ministers, *Gosplan* and to some extent the various ministries involved in energy production. Influence is wielded by the Referentura of the Council of Ministers (a subunit within the Council of Ministers' Administration of Affairs), a number of ministries, the State Experts' Commission and institutes of *Gosplan*, the State Committee for Science and Technology, the State Committee for Utilization of Atomic Energy, certain branches of the Academy of Sciences and regional authorities."[22]

In this framework, decisions are made in power labyrinths and there is no starting power of the negotiations among institutions.

> As eloberated below, there is a major disjunction between the structure of formal authority and the structures of operational command and influence. Some interlocking of operational command and influence takes place by virtue of the rules performed by key figures like Chairman of the Council of Ministers Kosygin, *Gosplan* Chairman Baybakov and – to a lesser extent – Central Committee Secretary Dolgikh, who is responsible for heavy industry. The net effect is probably to place the center of gravity of energy production decision making in the Presidium of the Council of Ministers – *Gosplan* sphere. However power in energy decision making remains diffused among leaders and institutions: there is no point at which all the strands come together."[23]

As mentioned above, such a system with power labyrinths increased importance of certain people.

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[21] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.195.

[22] CIA, (1976). *Politics of the Soviet Energy Balance: Decisionmaking and Production Strategies*, p.4. available at: <http://www.foia.cia.gov/browse_docs.asp?doc_no=0000587117> (accessed on June 9, 2012).

[23] CIA, (1976). *Politics of the Soviet Energy Balance: Decisionmaking and Production Strategies*, p.4. available at: <http://www.foia.cia.gov/browse_docs.asp?doc_no=0000587117> (accessed on June 9, 2012).

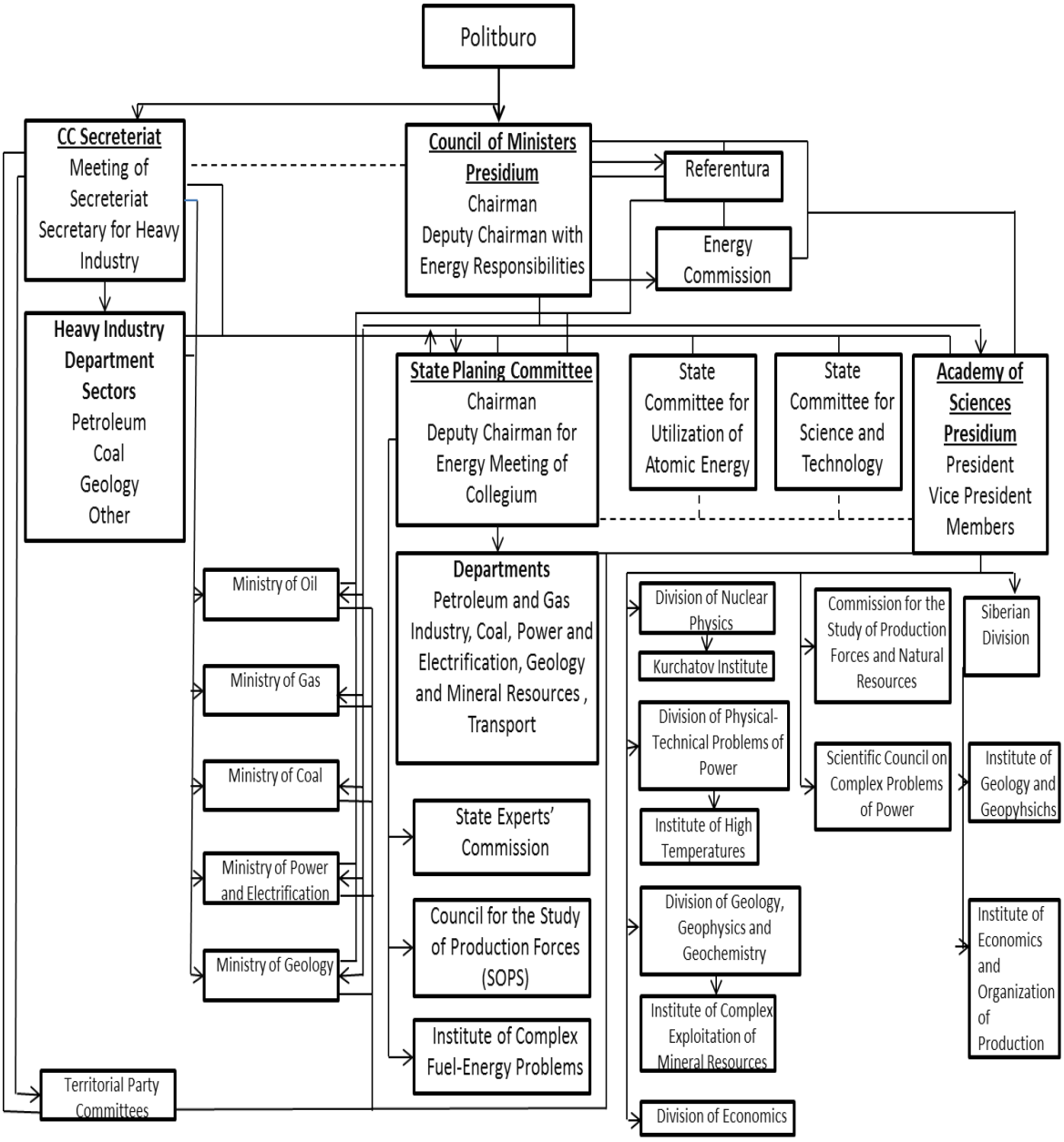

Figure 2. Soviet Energy Policy Decisionmaking

Source:CIA, (1976). *Politics of the Soviet Energy Balance: Decisionmaking and Production Strategies*, p.5.

If we look at inside of associations related to hydrocarbon production in USSR, engineers who were party members were in the executive positions or promoted very quickly. Economides gives an example for this situation:

> "G.P. Bogomiakov became an oil engineer at the age of 22. For two years he worked as an engineer with an oil exploratory expedition in Siberia and then pursued and completed a doctoral program in geological - mineralogical sciences. For the next ten years he served initially in oil exploration institutions and then became the deputy director of the Western Siberia Oil Research Institute. At the age of 37 he was recruited into the party apparatus as head of the oil Department of the Tiumen' Provincial Party Committee. He then became first secretary of this dynamic and important oil-producing province."[24]

In this context engineering became a more popular field and it was regarded as a way to participate Soviet politics. Engineering became a way for prestige, high salary and good working conditions. As a result many people, including the people with less skill for engineering, preferred being an engineer rather than jobs related to social sciences. This brought too much demand for jobs in industrial institutions; in this situation these institutions chose best graduates and that caused disappointment among majority of graduates because of too much demand for certain positions. Some Soviet scientists criticized the situation as "engineers had narrower and more task oriented vision and were less likely to question the objectives of their political mentors."[25]

While Soviet energy policy was executed in such domestic structure the output was analyzed carefully in the world due to its importance in the world. Soviet foreign petroleum trade was implemented via Soiuznefteeksport under the Soviet Foreign Ministry. There were four firms under Soiuznefteeksport each of which dealt with different regions. These were Euronafta dealing with Western Europe; Internafta dealing with Eastern Europe, Vostoknafta dealing with Africa, the near East and the

[24] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.260, 261.

[25] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.252, 253.

Middle East, and Dalnafta dealing with the Far East and America.[26] Also Zarubezhneft, established by the Ministry of Oil Industry in 1967, helped to develop oil industries in pro-Soviet countries like Algeria, Cuba, Iraq, Iran, Libya, Syria, Vietnam etc. for political benefits.[27]

One of the most important developments about Soviet energy policy was the construction of *Druzhba* pipeline between 1960 and 1964. The pipeline system created a new dimension of interdependence among communist states and USSR. The pipeline system, still the longest pipeline in the world with 5,327 km length, has a route including Bulgaria, Hungary, East Germany, Poland and Czechoslovakia. Second branch (Adria Pipeline between Yugoslavia and Hungary) united with *Druzhba* in 1974.[28] Soviet Union also sold oil to Western Bloc however there was a huge price difference between oil prices that Soviets sold to Eastern Bloc and Western Bloc also crude oil price of Soviets was even cheaper than OPEC crude oil prices.[29] There were several reasons for this policy:

First of all, according to Klinghoffer, Soviets wanted to create a dependency in Western Bloc for Soviet crude oil so that it could divide the bloc and prevent decisions against Soviet Union.[30]

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[26] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.216.

[27] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.104.

[28] Pipelines International, (2009). *Druzhba Pipeline*, available at: <http://pipelinesinternational.com/news/druzhba_pipeline/008045/> (accessed on June 9, 2012).

[29] Robert E. Ebel, (1970). *Communist Trade in Oil and Gas An Evaluation of the Future Export Capability of the Soviet Bloc*, New York, Washington, London, Praeger Publishers, p.57.

[30] Klinghoffer, Jay Arthur, *The Soviet Union & International Oil Politics*, New York, Columbia University Press, 1977, p.82.

Second, Soviet Union needed new technology - innovation for its industry and with the currency that Soviets got they imported goods and technologies that their industry needed.[31]

Third, Soviet crude oil was more expensive for Eastern Europe because Soviet Union was a raw material supplier for industries of Eastern European countries and Soviets provided subsidized raw material and equipment sold expensive oil and bought the end products with this money.[32]

Table 1. Average Prices Paid for Soviet Crude Oil by Different Country Groups

Source: Robert E. Ebel, (1970). *Communist Trade in Oil and Gas An Evaluation of the Future Export Capability of the Soviet Bloc*, New York, Washington, London, Praeger Publishers, p.58,59.

YEAR	**Price for Communist Countries ($/b)**	**Price for non-Communist Countries ($/b)**	**YEAR**	**Price for Communist Countries ($/b)**	**Price for non-Communist Countries ($/b)**
1955	3,38	2,16	1962	2,52	1,26
1956	3,30	2,17	1963	2,55	1,43
1957	3,28	2,55	1964	2,57	1,41
1958	2,97	2,08	1965	2,42	1,40
1959	3,01	1,88	1966	2,18	1,39
1960	3,01	1,57	1967	2,10	1,50
1961	2,54	1,26			

Cheap oil prices of Soviet Union disturbed OPEC countries after 70's however both sides could sustain a relationship without any hostility. Soviet Union had also an important advantage. The Soviet Union could manage foreign trade via barter, as a result for the countries especially third world countries that had little currency barter

[31] Robert E. Ebel, (1970). *Communist Trade in Oil and Gas An Evaluation of the Future Export Capability of the Soviet Bloc*, New York, Washington, London, Praeger Publishers, p.82.

[32] Robert E. Ebel, (1970). *Communist Trade in Oil and Gas An Evaluation of the Future Export Capability of the Soviet Bloc*, New York, Washington, London, Praeger Publishers, p.68.

method was essential for goods and technologies that they needed. None of the Western oil companies could execute such trade because of their structures.

There was a similar picture for Soviet natural gas trade: There was the idea to export Soviet gas to Western Europe, however this idea of dependency to Soviet Union worried Western countries. In 1967 the first export pipeline was laid to Czechoslovakia called as *Bratstvo* (Brotherhood). Following this, in 1968, the Austrian energy group OMV signed a long-term contract for gas deliveries. In 1970, the USSR closed the famous "gas for pipes" deal with the West German company Ruhrgas, and during 1973-1974, Soviet gas reached West Germany, France, and Finland.[33]

Figure 3. Druzhba Pipeline (with the connection of Adria Pipeline) with current borders

Source: Pipelines International, (2009). *Druzhba Pipeline*.

There were also some constraints in Soviet energy policy within the framework of oil and gas: first, Soviet technology was very ineffective, and Soviet oil reserves were far away from populated areas which caused rise of cost of transportation was very high, these increased cost of production and transportation. Also bureaucratic rivalries can also be evaluated as a weakness.

[33] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.104.

To sum up Russia inherited from Soviet Union some important features that influence today's Russia; first of them is a complex decision making process in energy policy where there was a huge political consideration in addition to economic consideration. Second, directors or oligarchs of oil and gas companies grew up with the ideas of Soviet era. These people mainly created Soviet-type but capitalist companies. Third, Russia inherited infrastructure of Soviet oil and gas industry including Soviet technology and pipeline system. Both of them are very clumsy and inefficient. However till new pipelines constructed in the regions of Former Soviet Union (especially in Central Asia) all pipelines had direction to the center of Soviet Union and this became a trump for Russia in energy diplomacy/pricing with these countries in 1990's.

2.2. Post-Soviet Transformation in Russia

Russia underwent huge transformation in the last decade of 20th century. The impact of the transformation from socialism to capitalism caused important problems in Russian society. Only a minority of the population benefited from the transformation of the country enormously. The political figure of the transformation was Boris Yeltsin, he used his charisma that he gained during the August Coup and supported shock therapy to transform his country into a capitalist country. Although the shock therapy was not the only choice to transform country, Yeltsin, Gaidar and his reformist staff chose this way that also destroyed the old system very fast.[34]

[34] Pınar Bedirhanoğlu, (2004*). The Nomenklatura's Passive Revolution in Russia in the Neoliberal Era*, (ed.)Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon., p.22, 23.

Yeltsin focused mainly on economic reforms rather than democratization[35] and prevented demands of democracy supporters until he needed support to stay in office.[36] In 1992 Russia became a member of IMF and economic policies of Russia were implemented with the supervision of IMF that provided Yeltsin administration financial funds in essential times (especially before elections). In 1992 price liberalization was declared and led to hyperinflation. Economides describes a situation with a diary from Mentsov:

> "(S)even days after Gaidar's price liberalization Yeltsin traveled to Nizhny Novgorod. The city… was in an uproar over the drastic price rises. It was total madness. Prices had increased six-fold…. Yeltsin… insisted on walking around the town center to discover first hand how his electorate was responding the shock therapy. (When Yeltsin went into a grocery store) Old ladies threw themselves out him (Yeltsin) and began to shout 'how can this be? Why are the prices so high'(….)Their anger horrified Yeltsin who just months before had been the nation's most heroic defender from a hard line putsch, received rapturously wherever he went. Alarmed, the president responded with the authoritarianism…"[37]

Quality of life in Russia decreased very rapidly. Finding primary goods was too difficult, as a result, black market increased, life expectancy in the country and level of production felt sharply in addition to that composition of Russian exports was like a third world country, because of dominance of raw material.

Within this framework social structure was deteriorated a lot. In addition to that overambitious efforts of Yeltsin in Chechnya caused a war against Chechnya to prevent secession of Chechnya between 1994 and 1996. Russia could not win anything in this effort and the result was very traumatic. First, Russia, the continual state of Soviet Union was defeated by small amount of people of former Soviet

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[35] Pınar Bedirhanoğlu, (2004). *The Nomenklatura's Passive Revolution in Russia in the Neoliberal Era*, (ed.)Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon., p.22.

[36] Pınar Bedirhanoğlu, (2004). *The Nomenklatura's Passive Revolution in Russia in the Neoliberal Era*, (ed.)Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon., p.22.

[37] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.358.

Union. Second, the war showed that from army to judicial institutions all Russian institutions were exhausted and during the war this disorganized structure caused lots of casualties. Third, and maybe the most tragic one, after the war injured people could not get good enough medical services and assistance for integration to social life.

In Russian economy privatization efforts started in 1992. However there was no healthy environment for privatized small businesses, especially for ordinary people who bought assets of these businesses, because hyperinflation eroded their assets. Within these conditions only one group won in terms of ownership: "financial and industrial groups known as oligarchs." Privatizations that took place between 1992 and 1994 aimed to reduce the number of inefficient enterprises to decrease financial burden of them and create funds for budget deficit.[38]

Industrial groups opposed the methods of privatization. They claimed that this scheme destroyed productive base, so they wanted to control 51% share of enterprises… In the end their expectations were fulfilled because they got majority shares or they became "de facto" managers."[39]

Hyperinflation created very lucrative opportunities for financial elites rather than industrial nomenklatura in 1990's. Especially loan for share program created huge profits. Loan for share program established to increase revenues to solve budget deficit by taking loans from banks; banks acquired management control over various

[38] Pınar Bedirhanoğlu, (2004). *The Nomenklatura's Passive Revolution in Russia in the Neoliberal Era*, (ed.)Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon., p.25.

[39] Pınar Bedirhanoğlu, (2004). *The Nomenklatura's Passive Revolution in Russia in the Neoliberal Era*, (ed.)Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon., p.25.

state enterprises, operating and other natural resources for a temporary period. An important point in this program was that: when state failed to pay its debts, the banks could sell their shares to get their money "in accordance with this agreement" state did not pay its debts and Russian oligarchs got the control of state enterprises. In this respect loan for share program became a method of privatization. Another important point, the banks participated on loan for share program were selected with the presidential decree on August 31, 1995 that started also loan for share program. Vladimir Potanin's ONEKSIMbank, Mikhail Khodorkovsky's Menatep Group; Boris Berezovsky's LogoVAZ were most prominent participating groups.[40]

In 1996 and 1997 shares of many state enterprises were acquired by the banks and their managers. In this process ONEKSIMbank got important shares of Sidanko Oil and Norilsk Nickel; Menatep, YUKOS Oil and LogoVAZ together with Alexandr Smolenski's SBS Agro, Sibneft Oil… These banks - financial groups acquired the shares of these companies almost for free however they provided political support for Yeltsin.[41] In 1996 elections Yeltsin won the elections despite his terrible image in public, IMF support and TV propaganda operated by Gusinski and Berezovsky kept him in office.

> "(According to Marshall Goldman) Russian oligarchs are separated into two groups: *nomenklatura* and upstart oligarchs. The first group consists primarily of former members of the Communist elite. Typically they had been senior officials in a government ministry or regional industrial administration. Using the loan for shares opportunity, they arranged for the transformation of several state enterprises enter private joint-stock companies and then appointed themselves as managing officers…"[42]

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[40] Pınar Bedirhanoğlu, (2004*). The Nomenklatura's Passive Revolution in Russia in the Neoliberal Era,* (ed.)Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon., p.32.

[41] Pınar Bedirhanoğlu, (2004). *The Nomenklatura's Passive Revolution in Russia in the Neoliberal Era,* (ed.)Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon., p.32.

[42] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.382.

Important oligarchs rooted from *nomenklatura* were R.Vyakhirev (in Gazprom) V.Chernomirdin (former prime minister) and V.Alekperov (Lukoil) who got lots of oil fields and refineries owned by the state with little payment.[43] Other group of oligarchs "the upstarts" includes A.Smolensky, V.Gusinsky, B.Berezovsky, M.Khodorjovsky, M.Fridman, P.Aven, R.Abramovich and O.Deripaska who acquired huge fortunes with a small starting capital by dark bargains and trade during the volatile times of Russia.[44]

To analyze the rise "the upstarts" rise of B.Berezovsky can be evaluated. Berezovsky took Russia's largest car manufacturer Autovaz (after the joint venture with Italian firm Logosystem - Logovaz) sold cars with foreign currency and also engaged in fictious export of the cars. When his new company AVVA went into bankrupt all shareholders except Berezovksy lost their money. Berezovsky continued his adventure with Aeroflot (the largest Russian airline), the Eastern-Siberian Oil and Gas Company, most of the Russian aluminum industry, and ORT (Russia's largest TV channel). When it was understood that a possible communist victory in elections could cause too many problems for oligarchs they including Berezovsky supported Yeltsin in 1996 elections.[45]

At the end of 90's less than twenty of the largest companies and banks controlled 70% of Russian economy and in 1997, six Russian entrepreneurs were on the Forbes list of the World's richest people.[46] In 1998 international and domestic debt stock of

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[43] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.358.

[44] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.383.

[45] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.384-385.

[46] Michael J. Economides, and Dona Marie D'aleo, (2008). *From Soviet to Putin and Back the Dominance of Energy in Today's Russia*, Houston, ET Publishing., p.381.

Russia became impossible to manage; before 1998 credits were used to prevent hyperinflation. Russia tried to reschedule debt payment calendar by changing short-term debts with long term debts with higher interest rates…[47] During this process IMF could not provide enough confidence in the country.[48] At the same time countries of South Eastern Asia faced a financial crisis as a short term debt management. Financial crisis vacuumed Russia and capital began to exit out of the country. There were internal reasons for economic crisis:

> " - failure of the budget revenues collection in 1998;
>
> - policy mistakes of the new governments;
>
> - continual fall of industrial production;
>
> - sharp deterioration of the trade balance;
>
> - outburst of social protest by miners , teachers and students;
>
> - Soros's speculations about an imminent devaluation."[49]

According to B.Kagarlitsky economic crisis in 1998 made Russia a part of the global system (because of the economic crisis in South Eastern Asia) and Russia was a country with first world social structure and third world economy. Housing healthcare and education systems inherited from Soviet Period provided some basic services at a level comparable with West but salaries remained almost at African level (average of salary $100 a month in 2001). In addition to that ownership structure of Russian economy became more oligarchic.[50] In this framework Yeltsin

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[47] Anastacia Nesvetailova, (2004). *Globalization Po-Russki or, What Really Happened in August 1998* (ed.) Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon, p.43-44.

[48] Anastacia Nesvetailova,(2004). *Globalization Po-Russki or, What Really Happened in August 1998* (ed.) Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon, p.44.

[49] Anastacia Nesvetailova,(2004). *Globalization Po-Russki or, What Really Happened in August 1998* (ed.) Leo McCann, Russian Transformations: Challenging the Global Narrative, RoutledgeCurzon, p.46.

[50] Boris Kagarlitsky, (2006). *Russia in Globalized System*, Ankara Üniversitesi Dergisi, 61-1. p.224-225. available at: <http://dergiler.ankara.edu.tr/dergiler/42/444/4978.pdf> (accessed on June 9, 2012).

declared that he left his post in 1999 to Prime Minister Putin. Putin controlled an exhausted country however this was not an end; it was a start after Yeltsin Era.

2.3. The Impact of the Russian Transformation to its Energy Sector

The transition that Russia underwent, also affected energy sector. In transition from socialism to capitalism the logic of the economy had to change in general. In this respect many important problems emerged for energy sector: "the sale of assets, the control and liberalization of price structure, the receipt of tax revenues and the international effects of exports and also internal impact of the global financial system."[51]

In 1992 ministries of USSR about energy were united under the label of "Ministry of Fuel and Energy" the aim of the ministry was to enact legal documents to regulate Russian energy sector.[52] Main power in the sector was in the hands of production associations and on November 17, 1992 with the Presidential Decree 1403, Production Associations of USSR transformed into state-owned joint-stock companies. Their capital divided into 25% preferred shares and 75% ordinary share whose 51% (38% of total shares) were kept under federal ownership for 3 years. The remaining shares were distributed among staff and managers and sold in voucher auctions. Also foreign participation to privatization of Russian oil corporations was limited to 15%.[53]

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[51] David Lane, (ed.), (1999). *The Political Economy of Russian Oil*, Rowman & Littlefield Publishers, Inc. USA. p.16.

[52] David Lane, (ed.), (1999). *The Political Economy of Russian Oil*, Rowman & Littlefield Publishers, Inc. USA. p.16.

[53] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.1. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

Within the framework of Presidential Decree 1403 privatization of the production associations was executed and first comers to privatization auctions were heads of the oil production associations with strong communist party background. There was another important point of the presidential decree: important oil companies that became major players in Russian energy market, were established with this decree. Rosneft was established with the unification of 32 oil production associations and 29 refineries as an exploration and production (upstream) company. Also Transneft and Transnefte product (crude oil and petroleum products transporter) were established. However more important ones were three vertically-integrated companies, active in whole production cycle from oil well to gasoline-filling stations. These companies were Lukoil, Yukos and Surgutneftegas.[54]

A temporary structure was established with the presidential decree. However the non-payment crisis from 1992 to 1994 was regarded in Russia. Non-payments problem in Russian oil sector was the result of two problems: inconsistent price liberalization policies and the burden of taxes and levies.[55] Before 1992 for producers use of lands and mineral rights were free. However they faced a lot of taxes after 1991. By the end of 1992 total payments had reached 69% of the exfield gate wholesale enterprise price. This burden forced enterprises to operate at a loss of approximately 327 rubles per ton.[56]

While burden of taxes, levies and duties were increasing, supplier prices increased too. However retail prices remained constant at the level of 1990. In 1991 production

[54] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.1. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

[55] Jennifer I Considine and William A. Kerr, (2002). *The Russian Oil Economy*, Cheltenham: Edward Elgar. p.288.

[56] Jennifer I Considine and William A. Kerr, (2002). *The Russian Oil Economy*, Cheltenham: Edward Elgar. p.251.

costs reached to 98.2% of whole sale prices. In this case money shortfalls were regarded in oil sector that caused even shortage of equipment. According to J.Considine, non-payments problem has been aggravated by some considerations:

> "1) The lack of uniform accounting procedures and bankruptcy laws;
>
> 2) Friction in the banking system which has resulted in delays of up to six months for payment settlements;
>
> 3) Reluctance to pay under conditions of high inflation;
>
> 4) Financial difficulties of customers;
>
> 5) The lack of reliable short term financing instruments such as letters of credit and exchange;
>
> 6) Non-payment by public authorities.
>
> 7) Heavy reliance on barter as a means of managing cash flows. "[57]

In this respect 10-20% of domestic oil deliveries were paid in cash and 80-90% by barter or short term letters of credit and similar methods.[58] As a result of this crisis, exploration and production companies suffered a lot because of constant crude prices and increasing taxes. However companies engaged in downstream could earn money easier in comparison with upstream companies. Thus Russian government established new vertically-integrated companies and kept some shares of the companies to control them.[59]

Different production units united to establish vertically integrated companies, however these vertically integrated companies did not act as single units in the

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[57] Jennifer I Considine and William A. Kerr, (2002). *The Russian Oil Economy*, Cheltenham: Edward Elgar. p.288.

[58] Jennifer I Considine and William A. Kerr, (2002). *The Russian Oil Economy*, Cheltenham: Edward Elgar. p.288.

[59] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.2. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

industry, in other words the united elements worked with little interaction in terms of decision making and production. The breaking point in this process was the "loan for share program".[60]

Within the context of loan for share program from December 8, 1995, Group MENATEP bought shares of YUKOS, one of the prominent players in Russian energy market, gradually. Also Alfa-Group and Renova acquired 49% shares of TNK with $90 million equal to 1% of TNK's oil reserves. Surgutneftegas pension fund paid the tax debt of the company, $216 million, and provided $84 million loans, that means a total $300 million.[61]

Until 2000's the shape of the industry had the essence of private ownership. Among the most important exploration & production companies only Rosneft was under state ownership, in which case Yeltsin was not able to privatize the company because of the experience of old privatizations, that was regarded as an "unsuccessful policy" in public sphere. To understand the structure of the oil industry it is better to evaluate some companies as actors in Russian energy market.

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[60] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.2. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

[61] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.3. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

2.4. Major Russian Energy Companies in 1990's

Lukoil

Lukoil is the first oil company born from the ashes of Soviet Ministry of Oil. It was a voluntary merger of three Western Siberian producers Langepas, Urai, Kogalym and Luco refineries at Volgograd and Perm. The company transformed into a joint stock company with a government decree in 1993. The company was the biggest oil producer among Russian companies in 1990's.[62]

Despite the separation from the ministerial organization the company still keeps some features of old era. Some people call Lukoil as a Soviet-style company and Alekperov, as a "red director."[63] Western type of management was learned via investments outside Russia.[64]

In operational field dominance of Soviet style is regarded a lot.[65] In 2000 Lukoil acquired Getty Oil network of gasoline stations. A Western consultant describes the issue:

> "From government's point of view the Russian flag has been firmly planted on the East coast of the United States. That meant a lot, because in the 'shadow governor' or 'shadow minister' mentality that seems to exist at the high levels of Lukoil, that kind of nationalistic or ministerial portfolio is very, very important. So they have not broken away from that…

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[62] Isabel Gorst, (2007). *Lukoil: Russia's Largest Oil Company*, the James A. Baker III Institute for Public Policy of Rice University, p.6. available at: <http://www.bakerinstitute.org/programs/energy-forum/publications/energy-studies/docs/NOCs/Papers/NOC_Lukoil_Gorst.pdf> (accessed on June 9, 2012).

[63] Sarah Dixon, (2008). *Organizational Transformation in the Russian Oil Industry*, Cheltenham, Glos, UK, Northampton, MA, Edward Elgar, p. 132.

[64] Sarah Dixon, (2008). *Organizational Transformation in the Russian Oil Industry*, Cheltenham, Glos, UK, Northampton, MA : Edward Elgar, p.186.

[65] Sarah Dixon, (2008). *Organizational Transformation in the Russian Oil Industry*, Cheltenham, Glos, UK, Northampton, MA, Edward Elgar, p.126.

> Alekperov was Deputy Minister of Oil and Gas in the old days, so he still has an attachment to the importance of that thing. And I am sure if there was a way to have a new national oil company created he would love to be the person in change."[66]

In addition to that there were some different points in the success of the company. First, Vagit Alekperov is an experienced oilman. He was born in 1950 in Baku. His father was also an oilman. Since 1970's he had worked for oil industry of Soviet Union and he was at the age of 37, the general director of Kogalymneftegaz in 1987.[67] According to I.Gorst, Alekperov distinguished himself with his success and age; and in 1991 he was the head of Lukoil.[68]

Second, there is an undeniable reality for Lukoil in 1990's as a bright oilman Alekperov had important relations like V.Chernomyrdin in Kremlin, Moscow. V.Chernomyrdin was the prime minister from 1992 to 1998. He was also an oilman, former minister of natural gas industries and founder of Gazprom. He believed that an oil company as strong as Gazprom was essential. Gorst called the situation as "Lukoil had a protective godfather at the heart of the government."[69] On the other hand the relation was not one sided. In 1990's oil was a matter of business, not a strategic political product in Russian foreign policy, Russian administration used

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[66] Sarah Dixon, (2008). *Organizational Transformation in the Russian Oil Industry*, Cheltenham, Glos, UK, Northampton, MA, Edward Elgar, p.126.

[67] Isabel Gorst, (2007). *Lukoil: Russia's Largest Oil Company*, the James A. Baker III Institute for Public Policy of Rice University, p.38. available at: <http://www.bakerinstitute.org/programs/energy-forum/publications/energy-studies/docs/NOCs/Papers/NOC_Lukoil_Gorst.pdf> (accessed on June 9, 2012).

[68] Isabel Gorst, (2007). *Lukoil: Russia's Largest Oil Company*, the James A. Baker III Institute for Public Policy of Rice University, p.39. available at: <http://www.bakerinstitute.org/programs/energy-forum/publications/energy-studies/docs/NOCs/Papers/NOC_Lukoil_Gorst.pdf> (accessed on June 9, 2012).

[69] Isabel Gorst, (2007). *Lukoil: Russia's Largest Oil Company*, the James A. Baker III Institute for Public Policy of Rice University, p.7. available at: <http://www.bakerinstitute.org/programs/energy-forum/publications/energy-studies/docs/NOCs/Papers/NOC_Lukoil_Gorst.pdf> (accessed on June 9, 2012).

Lukoil as a "petroleum ambassador of Russia" firstly in "near abroad especially in Caspian region."[70]

This type of policy -close relation with Kremlin- provided Lukoil low production cost and customers outside Russia that can afford to pay their debts, while there were high production costs including taxes and duties, and non-payment crisis of 93-94 in Russia. For Russian administration this relation gave chance to have influence on Russia's traditional zone of interest - "near abroad" especially in Caspian Region and to control "export routes of this landlocked region".[71] In this context Lukoil was perceived as a counter balance against foreign powers in the region.[72]

In addition to upstream investments in foreign countries Lukoil acquired 12.5% of Caspian Pipeline Consortium that built pipeline from Kazakh oilfields to Novorossiysk, through LukARCO joint venture, also Petrotel refinery in Romania, Neftokhim Burgas in Bulgaria and Odessa Refinery in Ukraine were bought by Lukoil.[73] As a result Lukoil was the shining star of Russia in 1990's despite many difficulties that the company faced in the country.

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[70] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.104.

[71] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.105.

[72] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.105.

[73] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.105.

Table 2. Lukoil's involvement to foreign projects in 1990's

Source: Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.106.

Project/Country	**Project Timeframe**	**Lukoil's Share**	**Other Participants**
Azeri-Chirag-Guneshli (Azerbaijan)	1994-2024	10% (in 2003 Lukoil sold its shares to INPEX)	BP (34.1%) Chevron (10.3%) SOCAR (10%) Statoil (8.5%) ExxonMobil (8%) TPAO (6.8%) Devon Energy (5.6%) Itochu (3.9%) Amerada Hess (2.7%)
Shah-Deniz (Azerbaijan)	1996-2036	%10	BP (25.5%) Statoil (25.5%) Total (10%) NICO (10%) SOCAR (10%) TPAO (9%)
Yalama (Azerbaijan)	1998-2035	65%(operator) (The project was frozen in 2009)	SOCAR (20%) GDF SUEZ (15%)
Kumkol (Kazakhstan)	1995-2021	50%	CNPC (50%)
Karachaganak (Kazakhstan)	1995-2038	15%	BG Group (32.5%) ENI Group (32.5%) Chevron (20%)
Tengiz (Kazakhstan)	1997-2032	2.7% through LUKARCO (5%)	Chevron (50%) ExxonMobil (25%) KazMunaiGaz (20%)
Meleya (Egypt)	1995-2024	24%	EGPC (56%) IFC (20%)
West-Kurna 2 (Iraq)	1997-2020	68.5%	SOMO (25%) Zarubezhneft (3.25%) Mashinoimport (3.25%)

Rosneft

In 1991 Rosneftegas Corporation was founded instead of USSR Ministry of Oil Industry. First Lev Tchurilov then Alexander Putilov became the president of Rosneftegas. When privatization in Russian oil sector started with "Presidential Decree 1403" in November 1992 Rosneftegas became Rosneft.[74]

Rosneft controlled 259 out of 301 oil enterprises of Russia and had some additional tasks in comparison with other companies:

> "- assist operating and financial restructuring of joint-stock companies;
>
> - ensure stable deliveries of oil, gas and petroleum products for state needs;
>
> - represent interests of the state in managing boards of companies which shares it held in trust management;
>
> - coordinate state investments in the oil industry;
>
> - organize production of oil-field equipment;
>
> - facilitate inflow of capital into the sector by creating banks and investment companies;
>
> - promote R&D programs and develop international trade, etc."[75]

In 1993 Rosneft produced more than 60% of Russian domestic oil output, however there were hardships in Russian economy These hardships were non-payment crisis, disappearance of old command-centered type of industry and loss of hierarchical management culture and immature market conditions, and they caused Rosneft to fall

[74] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution***,** the James A. Baker III Institute for Public Policy of Rice University, p. 3. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[75] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p. 3. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

behind other companies.[76] Also in 1993-1994 during non-payment crisis new vertically integrated companies were established by separating production units from Rosneft.[77]

Table 3. Oil production of Rosneft

Source: Nina Poussenkova, (2007). Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution, the James A. Baker III Institute for Public Policy of Rice University, p. 84. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

Million tonnes	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Rosneft	18	16.7	15.2	14	12.9	12.8	12.5	12.1	11.9	12.6	13.4
Including											
Purneftegas	11.7	10.8	9.8	9.4	8.4	8.4	8.4	8.3	8.2	8.1	8.9
Sakhalinmorneftegas	1.9	1.8	1.6	1.5	1.5	1.5	1.4	1.6	1.5	1.4	1.4

Fall of Rosneft continued until 2000's. In 1995 Rosneft became a joint stock company with Government Decree 971. "Archangelskgeoldobyca (AGD) that held 21 licenses for oil fields, 2 licenses for diamond deposits in Timan Pechora" and co-owner of Polar Lights Joint Venture was transferred to Lukoil with the intermediation of MAPO-Bank in 1997.[78] Rosneft only purchased shares of Polar Lights Joint Venture.[79] Also Mayor of Moscow Yuri Luzhkov separated

[76] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p. 4. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[77] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p. 4. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[78] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p. 6. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[79] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p. 6. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

Mosnefteproduct by claiming prevention of manipulation gasoline prices by Rosneft in Moscow.[80]

In 2000 the Leuna project - construction of a refinery in East Germany with Elf and Russian companies, Rosneft, Surgutneftegas and Megionneftegas from Slavneft - failed because of late permission of the government needed for the project.[81] The company could not be privatized by chance; also administration of Rosneft was very unwilling for privatization. However private companies were willing to get the shares of Rosneft. In 1995 other private companies prevented Sidanco to get Rosneft; in 1996 Sidanco tried again; in 1997 Sibneft; in the same year in November Sidanco-BP, Gazprom-Shell-Lukoil groups tried to acquire Rosneft. In 1998 a new privatization plan was formulated, however it was also unsuccessful by chance.[82]

To sum up the company could not be privatized by chance and because of the conflicting interests between oil companies and oligarchs. However the company paid the cost of being a state company a lot. Each try of the administration of Rosneft to strengthen the company was prevented by other companies. In addition to that the lack of an oligarchic leader like Alekperov prevented a private, strong Rosneft. Administration of Rosneft was always loyal to Russian Administration. In this respect the breaking point for Rosneft was appointment of Sergei Bogdanchikov as the president of Rosneft in October 1998, he was the old general director of

[80] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p. 7. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[81] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p. 9. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[82] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.18,19. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

Sakhalinmorneftegas.[83] Bogdanchikov made the company more manageable. Then he sought to form a kind of "coalition" with Russian administration; however Primakov was not strong enough to support Rosneft, as a result Bogdanchikov had to wait until Putin came to power.

Yukos

Before the involvement of Khodorkovsky to Yukos the situation in the company was very problematic. According to observations of a western top manager of TNK-BP, the company was too problematic, production had been declining, salaries and cash flow were problematic before Khodorkovsky acquired the company.[84] Khodorkovsky started to be interested in Yukos with "the loan for share program". In 1995 the company was extremely inefficient. First financial unification in Yukos was achieved, so that units of Yukos could not spend any money themselves, in this context cost control began in the company.[85]

Under the supervision of Western advisors, restructuring process of Yukos started. Upstream units united under Yukos-EP in 1998; downstream units under Yukos-RM and planning-strategy were duties of Yukos-Moscow. Extra activities like drilling

[83] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.22. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[84] Sarah Dixon, (2008). *Organizational Transformation in the Russian Oil Industry*, Cheltenham, Glos, UK, Northampton, MA, Edward Elgar, p.53.

[85] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.23. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

construction or transportation divided into several service enterprises.[86] In operational side with the support of Western advisors and companies like Schlumberger and Fracmaster, Shell - via Joint Ventures; Yukos decreased production costs a lot; increased output levels of wells and adopted new technologies. Field recovery increased from 25-30% to 40-45% and daily output of all wells of Yukos increased to 202.9 barrels a day, while Russian average was 71.3 barrels a day in 2002.[87] In addition to that Yukos allocated lots of money for human resources. Staff of Yukos experienced and educated in best education institutions and Yukos gave responsibilities to these graduates.[88]

Despite the leadership of Lukoil in total crude oil production - Yukos could surpass Lukoil only one year - Yukos was the leader of innovation in Russian oil industry in 2000's. Yukos was like a Western type oil company in terms of both operational and managerial activities. The efficiency of the company was very high in comparison with other Russian companies. The only missing thing was in decision making bodies: Khodorkovsky transformed the company into a modern oil company however in every key decision Khodorkovsky was vital; the cost of this structure would be understood in coming years when Khodorkovsky was imprisoned.

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[86] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.23. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[87] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.24-26. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[88] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.27,28. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

Surgutneftegas

Surgutneftegas is a big question mark in terms of information on the company. According to Poussenkova Surgutneftegas is a unique phenomenon in Russia.[89] When "Surgutneftegas" is called, experts remember Vladimir Bogdanov, the general director of the company who gives the characteristic features to the company.

Bogdanov was appointed as "the general director of Surgutneftegas Production Association in 1984 at the age of 32; he became the youngest oil baron of the country."[90] With the loan for share program the pension fund of the company got the shares of Surgutneftegas and he stayed in office. Bogdanov as an experienced oilman in Russian oil industry knows everything about his company and did not try to change the managerial tradition in his company. As a result for each key decision he is essential.

The process of decision making of the company is not known very well however according to Poussenkova, it is known that Bogdanov is in the center of the decision making and businesses. He is hardworking and nationalistic; financially conservative that means he is not interested in stock market movements. Also he avoids being interested in high politics and participates to the social responsibility projects.[91]

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[89] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.7. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[90] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.7. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[91] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.21,22. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

The company usually does not participate on joint ventures with other especially foreign companies and financially the company is not transparent.[92] The company educates and trains its staff itself even if it is not possible to find trainers from Russian staff of Surgutneftegas who are trained in foreign institutions educates staff of the company.[93]

Table 4. Key Data from Russian Oil Companies

Source: David Lane, (ed.), (1999). *The Political Economy of Russian Oil*, Rowman & Littlefield Publishers, Inc. USA. p.21.

Company	**Number of Employees**	**Level of Vertical Integration**	**Retail Outlets (1995) $m**	**Revenue (1995) $m**	**Market Capitalization (June 1997) $m**	**Oil Extraction (1998) million tonnes**	**Reserves (1996) 1,000 bbl**
LUKOIL	107	High	712	6,470	13,386	54	13,460
YUKOS	110	Medium	940	4,785	5,553	34	14,875
Surgutneftegas	81	High	700	4,550	6,081	36	8,500
Rosneft	75	Medium	1,580	2,894	274	12.5	10,825

Gazprom

Gazprom was established in February 1993 in accordance with the presidential decree in 1992. The process was similar to the process in oil companies; 40% of shares were left to government for at least 3 years and 9% of the shares were set for

[92] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.21. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[93] Sarah Dixon, (2008). *Organizational Transformation in the Russian Oil Industry*, Cheltenham, Glos, UK, Northampton, MA, Edward Elgar, p.137.

foreign ownership. Remaining shares were for domestic investors and Gazprom's employees.[94]

Further privatization - or more specifically loan for share program - was not implemented for Gazprom because Russian government especially Chernomyrdin wanted to keep the company under control, also Chernomyrdin wanted to build a gas giant because natural gas was vital for Russian economy and domestic prices were very low in comparison with international prices. Furthermore the company provided huge money for government; only 2.5% of its additional shares were sold to Ruhrgas for close investment relations with Germany.[95]

The company faced a volatile process between private and public ownership. Despite the ambiguities of 1990's the company involved in foreign investments; there was a logical reason behind it: in Russia domestic natural gas prices were very low; in contrary in international markets it was higher and payments were regular in international markets when Russia faced the non-payment crisis. As a result, the company got more rents from international investments.

Gazprom established joint ventures with European companies: Wingas and WIEH with BASF's subsidiary, Wintershall; Fragaz with Gaz de France, Gasum with Neste in Finland; Volta with Edison and Promgaz with SNAM both in Italy among others. Gazprom bought 10% of interconnector consortium planned for shipment of 20

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[94] Nadejda Makarova Victor, (2008). *Gazprom: Gas Giant Under Strain*, Working Paper no:71, Program on Energy and Sustainable Development, Stanford University, p.48. available at: <http://iis-db.stanford.edu/pubs/22090/WP71,_Nadja_Victor,_Gazprom,_13Jan08.pdf> (accessed on June 9, 2012).

[95] Nadejda Makarova Victor, (2008). *Gazprom: Gas Giant Under Strain*, Working Paper no:71, Program on Energy and Sustainable Development, Stanford University, p.48. available at: <http://iis-db.stanford.edu/pubs/22090/WP71,_Nadja_Victor,_Gazprom,_13Jan08.pdf> (accessed on June 9, 2012).

billion cubic meter per year from Great Britain to continental Europe. In 1995 Gazprom had 21% of Western European market mainly with long term take-or-pay contracts and 55% of Eastern European market; "Gazprom behaved as a responsible member of "the European gas club" with lowest price and without any disruption.[96]

In addition to these investment and efforts Gazprom had also a different power: Monopoly on Russian natural gas pipelines. In Russia there has been no real competitor in natural gas markets. This situation has made Gazprom a real monopoly with its infrastructure in the country.

As a result of the dominance of Chernomyrdin, Gazprom protected its structure and strength. In 1997 Chubais and Nemtsov took Rem Vyakhirov from his post, then Chernomyrdin prevented the attempt. According to N.M. Victor, Gazprom was "de jure" a partly state company, but "de facto" under control of a small group of bureaucrats.[97] Main usage of state share has become visible in 2000's with Putin's energy policy.

2.5. Result of Post-Soviet Transformation

Although Cold War was not a kind of a conventional war; results of the end of the Cold War were very heavy like a conventional war for Russia. Russian economy has

[96] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.107.

[97] Nadejda Makarova Victor, (2008). *Gazprom: Gas Giant Under Strain*, Working Paper no:71, Program on Energy and Sustainable Development, Stanford University, p.49. available at: <http://iis-db.stanford.edu/pubs/22090/WP71,_Nadja_Victor,_Gazprom,_13Jan08.pdf> (accessed on June 9, 2012).

almost collapsed and the results of these years made Russian citizens the victims of the process. Only oligarchs benefitted from collapsed structure.

In energy sector, as a focus point for us privatization process consolidated the position of Russian oligarchs. There were, as above mentioned, two types of oligarchs in Russia: the upstarts and nomenklatura. However for oil and gas sector of Russia there can be a new classification. Poussenkova divides the oligarchs in oil and gas sector as "production gurus" and "financial whiz kids".[98]

In the first group there were Soviet minded oligarchs who focus on amount of production of oil and natural gas. However they are more sensitive about features of reserves that means they do not put overambitious (and also harmful for reserves) missions like *Gosplan* did. Also they use new management techniques, operational technologies and methods, when they needed those things.

Financial whiz kids, the second group, mainly focus on stock market movements; they attached importance to financial transparency and new managerial, operational methods that improve efficiency in their companies. Because of these reasons they were leaders of innovation in energy sector. 90's were years of financial whiz kids mainly they could manipulate political area; used corrupted relations for more benefit. Their companies became Russian "western-type" companies. Russian administration did not care capital-oriented moves of financial whiz kids in 90's

[98] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.4, 5. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

In 90’s energy sector was perceived as a matter of business not a matter of politics in Russia. Also the position of the state was very volatile, Russian administration faced hardships even in tax collection. In internal politics, in addition to economic problems, separatism became a problem… In foreign policy “near abroad” was named however Russian administration had lack of instruments to influence the region because of restructuring state apparatus. In this context Lukoil and Gazprom were active in energy field in the region. However state control on these two companies was not so strong in 90’s in comparison with 2000’s.

The economic crisis in 1998 symbolized the downfall of the economy however politics in Russia was as bad as economics in the country. The importance of this economic crisis was that before Putin came to power the country was in a hard position and it was ready for recovery. When Putin came to power he found a country in worst situation.

CHAPTER 3

ENERGY PROFILE OF RUSSIA

Russia is an important country with its oil, natural gas and coal reserves. The country has a lot reserves and it produces these resources not only for domestic use but also for international trade and politics. In this framework reserve richness of Russia provides advantages and draws borders of opportunities for Russian energy policy; to understand the importance of Russian energy potential, energy profile of Russia is analyzed per energy types in this chapter. Methodologically first energy profile of Russia in 90's and then in 2010's is evaluated to provide comprehensive information.

3.1 Oil

In 2000 Russia had 59 billion barrels - 6.7 billion tonnes oil reserves, this amount is the 4.7% of world total oil reserves in 2000.[99] According to IEA survey in 2000, most of the oil reserves of Russia are in Western Siberia - 72% of total reserves. The rest of the reserves are in "Volga Ural Region (14%), Timan-Pechora Basin (7%), East Siberia (4%) and 3% of the oil reserves in the Pechora Sea, the Sakhalin shelf and North Caucasus and Kaliningrad".[100]

[99] IEA, (2002). *Russia Energy Survey 2002*, p.70. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[100] IEA, (2002). *Russia Energy Survey 2002*, p.72. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

In 2010 Russian oil reserves are estimated as 77 billion barrels by IEA.[101] Ultimately recoverable resources are at around 480 billion barrels and 144 billion barrels of them have already been produced. In 2010, Western Siberia has 65% of total oil reserves. However there are some points that have to be kept in mind: Russian reserves are mainly in mature fields and rate of recovery diminishes, unless new technologies that increase recoverable oil resources are used.[102] In addition to that new oil fields are smaller fields in comparison with old fields, this brings cost increases in taking to production phase, this is the typical problem in Eastern Siberia and offshore fields.[103]

Table 5. Russian Oil Reserves by Regions in 2010

Source: IEA (2011), World Energy Outlook 2011, p.289.

	Proven reserves*	Ultimately recoverable resources	Cumulative production	Remaining recoverable resources		
				Total	Share	Share per ABCD**
Western Siberia	48	266	80	186	55%	55%
Volga Urals	16	81	51	29	9%	10%
Timan Pechora	4	28	5	22	7%	7%
Eastern Siberia	5	21	0	21	6%	14%
Sakhalin	2	9	1	7	2%	3%
Caspian	2	25	5	20	6%	5%
Barents Sea	0	18	0	18	5%	3%
Other offshore Arctic	0	30	0	30	9%	3%
Others	0	2	1	0	0%	0%
Total Russia	**77**	**480**	**144**	**336**	**100%**	**100%**

*Proven reserves are approximately broken down by basin based on company reports.**This column is an IEA estimate based on the Russian classification system taking into account recovery factors and the probabilities of the various categories to estimate a mean value.

[101] IEA (2011), *World Energy Outlook 2011*, p.288 available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012)

[102] IEA (2011), *World Energy Outlook 2011*, p.289. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[103] IEA (2011), *World Energy Outlook 2011*, p.300,301. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

Russian was the third biggest oil producer with 323 million tonnes of oil in 2000. Russian oil production was volatile in 1990's mainly because of the structural transformation that the country and companies underwent. Also oil fields of Russia are mainly old fields and new fields are smaller than old ones which bring more cost of infrastructure for the industry. However in the late 90's oil prices started to increase and Russian oil companies gained an opportunity of low costs because of devaluation, a result of the economic crisis in 1998.[104]

IEA evaluates history of oil production of Russian Federation in two phases: first phase is from 1990 to 2006. In this phase Russian companies adopted new techniques and used efficient technologies especially in Western Siberia. Second phase is "time for new production fields" like Timan Pechora, Sakhalin and more recently Eastern Siberia "while production in Western Siberia remained the same or decreased".[105] It is not expected that oil production level of Western Siberia does not increase in the future, because the field is aging and production level of the field decreases because of this reason, however this field keeps its position as the biggest production field of Russia in the future; however new technology for more effective production in the field is essential, in this respect tax regime is very determined on new investments to attract new technology.[106]

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[104] IEA, (2002). *Russia Energy Survey 2002*, p.73,74. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[105] IEA (2011), *World Energy Outlook 2011*, p.293. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[106] IEA (2011), *World Energy Outlook 2011*, p.294. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

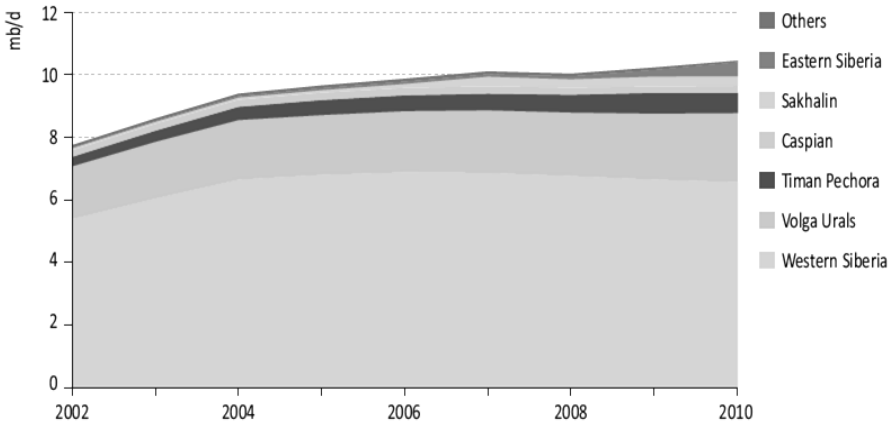

Figure 4. Russian Oil Production by Regions

Source: IEA (2011), *World Energy Outlook 2011*, p.293.

According to IEA, in 2000 there were 28 refineries and many oil processing facilities in Russia. Primary distillation capacity of these refineries was 296 million tonnes that was the 87.5% of 1990's capacity in 1999.[107] In these refineries mainly Russian equipment is used. Refinery products are the mirror of development in the sector, heavy petroleum products especially mazut dominated Russian sector. Within the framework of the output of these refineries, share of premium products was 64.3% in 1998, which is 85% in western countries.[108] 129.7 million tonnes of oil consumed in 2000. This amount is almost the half of the oil consumption in the last years of Soviet Union. Oil demand of Russia underwent structural changes, share of oil in electricity production and in industry declined at the same time, share of oil increases in transportation sector.[109]

[107] IEA, (2002). *Russia Energy Survey 2002*, p.101. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[108] IEA, (2002). *Russia Energy Survey 2002*, p.101. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[109] IEA, (2002). *Russia Energy Survey 2002*, p.103. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

Russia had 40 oil refineries with a total crude oil processing capacity of 5.4 million b/d in 2009 with Oil&Gas Journal data.[110] Most of the Russian refineries are very inefficient, aging and need modernization.[111] Rosneft, the largest refinery operator controls 1.3 million b/d and operates Russia's largest refinery, the Angarsk facility with 385,176 b/d capacity; other companies with sizeable refining capacity in Russia include Lukoil (975,860 b/d), and TNK-BP (690,000 b/d).[112] Russian administration urges oil companies to invest on refinery sector. In addition to these 40 oil refineries, in October 2010, Russia opened a major petrochemical production facility first stage of Nizhnekamsk petrochemical facility.[113] In 2010 oil consumption was 147.6 million tonnes, which means a 9% increase in comparison with 2009.

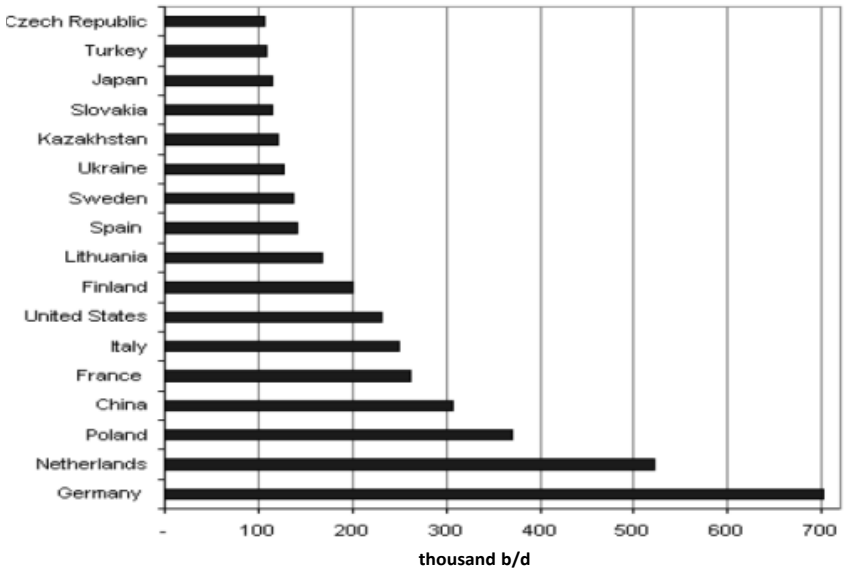

Figure 5. Top Importers of Russian Crude Oil in 2009

Source: EIA, (2010). Russia Country Analysis Brief, p.4.

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[110] EIA, (2010). *Russia Country Analysis Brief*, p.2, available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

[111] Global Business and Investment Center, (2010). *Russia Energy Sector Handbook*, Strategic Information and Important Developments, Vol. 1, USA, p.12.

[112] EIA, (2010). *Russia Country Analysis Brief*, p.2,3. available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

[113] Sergei Biagov, (2011) *Russia Seeks Refinery Sector Modernization*, Eurasia Daily Monitor Volume: 8 Issue: 151. available at: <http://www.jamestown.org/single/?no_cache=1&tx_ttnews[tt_news]=38287> (accessed on June 9, 2012).

As a continental country Russian oil trade with other countries dominated by pipelines. Transneft is the monopoly on Russian pipeline structure. Russian crude oil exports in 2000 were 143 million tonnes. Largest customers of Russian oil were Germany, Italy, France, Finland and UK.[114] In 1990's Russia was the biggest oil supplier for EU markets with 33% share. However pipeline system for exports to Asia-Pacific was not developed and the structure of pipeline system was old.[115]

Figure 6. Major Oil Fields and Supply Infrastructure in Russia

Source: IEA (2011), *World Energy Outlook 2011*, p.297.

In 2009, Russia exported 7 million b/d of oil, "80% of it was destined to Europe especially to Germany and Netherlands, around 12 percent of Russia's oil exports carried to Asia; 6 percent are exported to America, 5 percent of total export was to

[114] IEA, (2002). *Russia Energy Survey 2002*, p.92. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[115] Leonard Coburn, L. Igor Danchenko and Vladimir Milov, (2006). *Russia's Energy Policy 1992-2005*, Eurasian Geography and Economics, 47, No. 3, pp. 285-313. p.294.

USA".[116] Transneft transported 90% of total produced oil. As a monopoly on Russian oil pipeline system Transneft's control includes a number of export pipelines like Druzhba, Baltic Pipeline System, North-Western Pipeline System and Baku-Novorossiisk pipeline. Only Tengiz-Novorossiisk pipeline[117] is not under monopoly of Transneft.[118] In addition to these pipelines first phase of Eastern Siberia-Pacific Ocean (ESPO) pipeline (1,491 mile with 600,000 b/d capacity) is completed by Transneft in September 2010.[119] After the construction of second phase, it is expected that oil trade to China increases a lot.

3.2 Natural Gas

Russia had the largest natural gas reserves in the world with 46.9 tcm in January 2001, this amount is the 27.4% of the world natural gas reserves. Gazprom is the biggest gas company in the sector. According to IEA statistics Gazprom controlled 64.4% of natural gas reserves in 2001.[120]

In 2010 Russian natural gas reserves are estimated 45 tcm. Western Siberia has the majority of natural gas reserves with 39%. All the biggest Gazprom fields are in this

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[116] EIA, (2010). *Russia Country Analysis Brief*, p.4. available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

[117] This pipeline is owned by Caspian Pipeline Consortium.

[118] EIA, (2010). *Russia Country Analysis Brief*, p.4. available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

[119] EIA, (2010). *Russia Country Analysis Brief*, p.4. available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

[120] IEA, (2002). *Russia Energy Survey 2002*, p.111.available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

field and there are important big fields that have not been evaluated deeply like Barents and Kara Seas close to Western Siberia field.[121]

Table 6. Natural Gas Reserves by Regions in 2010

Source: IEA (2011), *World Energy Outlook 2011*, p.313.

	Proven reserves*	Ultimately recoverable resources	Cumulative production	Remaining recoverable resources		
				Total	Share	Share per ABCD**
Western Siberia	22	59	18	41	39%	53%
Volga Urals	1	5	1	4	3%	1%
Timan Pechora	1	3	1	2	2%	2%
Eastern Siberia	1	7	0	7	7%	18%
Sakhalin	1	3	0	3	3%	3%
Caspian	1	7	1	6	6%	7%
Barents Sea	0	23	0	23	21%	7%
Other offshore Arctic	0	20	0	20	19%	9%
Others	0	1	0	1	1%	0%
Total Russia	**26**	**127**	**21**	**106**	**100%**	**100%**

*Proven reserves are approximately broken down by basin based on company reports. **This column is an IEA estimate based on the Russian ("ABCD") classification system taking into account recovery factors and the probabilities of the various categories to estimate a mean value.

In 2000 Russian gas production was 528.5 bcm. Main production field of gas that accounted for 85% of total production in 2000, was Nadym-Pur-Taz field in Western Siberia.[122] These fields were aging production fields and because of declining production level new discoveries were essential. Main gas producer of Russia in 2000 was Gazprom as it is now.

[121] IEA (2011), *World Energy Outlook 2011*, p.303. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[122] IEA, (2002). *Russia Energy Survey 2002*, p.112. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

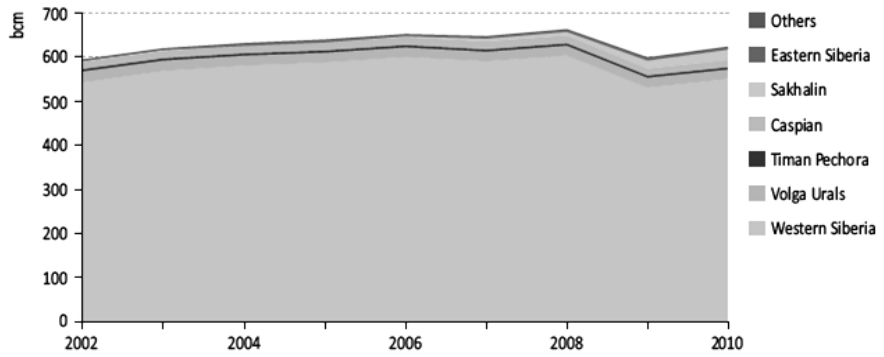

Figure 7. Gas Production Trends by Region from 2002-2010

Source: IEA (2011), *World Energy Outlook 2011*, p.305.

Russian natural gas production was 637 bcm in 2010.[123] According to IEA, Russia has developed satellite fields in Western Siberia to fulfill its export commitments and domestic demand, this execution was a need for Russian natural gas sector because of aging fields.[124] There are also giant natural gas projects like Yamal and Shtokman LNG projects in Russia. Yamal project is developed by Novatek - Gazprom and Shtokman project is developed by Gazprom; both companies look for future consumers for these natural gas projects. In addition to that, position of Gazprom continues in the future, despite it's the expectation of decreasing dominance of the company.[125]

From the dissolution of USSR till 2000 there has been a gradual decline in natural gas consumption of Russia. According to BP statistical review of World Energy 2011, natural gas consumption 418.2 bcm in 1991, was 354 bcm in 2000. In Russia,

[123] IEA (2011), *World Energy Outlook 2011*, p.304. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[124] IEA (2011), *World Energy Outlook 2011*, p.305. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[125] IEA (2011), *World Energy Outlook 2011*, p.305. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

natural gas is used mainly in power plants, industry and in residential sector. The main problem of this usage is clumsy technology that Russians have been using.

In comparison with 2000, Russian natural gas demand increased 17% and was 414.1 bcm in 2010. This is a 6.3% increase in comparison with 2009.[126] Historically Russia exports gas to two main markets: the CIS and Baltic countries, and European countries. All Russian gas sales outside the CIS and Baltic countries are sold by Gazprom's export affiliate, Gazexport. Gazprom still sells some natural gas to the FSU and Baltic countries, however Itera was increasingly taking over these markets in 1990's. In 2000 129 bcm, 59.2% of total Russian exports were to European countries mainly through pipelines in Ukraine. Because of the problems in the post-Soviet era with Ukraine about transit gas Gazprom constructed alternative routes until 2000 - notably via Belarus and across the Black Sea to Turkey - to overcome these transit problems.[127]

In 2010 there were nine major pipelines in Russia, seven of which are export pipelines. The Yamal-Europe I, Northern Lights, *Soyuz*, and *Bratstvo* pipelines with a combined capacity of 4 Tcf, carry Russian gas to Eastern and Western European markets via Ukraine and/or Belarus. Other pipelines, Blue Stream, North Caucasus, and Mozdok-Gazi-Magomed connect Russia's production areas to consumers in Turkey and FSU republics in the east.[128] In addition to these pipelines construction of

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[126] BP, (2011). *BP Statistical Review of World Energy June 2011*, p.23, available at: <http://www.bp.com/assets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/pdf/statistical_review_of_world_energy_full_report_2011.pdf> (accessed on June 9, 2012).

[127] IEA, (2002). *Russia Energy Survey 2002*, p.135. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[128] EIA, (2010). *Russia Country Analysis Brief*, p.8. available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

the Nord Stream pipeline was finished and opened on October 8, 2011. This is the longest subsea pipeline in the world with 1,222 kilometres.[129]

Figure 8. Major Gas Fields and Supply Infrastructure in Russia

Source: IEA (2011), *World Energy Outlook 2011*, p.313.

3.3 Coal

Russia is an important country with its coal reserves, the country "was the sixth-largest producer of hard coal" with 5% of world production, after China, the United States, India, Australia and South Africa and "eighth-largest hard-coal exporter" in 2000.[130]

In 2000, the Russian government estimated its proven recoverable coal reserves at just over 157 billion tonnes. Hard coal includes anthracite (49 billion tonnes), brown

[129] EIA, (2010). *Russia Country Analysis Brief*, p.8. available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

[130] IEA, (2002). *Russia Energy Survey 2002*, p.149. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

coal (97.5 billion tonnes) and lignite (10.5 billion tonnes) in 2000. Coal producers controlled only 11.3 billion tonnes in terms of international quality standards. Coal in Western Russia is generally costly to extract because of the structure of reserves. In Eastern Russia and Siberia coal extraction is more feasible in comparison with Western Russia, however reserves in Siberia are far away from consumption centers. Russia's main coal basins are explained below with their technical features.

- "Kuzbass Basin: (44% of 1999 production) The main coal-producing area of Russia, the basin contains more than 65% of Russia's total hard-coal reserves. This basin is located in West Siberia coal of the region has high quality, with low sulphur, inherent moisture and ash content. However the region is far from consumption centers.
- Kansk-Achinsk (KATEK): (15% of 1999 production) Located several hundred kilometres east of the Kuzbass basin, this Central Siberian region's large reserves of brown coal come mainly from open-cast mines. This coal is more suitable for on-site consumption for power generation;
- East Siberia and the Far East: (Almost 14% and 12% of 1999 production, respectively) These areas produce both hard and brown coals;
- Pechora Basin: (8% of 1999 production) Mostly above the Arctic Circle, this region's deep mines produce both steam and coking coal;
- Donbass Basin: (4% of 1999 production) The Donbass was formerly the centre of coal mining in the Soviet Union. This basin lies mainly in Ukraine with an eastern extension into Russia. Its deep mines produce anthracite and hard coal."[131]

Coal production of Russia was 258.3 million tonnes in 2000. Peak of coal production was 425.5 million tonnes in 1988[132]; after the dissolution of Soviet Union Russian coal industry underwent profound transformation, costly mines

[131] IEA, (2002). *Russia Energy Survey 2002*, p.150, 151. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[132] BP, (2011). *BP Statistical Review of World Energy June 2011*, p.33. available at: <http://www.bp.com/assets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/pdf/statistical_review_of_world_energy_full_report_2011.pdf> (accessed on June 9, 2012).

were closed and more feasible ones were operated, because of this reason Russian coal production declined a lot.[133]

In 2010, ultimately recoverable coal reserves were around 4 trillion tonnes, that made Russia third country with coal reserves, following USA and China. %66 of these reserves were estimated as hard coal and the %33 were brown coal. With PMRS classification Russian total coal reserves were estimated as 160 billion tonnes.[134] In 2010, Kuznets basin in the Kemerovo region produced 60% of total production; second was the Kansko-Achinsk basin with 15% of total production, mainly lignite was produced in the basin. The rest of the production came from basins in Eastern Siberia, Far East and to lesser extend from the Timon-Pechora and Donetsk (Russian side).[135]

According to IEA statistics, coal demand decreased from 1990 to 1998 by 40% from 374 million tonnes to 217 million tonnes, because of the economic downturn. Also lack of investment for mines and social problems affected coal sector; as a result, share of natural gas rose as a substitute energy resource. Share of coal in total primary energy supply decreased to 18%, on the other hand share of natural gas rose to 52% in 1999. The electricity sector is the main market for coal, accounting for 60% of total coal use in 1999, up from 48% in 1990. Coal

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[133] IEA, (2002). *Russia Energy Survey 2002*, p.153. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[134] IEA (2011), *World Energy Outlook 2011*, p.318.available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[135] IEA (2011), *World Energy Outlook 2011*, p.318.available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

exports decreased from 16% to 14% of the total in 1999.[136] In 2000, GDP increased to 8.3% and industrial output to 9%. Industrial growth stimulated demand for coking-coal for the metallurgical industries, that increased by over 16% in 1999 and by Russian estimates by another 7% in 2000. Despite increases in electricity supply for 2% in 1999 and 4% in 2000, demand for steam coal hardly increased in electricity sector. During the economic crisis in Russia mainly because of the non-payment crisis the export market was a very attractive option for coal producers.[137] In addition to that some of the major constraints for Russian coal basins are remoteness from populated areas and weakness of transportation infrastructure in these regions. Because of this reason Siberia's Tungusk basin and the Lena basin have been hardly exploited.[138]

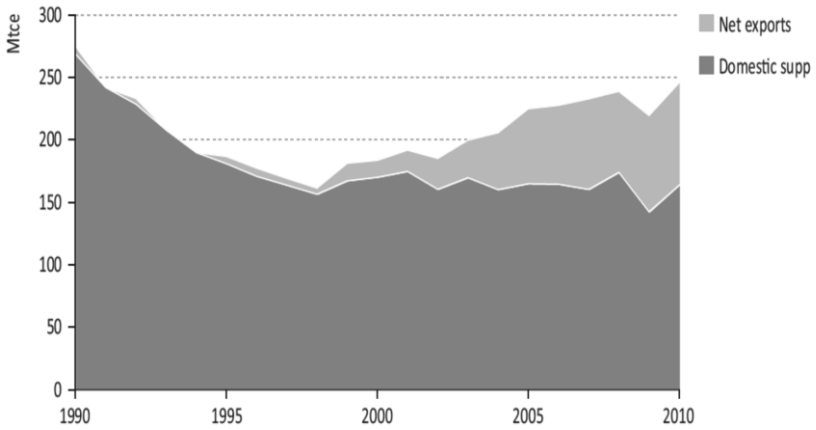

Figure 9. Russian Coal Production and Exports

Source: IEA (2011), *World Energy Outlook 2011*, p.319.

[136] IEA, (2002). *Russia Energy Survey 2002*, p.152. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[137] IEA, (2002). *Russia Energy Survey 2002*, p.152, 153. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[138] IEA (2011), *World Energy Outlook 2011*, p.318.available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

Since 2000 Russian coal production has increased steadily. Only in 2009 it decreased mainly because of the economic crisis. The reason of the increasing production is Russian coal exports. Despite the increasing coal production in the country, share of coal demand in Russian primary energy consumption decreases. In addition to that natural gas has become a substitute energy resource for coal and low natural gas prices created a shift from coal to natural gas. In this respect coal demand is sensitive to natural gas prices and future of natural gas prices will be determined on natural gas demand and coal demand. Also extraction cost of Russian coal is close to cost curve that means global coal price may be a constraint on production if it decreases.[139]

After the collapse of Soviet Union Russian coal industry underwent profound changes - the restructuring of the coal industry of Russia. During Soviet era state-owned coal company RosUgol controlled all the coal mines and produced all the coal of the country, however cost and profit become an important factor in economy. As a result RosUgol closed 60 of its mines until 1997, because of the lack of feasibility, need of investment and bad organization. In 2000 the number of closed mines was 140, and coal production associations, subsidiaries of RosUgol were privatized.[140]

In 2010, Russia is the third biggest coal exporter following Australia and Indonesia and coal exports became the engine of increasing coal production. Main importer of Russian coal is the European Union with 50% of total Russian coal export. It is expected China to buy more coal from Russia, because of the

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[139] IEA (2011), *World Energy Outlook 2011*, p.319,320. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[140] IEA, (2002). *Russia Energy Survey 2002*, p.154. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

skyrocketing Chinese energy demand; according to IEA Chinese demand for Russian coal will be an effective solution for eastern remote coal basins of Russia, also Chinese involvement to the Russian coal sector may be a possible development in the future.[141]

3.4 Nuclear Energy

Russia has great know-how about nuclear energy inherited from Soviet Union. Russian nuclear sector is organized in all aspects of use of nuclear power. In 1986 with Chernobyl accident Soviet Union and all countries faced dangers of lack of security in nuclear power plants. However Russian nuclear sector and power plants have close relations with scientific-industrial complex of Russia and this relationship gives great impetus for development of the nuclear sector.[142]

In 1990's Russian nuclear sector was organized under Russian Ministry of Atomic Energy (MinAtom) and nuclear power plants operated under Rosenergoatom whose majority shares were owned by MinAtom. In addition to that, there was GosAtomNadzor (GAN) the independent safety regulator whose chairmen appointed directly by the president of Russia.[143]

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[141] IEA (2011), *World Energy Outlook 2011*, p.319. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[142] IEA, (2002). *Russia Energy Survey 2002*, p.171. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[143] IEA, (2002). *Russia Energy Survey 2002*, p.171. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

Table 7. Nuclear Electricity Production in TWh

Source: IEA, (2002). *Russia Energy Survey 2002*, p.171.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nuclear	118.3	120.0	119.6	119.2	97.8*	99.5	108.8	108.5	103.5	122.0	131.0
Total electricity production	1,082	1,068	1,008	957	876	860	847	834	826	845	876
Nuclear's share (%)	10.9	11.2	11.9	12.5	11.2	11.6	12.8	13.0	12.5	14.4	15.0
Load factor (%)	66.1	67,7	67,3	64,9	52,6	53,4	58,3	58,2	55,6	64.5	69.0

From 1990 to 1998 overall electricity production in Russia dropped 22%. However this drop in electricity production from nuclear power plants was only 12.5%.[144] In 1990's nuclear power plants faced the problem that oil and gas industry faced: "the non-payment crisis". However this crisis was solved gradually due to the improving economic conditions.

In addition to that the most striking problem for Russian nuclear industry in 1990's was the aging Soviet technology. Chernobyl accident showed that upgrading the Soviet technology was vital. Also life time of first generation Russian nuclear power plants was ended in 2000's; new investments were essential. In a period of time Russian nuclear sector underwent non-payment crisis, technology exports to Iran and China provided funds for safer nuclear technology and investments.[145]

In 1990's Russian nuclear power plants have become safer with new regulations of GosAtomNadzor (GAN) the independent safety regulator, and closure of first generation nuclear power plants. Also Russia adopted European safety technologies to its power plants. Effectiveness of Russian nuclear power plants is

[144] IEA, (2002). *Russia Energy Survey 2002*, p.177. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[145] World Nuclear Association, *Nuclear Power in Russia*, available at: <http://www.world-nuclear.org/info/inf45.html> (accessed on 20 November 2011).

higher in comparison with other power plants in Russia; in 2000 nuclear power plants produced 15% of total electricity whereas they constitute 11% of total installed capacity.[146]

In 2007 the Federal Agency on Atomic Energy successive body of MinAtom became RosAtom, a state corporation.[147] RosAtom keeps both civil nuclear technology and nuclear weapon technology of Russia in its hands. In terms of civil nuclear energy, RosAtom keeps all components of nuclear energy in its hands: for us two important components of them Rosenergoatom responsible from nuclear power plants in Russia and Atomstroyexport responsible to negotiate and construct new nuclear power plants with Russian technology abroad.[148]

In 2011, Russia has 32 nuclear reactors at ten power plants. All of them are operated by Rosenergoatom. 27 of these reactors were inherited from the Soviet Union, and stated operation in 1970's and 1980's, their licenses were for 30 years RosAtom has already given or thought to give additional 15-year-long licenses for these reactors. Two of the rest of the reactors started operation in 1990's, three of the rest started operation in 2000's. These are Rostov-1(Volgodonsk-1) in 2001, Kalinin-3 in 2004 and Rostov-2 in 2010.[149] RosAtom also has been building ten

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[146] IEA, (2002). *Russia Energy Survey 2002*, p.175. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[147] RosAtom, *History of Russian Nuclear Industry*, available at: <http://www.rosatom.ru/wps/wcm/connect/rosatom/rosatomsite.eng/education/history/> (accessed on June 9, 2012).

[148] RosAtom, *Enterprises*, available at: < http://www.rosatom.ru/en/about/enterprises/> (accessed on June 9, 2012).

[149] IEA (2011), *World Energy Outlook 2011*, p.321, 322. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

new reactors on six sites and designed a floating nuclear power plant for remote, Arctic locations.[150]

In this framework Russia continues to supply its electricity from nuclear power plants and in accordance with Russian plans new nuclear power plants are constructed. From 2000 to 2009 the output of Russia's nuclear plants increased from 130 TWh to 164 TWh, because of the load factor that increased by around 80%.[151]

Also the countries interested in nuclear power plants negotiate with Russian companies. A subsidiary of RosAtom, Atomstroyexport is responsible with construction of reactors abroad. Construction of Bushehr reactor in Iran whose construction started by Siemens KWU in 1970's has been continued by Atomstroyexport; there are also nuclear reactors constructed in India and China. Ministry of Foreign Affairs of Russia also works for promoting Russian nuclear technologies abroad and plans to provide partial or full credits for construction especially for these countries: Ukraine (Khmelnitsky 3 & 4), Belarus (Ostrovets 1 & 2), India (Kudankulam 3 & 4), China (Tianwan 3 & 4) and Turkey (Akkuyu 1-4). Vietnam and Bangladesh also rely on Russia to finance nuclear construction.[152] In Akkuyu Atomstroyexport prepared build-own-operate model to overcome financial difficulties in front of the project. In addition to

[150] IEA (2011), *World Energy Outlook 2011*, p.321, 322. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[151] IEA (2011), *World Energy Outlook 2011*, p.322. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[152] World Nuclear Association, *Nuclear Power in Russia*, available at: <http://www.world-nuclear.org/info/inf45.html> (accessed on 20 November 2011).

Atomstroyexport, in 2011 Rusatom Overseas was established for build-own-operate projects like Akkuyu.[153]

In addition to above mentioned projects and constructed nuclear reactors, Atomstroyexport is likely to construct reactors in Kazakhstan (despite disagreements), in Eastern and Central Europe in cooperation with Italian firm ENEL. A consortium led by RosAtom, won a nuclear power plant project in Belene, Bulgaria with €4 billion in 2006. Since 2006 RosAtom has actively pursued cooperation deals in South Africa, Namibia, Chile and Morocco as well as with Egypt, Algeria, Vietnam, Bangladesh and Kuwait. A new technology (Floating nuclear power plant) may be exported to Indonesia which is predicted as an important market for Russian nuclear technology.[154]

3.5 Electricity Sector

The core of Russian electricity sector, RAO UES (United Energy Systems) was established with two presidential decree (no.922 and 923) in 1992. RAO UES took control of all Russian electricity sector, only nuclear power plants were not controlled by the company. Government had majority shares with 52.6% of RAO UES in 2000.[155] The company had voting right in all of the electricity an heat supplier companies - *energos*; in 34 of 74 *energos* the company had more than 51%

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[153] RosAtom, *Enterprises*, available at:

<http://www.rosatom.ru/en/about/enterprises/485dca804ae8030fbe80be54af117364> (accessed on July 20, 2012).

[154] World Nuclear Association, *Nuclear Power in Russia*, available at: <http://www.world-nuclear.org/info/inf45.html> (accessed on 20 November 2011).

[155] IEA, (2002). *Russia Energy Survey 2002*, p.193. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

of the voting right; the company controlled Russian national grid, the Central Dispatch Unit - network structure, 57 research and design institutes, 29 companies engaged in construction, maintenance etc, also installed thermal and hydro capacity.[156] In 1990's power generation system of Russia was divided into seven regional grids called as energy systems. Almost 75% of Russian electricity was produced in Urals, Siberia and Central energy systems. Nuclear power production had largest proportion in Northwest energy system, Central energy system, Volga energy system and Siberia energy system had largest share from hydroelectricity with 59.8%, 53.2% and 47.9%. Thermal power was common in Urals ES, North Caucasus ES, Far East ES with 90.2%, 81.4% and 71.7%.[157]

Table 8. Electricity Generation, by Fuel (TWh)

Source: IEA, (2002). *Russia Energy Survey 2002*, p.195.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total Electricity Generation	**1,082**	**1,068**	**1,008**	**957**	**876**	**860**	**847**	**834**	**827**	**846**
Natural gas	512	502	461	430	364	354	365	357	346	359
Coal and coal products	157	155	154	149	163	161	161	157	163	161
Hydro-electricity	166	168	172	173	175	175	153	157	158	160
Nuclear	118	120	120	119	98	100	109	108	105	122
Petroleum products	129	124	100	83	73	68	57	52	53	41
Combustible renewables	0	0	2	2	2	2	2	2	2	2

In 1998, Russia was the fourth largest electricity generator behind the United States, China and Japan. However generated power in 1998 was less than generated power in 1990. The amount of generated power was 827 TWh in 1998 that means a 23.56% decrease in comparison with 1990. In 1999 fuel shares of power generation units in

[156] IEA, (2002). *Russia Energy Survey 2002*, p.193. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[157] IEA, (2002). *Russia Energy Survey 2002*, p.194. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

electricity production were as follows: natural gas for 42%; coal for 19%; hydro for 19%; nuclear for 14%; oil for 5%.[158]

Table 9. Electricity Balance in Russia, 1990-1999, in TWh

Source: IEA, (2002). *Russia Energy Survey 2002*, p.197.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Electricity generation	**1,082**	**1,068**	**1,008**	**957**	**876**	**860**	**847**	**834**	**827**	**846**
Imports	35	35	28	25	24	18	12	7	8	8
Exports	43	47	44	43	44	38	32	27	26	23
Domestic supply	**1,074**	**1,056**	**992**	**938**	**855**	**840**	**828**	**814**	**809**	**832**
Total energy sector	163	161	152	144	135	139	142	140	137	143
• coal mines	13	12	12	13	12	11	10	9	8	8
• oil & gas extraction	55	52	47	43	40	40	41	41	41	45
• oil refineries	15	14	13	12	11	11	12	11	10	12
• own use	72	74	70	67	62	59	61	61	65	65
• non-specified	8	8	9	9	10	18	19	18	13	13
Distribution losses	84	84	84	88	85	83	84	84	93	96
TFC	**826**	**811**	**756**	**706**	**635**	**618**	**601**	**590**	**579**	**593**
Industry	482	461	419	376	318	314	294	292	283	296
Transport	104	97	87	77	68	65	65	63	60	61
Agriculture	67	70	70	69	61	53	49	42	38	34
Services	67	67	65	62	61	60	61	60	62	62
Residential	107	116	116	121	126	126	132	133	135	140

From 1990 to 1998 electricity consumption in Russia decreased more than 30%, due to the shrinking economy, only in residential sector electricity consumption increased and in transportation sector electricity consumption remained at the same level. In other sectors agriculture and industry electricity consumption decreased sharply.[159]

In 1990's Russian electricity generation capacity stayed in the same capacity. In 2001 total installed capacity in Russia was 214 GW and 69% of it was thermal, 21% of it was hydro and 10% of it was nuclear energy capacity. And Russia had over 500 thermal power plants, over 90 hydro plants and 29 nuclear reactors by the beginning

[158] IEA, (2002). *Russia Energy Survey 2002*, p.194. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[159] IEA, (2002). *Russia Energy Survey 2002*, p.197. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

of 2000.[160] In 1998 utilisation rate was 44% this was the result of old transmission infrastructure and old power plants in addition to that in 90's electricity sector suffered from lack of investment.[161]

Since 2003 Russian electricity sector has undegone important changes. Electricity reform has been implemented since 2003 and electricity monopoly of Russia RAO UES was unbundled, power generation and supply companies in RAO UES were privatizied.[162] Until 2009, 100 GW generation capacity was privatizied. However state has still 60% of total capacity, because of RusHydro who has all the hydropower plants and subsidiary of RosAtom - RosEnergoAtom that controls nuclear power plants in Russia. In addition to that Gazprom took part in privatization, that can be evaluated as an alternative power for control of Russian administration.[163]

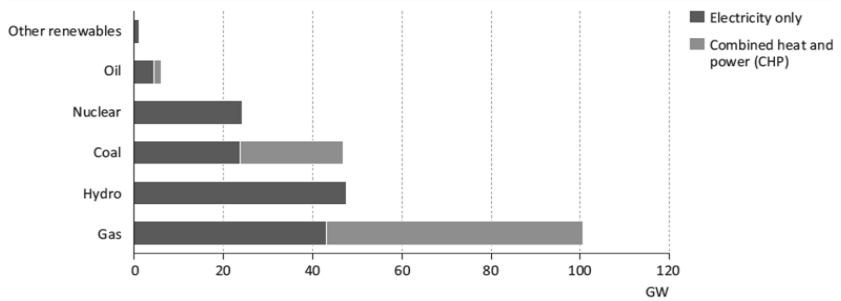

Figure 10. Installed Electricity and Combined Heat and Power (CHP) capacity in Russia, 2009

Source: IEA (2011), *World Energy Outlook 2011*, p.269.

[160] IEA, (2002). *Russia Energy Survey 2002*, p.198. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[161] IEA, (2002). *Russia Energy Survey 2002*, p.198,199. available at: <http://www.iea.org/publications/freepublications/publication/russia_energy_survey.pdf> (accessed on June 9, 2012).

[162] Abdurafikov Rinat (2009). *Russian electricity market Current State and Perspectives*, p.13. available at: <http://www.vtt.fi/inf/pdf/workingpapers/2009/W121.pdf> (accessed on June 9, 2012).

[163] IEA (2011), *World Energy Outlook 2011*, p.268. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

In 2009 Russian electricity sector was still the fourth-largest in the world after the United States, China and Japan.[164] In 2009 Russia had 225 GW total installed generation capacity. 68% consisted of thermal power, 21% of it were hydropower, 11% were nuclear. Thermal units can be evaluated as combined heat and power units. In this context "gas fired power plants make up 44%".[165] Mainly because of the economic recovery in Russia, Russian electricity consumption increased to 983 kWh in 2008[166] however energy consumption per capita is lower than EU average, in 2009 final electricity consumption per capita was at around 5 MWh that was 5.5 MWh in EU.[167] In addition to that Russian electricity generation capacity undergoes an important transformation and Russian transmission system has been suffering aging technology and lack of investment that also brings high rates of electricity losses.

Reform in Russian electricity sector has been one of the most important discussion topics for energy analysts, due to the scale of the sector. In line with Russian Energy Strategy documents phases of reform have been implemented. According to Energy Strategy of Russia for the Period up to 2030 first phase of reforms was completed. The process is summarized in the document as written below:

> "….the first phase of the industry reformation was completed: the unified generating company which possesses of and manages nuclear power plants – the Open Joint-Stock Company "Concern for the Production of Electrical and Thermal Energy at Nuclear Power Plants" was established; the Open Joint Stock Company "RAO

[164] IEA (2011), *World Energy Outlook 2011*, p.268. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[165] IEA (2011), *World Energy Outlook 2011*, p.269. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

[166] EIA, (2010). *Russia Country Analysis Brief*, p.8. available at: <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed on June 9, 2012).

[167] IEA (2011), *World Energy Outlook 2011*, p.268. available at: <http://www.oecd-ilibrary.org/docserver/download/fulltext/6111241e.pdf?expires=1340889212&id=id&accname=oid014326&checksum=F5638FAD03B3FA2F7A92F73469FD0EDA> (accessed on June 9, 2012).

> "UES of Russia" was liquidated and a group of independent companies was established on its basis, including 6 wholesale generating companies, 14 territorial generating companies, the Open Joint-Stock Company "Federal Grid Company of Unified Energy System" (JSC FGC UES), the Open Joint-Stock Company "RusHydro", the Open Joint-Stock Company "System Operator of Unified Energy System", the Open Joint-Stock Company "Interregional Distribution Grid Companies Holding", the Open Joint-Stock Company "RAO Energy Systems of the East" (for management of the Far Eastern electric energy industry), the Open Joint-Stock Company "INTER RAO UES" (for export and import of electricity), energy sales companies, as well as a number of research, design, service and repair organizations.
>
> The commercial infrastructure of the wholesale market of electricity (capacity) was established. A commercial operator of the stated wholesale market – the Open Joint-Stock Company "Administrator of Trading System" – and a self-regulated organization integrating subjects of the electric energy industry and major consumers of electricity and heat were set up.The process of competition promotion on the wholesale market of electricity (capacity) was launched; it involves gradual retreat from state regulation of prices for electricity and transition to market pricing for all consumers, with the exception of the population, within the price zones of the stated wholesale market (ultimate elimination of the state regulation of prices is supposed to have been accomplished by 2011)."[168]

Two of the wholesale generating companies, RosAtom that controls nuclear power plants and RosHydro that controls hydro power plants are under state ownership; the rest of power plants that produce one third of Russian power generation, power generating companies are acquired by strong companies in gas, oil and coal sectors Gazprom, IESholding, Norilsknikel and SUEK and foreign investors like Fortum, Enel and E-on.[169] Obligatory clause for investors has been investment for new electricity generation capacity.[170]

The reform process in Russia is not so perfect. According to O.Gore, liberalization of prices is partly achieved. To provide affordable energy for households about 15% of

[168] Ministry of Energy of the Russian Federation, (2010). *Energy Strategy of Russia for the Period up to 2030*, Moscow, p. 89,90. available at: <http://www.energystrategy.ru/projects/docs/ES-2030_%28Eng%29.pdf> (accessed on June 9, 2012).

[169] Olga Gore, Satu Viljainen, Mari Makkonen and Dmitry Kuleshov. (2012). *Russian Electricity Market Reform: Deregulation or Re-regulation?*, Vol. 41, Pages 676–685. p.678.

[170] Olga Gore, Satu Viljainen, Mari Makkonen and Dmitry Kuleshov. (2012). *Russian Electricity Market Reform: Deregulation or Re-regulation?*, Vol. 41, Pages 676–685. p.678.

electricity generation is excluded from liberalization and functions under regulated tariffs; “forced generation” accounts for 20% of total generation and operates under regulated tariffs without a competitive structure. That means 65% of total capacity functions with competitive prices; however when the Capacity Delivery Agreements and Long-Term Agreements are taken into account the actual degree of liberalization is regarded as 25%.[171]

Currently after the reform process assets of Russian electricity sector is concentrated in hands of important companies that may cause some problems in terms of market structure. In addition to that the companies that are fuel producers creates problem of vertically integration in the sector of some regions where these producers control generation facilities.[172] A company responsible for natural resource extraction can exploit the situation, by using its extracted natural resources in electricity generation if the company owns an electricity generation company.This also bring a cost advantage for electricity generation company owned by natural resource extractor, because main company can supply cheap raw material for electricity generation. In addition to that in case of control of many generating and territorial companies by one company may cause an oligopoly to the electricity sector and manipulation of electricity prices. In addition to guaranteed suppliers, control of electricity sector by few companies is harmful for competitiveness of the sector.[173] In this respect Russian electricity sector is open to new developments in next years.

[171] Olga Gore, Satu Viljainen, Mari Makkonen and Dmitry Kuleshov. (2012). *Russian Electricity Market Reform: Deregulation or Re-regulation?*, Vol. 41, Pages 676–685. p.679.

[172] Olga Gore, Satu Viljainen, Mari Makkonen and Dmitry Kuleshov. (2012). *Russian Electricity Market Reform: Deregulation or Re-regulation?*, Vol. 41, Pages 676–685. p.681.

[173] Olga Gore, Satu Viljainen, Mari Makkonen and Dmitry Kuleshov. (2012). *Russian Electricity Market Reform: Deregulation or Re-regulation?*, Vol. 41, Pages 676–685. p.681.

CHAPTER 4

RUSSIAN DOMESTIC ENERGY POLICY IN 2000'S

In this chapter implementation of Russian energy policy under Putin administration is evaluated. In this respect, main trends in Russian domestic politics, developments in energy sector and perception of elites on energy are summarized. As a methodological approach Russian energy policy is evaluated for energy policy first elite level and their view on energy issue and then actions of energy companies are expressed to include aspects of the implementation of Russian domestic energy policy and the structure of Russian major energy companies is analyzed within the assumption that these companies are important actors in Russian energy policy. Finally a general summary on domestic parameters that have impact on Russian energy policy is regarded.

4.1 Putin Era: Political and Economic Recovery

In 1999, Yeltsin dismissed the Prime Minister Sergei Stepashin, no one including Stepashin knew a reason for dismissal. The new Prime Minister Vladimir Putin who was an unknown political figure, appointed in August 9, 1999. In addition to that Yeltsin backed Putin and expressed that he wanted to see Putin as the next president after himself.[174] In December 31, 1999 Yeltsin went retired with these words:

> "Dear friends, my dears, today I am wishing you New Year greetings for the last time. But that is not all. Today I am addressing you for the last time as Russian president. I have made a decision. I have contemplated this long and hard. Today, on the last day of the outgoing century, I am retiring. (....) A new generation is taking

[174] BBC, (1999). *Yeltsin redraws political map*, available at: <http://news.bbc.co.uk/2/hi/europe/415087.stm> (accessed on June 9, 2012).

> my place, the generation of those who can do more and do it better. In accordance with the constitution, as I go into retirement, I have signed a decree entrusting the duties of the president of Russia to Prime Minister Vladimir Vladimirovich Putin."[175]

According to BBC, Yeltsin found Stepashin's approach moderate and looked for a though prime minister and for Yeltsin "Putin was a person that would be able to unite around himself those who would to renew Great Russia in new 21st century."[176]

After becoming prime minister, Putin started to deal with Chechen question. Since the first war (between 1994 and 1996) the Caucasus became an instable region with many criminal activities. In August 1999 Chechen troops tried to invade Dagestan and in October 1999 Russian troops were in Chechnya. In the second war Russian army bombed fiercely; according to U.S. Chechen terrorist groups targeted many civilians. The importance of these actions is that each attack to civilian targets increased support for Putin. In addition to that NATO's intervention to Kosovo issue in 1999 and 9/11 increased public support in Russia for the conflict in Chechnya.[177] In 2009 the war in Chechnya ended officially. There were many casualties however there was one winner of the war: Russia.

Generally Russian politics have centralized a lot since Yeltsin's withdrawal. Putin's background in terms of education and career created power centralization in Russia. Some authors claim that the conditions that gave the chance for further centralization

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[175] BBC, (1999). *Yeltsin's resignation speech***,** available at: <http://news.bbc.co.uk/2/hi/world/monitoring/584845.stm> (accessed on June 9, 2012)

[176] BBC, (1999). *Yeltsin's resignation speech***,** available at: <http://news.bbc.co.uk/2/hi/world/monitoring/584845.stm> (accessed on June 9, 2012)

[177] Emil Pain, (2005). *The Chechen War in the Context of Contemporary Russian Politics*, Chechnya From Past to Future (ed.)Richard Sakwa, 1st ed., London, Anthem Press, p.70.

were created with efforts of FSB agents and they forestalled the obstacles which could prevent power centralization.[178]

The war has finished the Chechen issue for Russian administration and the fear of secessionism. According to Sakwa, in Yeltsin era Russia began to be not only a "multinational state, but also a multi-state state, with many proto-state formations claiming sovereignty against Moscow".[179] While the war continued Putin also dealt with the issue called as the "Federal Reform". In 2000 the country was divided into seven districts with seven plenipotentiary representatives.[180]

The right of local governors was taken from their hands, permanent representation in Federal Council was adopted and the president acquired the right to nominate representatives for Federal Council.[181] While power of federal districts diminished with these reforms, two new bodies were founded for representation of federal districts in capital city. These two bodies are the State Council and the Council of Legislators; however each of these bodies is advisory bodies and has no power at all.[182] In 2004, President acquired the power to nominate candidates for regional governors if it is refused by regional assembly twice, then the president has the power to disband the assembly and appoint an acting governor; in addition to that if a

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[178] Yuri Felshtinsky and Vladimir Pribylovsky, (2008). *The Corporation Russia and The KGB in the Age of President Putin*,1st ed., New York, Encounter, p.186-190.

[179] Ross Cameron, (2010). *Reforming the Federation*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.161.

[180] Ross Cameron, (2010). *Reforming the Federation*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.162.

[181] Ross Cameron, (2010). *Reforming the Federation*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.162.

[182] Ross Cameron, (2010). *Reforming the Federation*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.163.

governor is not able to fulfill its duties, the president can dismiss the governor.[183] Regional administrations are restricted with financial steps of Russian administration. Treaties that gave too many rights for some local administrations were negotiated to strengthen the central authority.[184]

Putin's reforms are not only limited with the centralization of the Federation, one of the most prominent issues that Putin dealt with was "the oligarchs". Putin executed an anti-oligarch campaign that targeted mainly strong ones in terms of politics to discipline other oligarchs.[185] New rules were set by Putin: "Business elite should be away from politics". This discourse increased the role of bureaucracy in Russian system which has been inherited from old times.[186] The conglomerate-dominated Russian economy remained highly concentrated, but its relations with government changed. Putin held meetings with business elites regularly but the days of oligarchs were over; improved corporate governance, greater transparency in financial process, greater economic competitiveness and an orientation towards profit are regarded in companies of the business elite.[187] However, the attack on Yukos in 2003 represented the beginning of a new phase. In this phase the administration sought to shape the economic sphere by sponsoring 'national champions', primarily in energy sector, and to guarantee that big business became 'socially responsible'. The security of property rights was undermined and, as in Soviet days, law was used instrumentally. The Yukos affair signaled a new model of political economy in which the line between the public and the private was no less blurred than in the 1990's, but now state

[183] Ross Cameron, (2010). *Reforming the Federation*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.163.

[184] Ross Cameron, (2010). *Reforming the Federation*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.165-167.

[185] Richard Sakwa, (2008). *Putin and the Oligarchs*, New Political Economy, Vol. 13, No. 2. p.185-187.

[186] Richard Sakwa, (2008). *Putin and the Oligarchs*, New Political Economy, Vol. 13, No. 2. p.188.

[187] Richard Sakwa, (2008). *Putin and the Oligarchs*, New Political Economy, Vol. 13, No. 2. p.189.

capture gave way to business capture.[188]As a result important holding companies with state control or obedience to state orders have been regarded in Russian economy. Especially in key areas like arms manufacturing and sales, ship building and aircraft manufacturing state monopolies become visible.[189]

While Russian politics centralized, Russian economy improved remarkably in Putin era. However it should be noted: Putin had an important advantage that Russian economy underwent its worst days, during 1998 crisis, before Putin became the prime minister. From 1990 to 1999 Russian economy shrank dramatically. Only in 1997 reel GDP increased 1.4% however Russian economy had grown over 4% in post-1998 period till 2009.[190] There are very good economists backing Putin and Russian economy improved very quickly; increasing revenue of the improved economy is used primarily for budget discipline - debt payment and balance of payment then for the centralization of power. Russian executive power has used its power directly to confiscate lucrative and "strategically important" companies and resources.

Macroeconomic success of Russia is not only limited with the growth of GDP. In post 1998 - crisis era Russian current account gives always surpluses and since 1999 government debts ratio per GDP decreased a lot which means stable debt payment. In 2009 the ratio was 11% for government debts. This number is very low in comparison with the world average that is above 60%. Inflation rate which was a skyrocketing rate in 1990's is about 10% in 2000's. In this respect all the indicators shows that Russia follows a disciplined macro-economic policy.

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[188] Richard Sakwa, (2008). *Putin and the Oligarchs*, New Political Economy, Vol. 13, No. 2. p.189.

[189] Richard Sakwa, (2008). *Putin and the Oligarchs*, New Political Economy, Vol. 13, No. 2. p.190.

[190] IMF, *Datamapper*, available at: <http://www.imf.org/external/datamapper/index.php> (accessed on June 9, 2012).

Russian macro-economic success is mainly a result of orthodox macro-economy policy. According to Philip Hanson this was result of long-serving finance minister Aleksei Kudrin. Kudrin was the authority on fiscal discipline and policies between 2000 and 2011 and opposed too much government spending and defended orthodox macro-economic policy.[191] In September 2011 Medvedev wanted him to resign.

Despite the orthodoxy in macro-economic policy, micro-economic policy is very heterodox in Russia. It is already known that there are economists championing market economy in Russia like Aleksei Kudrin and German Gref; however there are also siloviki rooted politicians in Russian administration and they are willing for intervention to economic sphere. In this respect it can be claimed that the money that comes from successful budget management is used for micro-economic intervention.

Most important example of state intervention in Russian economy is "the Yukos Affair". According to Hanson there are three main elements about state intervention: first, state ownership in hydrocarbon sector increased; second, there is also a likely trend in other sectors like engineering; also foreign investment in certain sectors (strategic sectors) is restricted via legislation.[192]

To acquire the assets of owners, regulations and executive power are used deliberately and the owners were forced sell their assets. In addition to giant powers with state control in hydrocarbon sector, Rostekhnologii holding company has assets in shipbuilding, aerospace, civil nuclear energy, nanotechnology and some

[191] Philip Hanson, (2010). *Managing the Economy*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.192.

[192] Philip Hanson, (2010). *Managing the Economy*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.193.

military-related fields; also Rosoboroneksport concentrated on arms exports has assets in car-making and metals.[193]

Foreign investments in sectors which are "strategically important" limited with the law "On Procedures for Making Foreign Investments in Russian Commercial Entities of Strategic Importance for National Security of Russian Federation" adopted on April 2, 2008; with this legislation ceilings on foreign ownership (mainly 50 per cent and 25 per cent if the owner is a state company) in 39 narrowly defined fields are determined; in natural resources sector the ceiling is 10 per cent and incase of partnership with a foreign state company the ceiling is 5 per cent for major deposits[194] However it has to be noted that major deposits means over 400 million barrels of oil reserves. Under 400 million boe each company can invest in Russia and over 400 million barrels a foreign company should find a Russian partner that owns 51% of the project.[195]

In this respect, Russian energy sector is very important with its "strategically important" resources and lucrative structure. Russian energy sector has become a field where state power is visibly used for control and revenue. On January 1, 2004, "Stabilization Fund of the Russian Federation" was established as a part of Federal Budget to balance federal budget and cash flows depending on oil prices (base price was 27 $/b in 2004).[196] Due to increasing oil prices the fund collected a lot of

[193] Philip Hanson, (2010). *Managing the Economy*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.195.

[194] Philip Hanson, (2010). *Managing the Economy*, Developments in Russian Politics. (ed.)White Stephen, Richard Sakwa and Henry Hale. 7.ed., New York, Palgrave Macmillan, p.196.

[195] Interview with Tayfun Yener Umucu on June 23, 2012.

[196] Ministry of Finance of Russia, *Stabilization Fund of the Russian Federation*, available at: <http://www.minfin.ru/en/stabfund/about/> (accessed on June 9, 2012).

money.[197] The fund was used mainly for payment of foreign debts of Russia and also invested for securities in European countries and USA.

In 2008 the "Reserve Fund" was established instead of the Stabilization Fund. The difference between these two funds is the Reserve Fund accumulates not only federal budget revenues from production and export of oil, but also revenues from production and export of natural gas and oil products whereas the Stabilization Fund collected only oil revenue; another important point about the Reserve Fund[198], the maximum size of the fund is "limited to 10% of forecasted GDP of the Russian Federation for the corresponding fiscal year".[199]

In addition to the Reserve Fund, "National Wealth Fund" was established. According to Ministry of Finance of the Russian Federation, this fund dedicated to support pension system of the Russian Federation to guarantee long-term sound functioning of the system.[200] When the oil revenue that is allocated for the Reserve Fund exceeds 10% of forecasted GDP for the corresponding fiscal year, the money equal to 10% of the GDP allocated to the Reserve Fund and the rest is allocated for the National Wealth Fund.[201]

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[197] According to data of Russian Ministry of Finance the Fund controlled 157,38 billion US dollars on 30rd of January, 2008

[198] The Fund has been controlling $62,28 billion on April 1, 2012.

[199] Ministry of Finance of Russia, *Reserve Fund of the Russian Federation*, available at: <http://www1.minfin.ru/en/reservefund/mission/> (accessed on June 9, 2012).

[200] Ministry of Finance of Russia, *National Wealth Fund of the Russian Federation*, available at: <http://www1.minfin.ru/en/nationalwealthfund/mission/> (accessed on June 9, 2012).

[201] Ministry of Finance of Russia, *Reserve Fund of the Russian Federation*, available at: <http://www1.minfin.ru/en/reservefund/mission/> (accessed on June 9, 2012).

All these improvements affected Russian policy implementation and Russian energy sector - especially hydrocarbon industry was also shaped within the trend of recovery. And the changes in hydrocarbon sector affected policy implementation both domestically and internationally. In this respect the profile of the leader, Vladimir Putin has been very dominant in terms of the trend of the industry. In this respect views of Putin and then developments in hydrocarbon sector within key players of Russian oil and gas industry are evaluated.

4.2 Energy in Putin Era: Consolidation of the Energy Sector

Energy is an important issue for Putin and the legislation process on foreign investment in strategic sectors shows us the importance. In 1997 Putin wrote and defended his Phd. thesis which is translated by Harley Balzer in 2006 as "Problems of Post-Communism", in St. Petersburg Mining Institute.[202]

In his thesis Putin claims that vast natural resources of Russia must be used for the national interest of Russia; in other words being an energy power is a key for being superpower. In this respect, state must be the owner of natural resources of the country regardless the given licenses and Russia have to create competitive and effective vertically integrated energy companies "national champions" which can compete with major companies of the world, so that these companies can defend national interest of Russia in global level.[203] To overcome technology and competitiveness problems of Russian energy industry foreign investment is essential;

[202] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.97.

[203] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.97.

however foreign investment is acceptable in case of obedience to Russian rules.[204] According to this thesis energy is a way for strength of Russia.[205] The thesis faced many claims of plagiarism. The important point of this thesis is that, the thesis describes a point of view on energy.

In addition to that energy is not only a matter for theoretical studies. There are some realistic reasons for Russian elites to control energy resources: first, oil and gas industry of Russia is very rich with its reserves and it provides foreign policy influence because of the energy demand of the world. Second, energy industry creates huge amount of added value. The transfer of added value may be determinant on political structure, in case of using the added value for oppositional groups can be harmful for ruling elite, and in contrary the use of the added value for power elite can consolidate their position in the country. Third, Russian elite are educated in Soviet era and use of energy as a political tool was a common method for former elite, in this respect energy was used for domestic and international purposes.

In this respect energy issue was an important matter for power elite. In 1990's the political importance of energy was ignored in Yeltsin era; however Putin was aware of the importance of the issue and all the business elite should obey new rules in Putin era. In other words they have to be far away from politics and obey the rules of Russian administration.

[204] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.99.

[205] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.98.

4.3. Major Russian Energy Companies in 2000's

Yukos Affair

Yukos became the most efficient Russian oil company in 1990's. In early 2000 Yukos made a lot of investments for oil industry both in Russia and abroad.[206] It was expected that Yukos in Russian oil industry, would become the leader of Russian oil industry. However Yukos become the example of the execution of changing energy policy. There were many reasons for this execution:

First of all, Yukos had many projects that could limit power of Transneft and Gazprom a lot. Transneft has used its limited capacity of shipment as "stick and carrot" for domestic policy and Gazprom has controlled the whole natural gas infrastructure; when Yukos declared Angarsk-Daqing pipeline this created for Russian authorities a threat to lose of control oil exports of Yukos.[207] Second, Khodorkovsky tried a merger between Sibneft and Yukos. Together with Sibneft production of Yukos would be 2.1 million b/d in 2002; 19.4 billion barrels of oil reserves that would make YukosSibneft one of the super majors of the world with 35% of oil refining and 39% of gasoline production capacity of Russia.[208] It was obvious that this production capacity would give Khodorkovsky political power and control of oil sector. Moreover Khodorkovsky wanted to sell up to 40% of

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[206] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.32-34. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

[207] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.35. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

[208] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.36. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

YukosSibneft to American oil companies (ExxonMobil or ChevronTexaco) however Russian bureaucrats were not ready for such activities; that move could decrease "the national identity of the business", "national primacy and security."[209] Finally, Khodorkovsky was interested in politics a lot but he did not support Putin. Yukos was the financial supporter of Yabloko Party, that provided Khodokovsky 100 supporting members of parliament in Duma. In addition to these moves Khodorkovsky openly criticized Putin. Khodorkovsky complained of spreading corruption. Putin's answer was a question "how Khodorkovsky obtained huge oil reserves with very little money" and Putin added: "I'm returning the hockey puck to you."[210]

The attack on Yukos started with the arrest of Boris Pichugin, the security chief of Khodorkovsky in June 2003; then in July 2003 Platon Lebedev, one of the top officials of Yukos and Khodorkovsky on October 25, 2003.[211] Arrests continued during trial of Yukos, accusations were on tax evasion and many people were arrested and put into jail not to prevent the process of bankruptcy of the company.

By the end of the trial it was declared that Yukos had to pay $33 billion because of tax evasion. This amount was more than the revenue that Yukos earned that year, the most valuable affiliate - asset of Yukos was sold to "the Baikal Finance Group" a financial group that was totally unknown, to pay the tax debt for $9.35 billion; however it was decided that Yukos would go bankrupt. In 2004 oil prices rose and

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[209] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.37. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012).

[210] Daniel Yergin, (2011). *The Quest: Energy, Security and the Remarking of the Modern World*, London, Allen Lane an imprint of Penguin Books. p.39.

[211] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.115, 116.

tax debt of Yukos was revised remaining debt increased to $26 billion.[212] As a result, a Russian court declared bankruptcy of Yukos in August 2006; Russian companies used quasi financial groups to purchase Yukos assets. Rosneft used the Baikal financial group, RN-Razvitiye and Neft Aktiv; Gazprom used Unitex; with these financial moves, two important companies could get rid of sanctions of western courts.[213]

During the Yukos affair Gazprom got the assets of Yukos in Sibneft that was 20% of Sibneft; however the issue for Sibneft was not closed with only 20%. The owner of the company, Abramovich saw and evaluated tragedy of Khodorkovsky very carefully and sold his assets (%72 percent of Sibneft) to Gazprom for $13 billion in 2005. Then the name of the company changed as "Gazpromneft".[214] According to Marshall Goldman, with this operation Russian state took the control of 30 percent of Russian oil output.[215]

Rosneft

90's were not so bright for Rosneft, however time changed very fast; Putin became the president of the Russian Federation and he supported national oil companies parallel with views. In this respect 2000's can be called as years of Rosneft; Putin clearly stated his views about Rosneft: "Rosneft is a state company that needs to

[212] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.120, 121.

[213] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.122.

[214] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.123.

[215] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.123.

increase its insufficient reserves."[216] As a result of his views on energy, Rosneft played its role as a national oil company whenever its help was needed. The company worked in important projects like gas pipeline to Petropavlosk which was not feasible; and during energy crisis in Kamchatka, the company sent tankers to solve the crisis. However "the prize" was good enough: licenses in rich West Kamchatka shelf.[217]

The former CEO of Rosneft, Sergei Bogdanchikov tried to gain the power that the company lost in loan for share program. Before 2000 Rosneft could not control its subsidiaries' activities; Bogdanchikov appointed loyal directors - executives to Purneftegas and Sakhalinmorneftegas and controlled their activities very carefully.[218] Then Rosneft consolidated the structure of its assets; Rosneft began to buy assets of other shareholders, however the process was not so normal. Rosneft determined prices of assets and shareholders had to sell their assets to the company.[219] In this context, first acquisition to enhance power of Rosneft was acquisition of Severnaya Neft with 450 million barrels of proved reserves.[220]

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[216] James Henderson, (2012). *Rosneft - On the Road to Global NOC Status*, Oxford Institute for Energy Studies, p.7. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/01/WPM_44.pdf> (accessed on June 9, 2012).

[217] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.41. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[218] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.25. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[219] Nina Poussenkova, (2007). *Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution*, the James A. Baker III Institute for Public Policy of Rice University, p.26. available at: <https://carnegieendowment.org/files/Rosneft_Nina.pdf.> (accessed on June 9, 2012).

[220] James Henderson, (2012). *Rosneft - On the Road to Global NOC Status*, Oxford Institute for Energy Studies, p.7. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/01/WPM_44.pdf> (accessed on June 9, 2012).

Despite the inefficient structure of the company, Rosneft invested in all fields of oil industry - upstream, midstream, downstream. In 2004-2005 a merger between Rosneft and Gazprom was discussed; however the aid for survival of Rosneft came from a different process: "the bankruptcy of Yukos". Most lucrative upstream unit of Yukos, Yuganskneftegas was acquired by Rosneft in 2004 and this acquisition added 11.5 billion barrels of oil reserves and Rosneft has become the largest oil producer in Russia.[221]

Another breaking point in Rosneft's history is the initial public offering in summer 2006. In initial public offering 14.8% of its shares were sold for $ 10.4 billion; the composition of shareholders was as follows: "BP with 1.2 per cent, Petronas with 1 per cent, CNPC with 0.5 per cent, treasury shares owned by Rosneft and Russian State with 75%."[222]

Parallel with the changing structure of ownership, structure of management also changed. In 2006 five of nine members of board appointed by Russian administration; most prominent ones were Sergei Bogdanchikov, the CEO of the company and Igor Sechin, the Chairman of the company (also the deputy prime minister of Russian Federation). The only independent representatives were Hans Jerg Rudloff from Barclays Capital and Aleksandr Nekipelov, the vice president of the Russian Academy of Sciences.[223] In March 2011 President Medvedev expressed that there would be no government representative on the boards of companies. This

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[221] James Henderson, (2012). *Rosneft - On the Road to Global NOC Status*, Oxford Institute for Energy Studies, p.8. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/01/WPM_44.pdf> (accessed on June 9, 2012).

[222] James Henderson, (2012). *Rosneft - On the Road to Global NOC Status*, Oxford Institute for Energy Studies, p.9. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/01/WPM_44.pdf> (accessed on June 9, 2012).

[223] James Henderson, (2012). *Rosneft - On the Road to Global NOC Status*, Oxford Institute for Energy Studies, p.48. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/01/WPM_44.pdf> (accessed on June 9, 2012).

decision is partly executed and there are fewer government representatives on board and Nekipelov, vice president of the Russian Academy of Sciences became the Chairman of the company after the resignation of Igor Sechin. There are two extra members from state-controlled bank VTB and Transneft; the CEO of Rosneft Khudainatov is the only state member of the board; however seven of nine members of board have close links with Russian state.[224] As a result, despite the decision of the president of Russian Federation, state influence is still visible in Rosneft.

It is also discussed that Rosneft might be partially privatized except 51% of state shares. Ministry of Economic Development announced that 15% of Rosneft could be sold in 2012. However two points must be noted: first, Putin is elected as the president in March 2012, in this respect the question is "whether Putin wants to see a partially privatized company or not?" Second, example of Gazprom shows that Russian state can defend its interests and manipulate the company for its purposes even with almost 51% of shares.

Rosneft is very important with its position in domestic market, according to data of Russia Oil & Gas Report Q1 2011 "around 80% of production of Rosneft comes from Western Siberia (Yuganskneftegaz and Purneftegaz) and the Volga region (Samaraneftegaz)."[225] Seven major refineries in Russia are owned by Rosneft these are: the Tuapse refinery on the Black Sea coast; the Komsomolsk refinery in the Russian Eastern Russia; the Kuibyshev, Novokuibyshevsk, and Syzran refineries in the Volga-Urals region; and the Achinsk and Angarsk refineries in East Siberia.

[224] James Henderson, (2012). *Rosneft - On the Road to Global NOC Status*, Oxford Institute for Energy Studies, p.49. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2012/01/WPM_44.pdf> (accessed on June 9, 2012).

[225] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.100.

"Rosneft also runs export terminals in Arkhangelsk, Tuapse, Nakhodka and De-Kastri, and the company has a retail network with 600 service stations."[226]

Demand of Rosneft to expand its natural gas caused business conflicts with Gazprom's position and Rosneft tries to have access to Gazprom infrastructure. In Kovykta field both companies joined the auction. However Gazprom won the auction.[227] The important assets that Rosneft acquired are in remote places of Russia, Russian exclusive economic zone and Arctic. In this context the company negotiated with many international oil companies for capital and high technology investment; Rosneft and ExxonMobil made an agreement that includes more than arctic licences in 2011. Key points of the agreement are as follows:

- "3.2 billion exploration program planned for Kara Sea and Black Sea
- Establishment of a joint Arctic Research and Design Center for Offshore Development (ARC) in St. Petersburg
- Rosneft participation in ExxonMobil projects in the US and other countries with a focus on building offshore and tight oil expertise
- Joint study of possibilities to develop Western Siberia tight oil resources
- The companies form a strategic partnership to undertake agreed joint projects in Russia and internationally."[228]

After such a strategic partnership Rosneft it is a question mark whether there will be further privatization in Rosneft or not. However there is a reality that the company enhanced its position financially and operationally very well.

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[226] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.100.

[227] Richard Fletcher, (2011). *Gazprom's Kovykta gas field victory is a lesson for BP shareholders*, available at: <http://www.telegraph.co.uk/finance/comment/richardfletcher/8355832/Gazproms-Kovykta-gas-field-victory-is-a-lesson-for-BP-shareholders.html> (accessed on June 9, 2012).

[228] Rosneft (2011), Rosneft and ExxonMobil to join forces in the Artic and Black Sea offshore, enhance co-operation through technology sharing and joint international projects http://www.rosneft.com/news/pressrelease/30082011.html

Gazprom

When Putin came to power he tried to rein in Gazprom. He used state shares in Gazprom to sack Chernomyrdin and Vyakhirev, then two close friends of Putin, Dmitri Medvedev and Alexei Miller came to power in Gazprom. According to M. Goldman, Putin assessed the situation in Gazprom as result of "mismanagement", because of this reason changes in posts were regarded.[229]

According to Victor, in 2001 a reform process in Gazprom started to enhance efficiency of the company. The reforms took place in two phases: in the first phase (2001-2003) key responsibilities, rules and regulations of governance were identified; in the second phase (2004-2005) the efficiency and transparency of the company was planned to be improved with the subsidiaries.[230] In 2006 a new reform process was declared for Gazprom… Reforms on agenda of Gazprom never disappear, because successes of reforms in Gazprom are controversial.[231] The efficiency of the company is still questionable however there is one fact that the reform process increased state control in the company.[232]

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[229] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia,* New York, Oxford University Press, p.104, 105.

[230] Nadejda Makarova Victor, (2008). *Gazprom: Gas Giant Under Strain*, Working Paper no:71, Program on Energy and Sustainable Development, Stanford University, p.28. .available at: <http://iis-db.stanford.edu/pubs/22090/WP71,_Nadja_Victor,_Gazprom,_13Jan08.pdf> (accessed on June 9, 2012).

[231] Anders Åslund, (2010). *Gazprom in crisis: a chance for reform*, European Energy Review. available at: <http://www.europeanenergyreview.eu/site/pagina.php?id_mailing=67&toegang=735b90b4568125ed6c3f678819b6e058&id=1898> (accessed on June 9, 2012).

[232] Nadejda Makarova Victor, (2008). *Gazprom: Gas Giant Under Strain*, Working Paper no:71, Program on Energy and Sustainable Development, Stanford University, p.29. available at: <http://iis-db.stanford.edu/pubs/22090/WP71,_Nadja_Victor,_Gazprom,_13Jan08.pdf> (accessed on June 9, 2012).

It is still a critic about Gazprom that the company is very inefficient. Whether it is efficient or inefficient, it is obvious that Gazprom is a giant company. The company controls at least two thirds of Russian natural gas reserves that means 15% of world reserves, and produces 80% of Russian natural gas with 2009 data; in addition to that the company is not only a monopoly on Russian natural gas pipeline system but also controls pipeline systems of CIS states and over 25 European states.[233] In addition to that the company provides subsidized natural gas for internal markets, prices are partly liberalized and it reached to 70 $/tcm while Russian natural gas price in December 2010 was 314,28 $/tcm.[234]

Gazprom has many investments abroad. It is also always repeated "What is good for Gazprom is good for Russia"[235]; the company has been serving very loyal to Kremlin, in this respect the company become a component of Russian foreign policy. Especially in the region of former Soviet Union the company becomes the major player. Russia not only signed agreements for the transportation of natural resources of CIS countries to Russia, but also constructed very important pipeline projects. Blue Stream pipeline, Nord Stream pipeline are some of them and the process for South Stream continues. These three pipeline projects cost a lot. According to Nemtsov and Milov, cost per kilometer for Blue Stream was $ 3 million while world average was 1-1.5 million $/km; however this is a result of geopolitical ambition.[236]

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[233] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.88.

[234] Indexmundi, Russian Natural Gas Prices, available at: <http://www.indexmundi.com/commodities/?commodity=russian-natural-gas&months=60> (accessed on June 9, 2012) and Business Monitor International, op.cit., p.88.

[235] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.113.

[236] Boris Nemtsov and Vladimir Milov, (2008). *Putin and Gazprom*, European Energy Review, p.19, 20. available at: <http://www.europeanenergyreview.eu/data/docs/Viewpoints/Putin%20and%20Gazprom_Nemtsov%20en%20Milov.pdf> (accessed on June 9, 2012).

One of the most important developments in Gazprom's history is acquisition of Sibneft by Gazprom for $ 13.1 billion that made Russian natural gas giant a hydrocarbon giant. Also the company holds very important licenses in its hands. Yamal peninsula that is very rich with its hydrocarbon reserves (first estimates 16 tcm);[237] Shtokman field with 3.8 trillion cubic meters of gas and 53.4 million tonnes of gas condensate (first estimates)[238]; Sakhalin-I, Sakhalin-II projects as operator and resources of Eastern Russia[239] are under control of Gazprom. Licenses of these fields give Gazprom great power in negotiations with other companies. It also has to be kept in mind that Gazprom acquired most of these licenses by using its close relations with Russian administration. Especially in Sakhalin project partners of the project were forced to cooperate with Gazprom.

Gazprom has been yielding from its relation with Kremlin a lot. According to Nemtsov and Milov Gazprom is the personal project of Putin.[240] Because of this reason the company is very related to Russian Foreign policy and constructs above mentioned pipelines and it directly took position parallel with foreign policy of the Russian State.[241] Despite this political support, Gazprom has some problems: it has $ 1 trillion value according to Gazprom officials, however in 2007 debt of the

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[237] Gazprom, *Yamal Megaproject*, available at :

<http://www.gazprom.com/about/production/projects/mega-yamal/> (accessed on June 9, 2012).

[238] Gazprom, *Shtokman*, available at,
<http://www.gazprom.com/about/production/projects/deposits/shp/> (accessed on June 9, 2012).

[239] Gazprom, *Eastern Gas Program*, available at:
<http://www.gazprom.com/about/production/projects/east-program/> (accessed on June 9, 2012).

[240] Boris Nemtsov and Vladimir Milov, (2008). *Putin and Gazprom*, European Energy Review, p.3. available at:
<http://www.europeanenergyreview.eu/data/docs/Viewpoints/Putin%20and%20Gazprom_Nemtsov%20en%20Milov.pdf> (accessed on June 9, 2012).

[241] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.115.

company was 2/3 of its incomes[242] and according to Åslund in 2010 the situation in company worsened.[243] Operationally operating cost of the company increases and most significant, in 2009 production was 460 bcm with preliminary data; that is the worst production performance of the company. In 2010 the company issued long term debt bonds.[244]

The company tried to reshape its debt structure and raise capital by using bond markets in 2010. Despite its problems, Gazprom is the biggest natural gas company of the world and supported by Russian administration publicly. In 2010 European companies wanted Gazprom to decrease the price of natural gas; the company used an oil-indexed price formula however despite the increase in oil prices the company accepted to decrease prices to some extend due to low LNG prices.[245] The economic crisis in Europe has been a major concern for Gazprom. Currently Russia and Norway also are in a competition for European market share and Russian natural gas is more expensive. However it may be a problem about expiring date of take or pay contracts.

In June 2009, Gazprom made an important point in its history. Gazprom and Statoil signed a three-year MoU on E&P in northern Russia and Norway. "According to a joint statement, the new MoU will not only see the two companies work together in E&P but also design and development of technologies for the harsh Arctic

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[242] Boris Nemtsov and Vladimir Milov, (2008). *Putin and Gazprom*, European Energy Review, p.27. available at: <http://www.europeanenergyreview.eu/data/docs/Viewpoints/Putin%20and%20Gazprom_Nemtsov%20en%20Milov.pdf> (accessed on June 9, 2012).

[243] Anders Åslund, (2010). *Gazprom in crisis: a chance for reform*, European Energy Review. available at: <http://www.europeanenergyreview.eu/site/pagina.php?id_mailing=67&toegang=735b90b4568125ed6c3f678819b6e058&id=1898> (accessed on June 9, 2012).

[244] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.88.

[245] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.90.

environment. In December 2009, the companies deepened ties by signing another MoU on joint gas trade in the US."[246]

Surgutneftegas

The most conservative oil company among the analyzed ones, "Surgutneftegas is the fourth largest crude producer in Russia. Its traditional base is southern Western Siberia; the company also has activities in Timan-Pechora, Khanty-Mansyisk."[247] In 2009 natural gas production of the company was 14.1 bcm and crude production was 1.2 million b/d; the company also has very lucrative downstream assets including Kirishi Oil Refinery with 398,000 b/d capacity and 300 service stations.[248]

The characteristic of the company comes from mainly the CEO of the company: Vladimir Bogdanov. As mentioned before, he grew up as an oil man in Soviet era and he created an opaque, one man company; the accounts of Surgutneftegas does not fit with western accounting standards and strategy of the company depends on Bogdanov. He has a parallel views with current Russian administration and does not interfere to political sphere by using his wealth.

It is believed that the company is backed by Kremlin too and the company supports foreign policy actions and other Russian companies abroad. Although the company has no activity in Hungary, it bought 21% assets of Hungarian MOL for $2.7 billion

[246] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.91.

[247] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.127.

[248] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.127.

to support activities of Russian companies in Hungary in 2009.[249] 42% of the shares of Surgutneftegas moved to a separate company in 2003 and there is no information on ownership structure of the company since 2003. According to Russian strategist Stanislav Belkovsky (taken from Russia Oil & Gas Report Q1 2011) Prime Minister Vladimir Putin owns 37% of Surgutneftegas.[250]

Lukoil

Lukoil has been one of the most important companies in Russia oil industry. Especially in 1990's energy was a matter of only business and Lukoil tried to reestablish the influence of Russia in CIS countries via investments. However parameters changed very fast, during the presidency of Putin (and Medvedev), Putin had his own agenda for energy industry, in this respect state influence in the industry increased a lot. The dominance of Rosneft and Gazprom have become more visible and Gazprom made investments in oil sector via Gazpromneft.

Still Lukoil is a private company and in this atmosphere Lukoil faced some difficulties for acquisition of new reserves in Russia. However Alekperov has not reacted angrily as Khodorkovsky did, according to Isabel Gorst, Alekperov adapted himself to new circumstances and becomes very loyal to new Russian administration.[251] In this respect the U.S. major Conoco acquired some assets of

[249] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.127; in 2011 Hungary managed a buy back operation for Surgutneftegas shares, Annual Report of Mol 2011, p. 254. available at: <http://ir.mol.hu/sites/default/files/en/2012/Annual%20Report%202011.pdf>

[250] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.127.

[251] Isabel Gorst, (2007). *Lukoil: Russia's Largest Oil Company*, the James A. Baker III Institute for Public Policy of Rice University, p.3. available at: <http://www.bakerinstitute.org/programs/energy-forum/publications/energy-studies/docs/NOCs/Papers/NOC_Lukoil_Gorst.pdf> (accessed on June 9, 2012).

Lukoil gradually and since 2004 Conoco have had 20%,[252] of Lukoil; in 2010, US major ConocoPhillips decided to sell its whole assets - 20% stake in Lukoil because of weakening relations with Russian side[253] and this financial operation was executed in 2010; total sale of ConocoPhillips share in Lukoil accounted for $20.2 billion.[254]

Despite the dominance of Rosneft and Gazprom (including Gazprom Neft) Lukoil continues to be a powerful company in 2000's. In 2007 liquid reserves of the company was 15.7 billion barrels and natural gas reserves 26.6 trillion cubic feet and Lukoil produced 91.43 million tonnes of oil (roughly 670.18 million barrels per year) that is 1 million barrels (1%) more than production amount of 2006 Natural gas production of the company decreased 2.8% with 13.7 billion bcm.[255]

Internationally, the company has assets of refineries in the Netherlands, Italy, Ukraine, Romania and Bulgaria, and retail networks in USA and most Eastern European and CIS states;[256] "International operations account for over 30% of Lukoil's total refining capacity, 60% of its retail network and 4% of the resource base."[257] Lukoil increased its revenues and incomes to $ 23.9 billion and $ 2.05 billion in the first quarter of 2010.[258] In April 2010 Lukoil brought the first oil field in the Russian sector of the Caspian Sea onstream with the launch of production from

[252] Kenny, Niam(ed.), (2008). *The Almanac of Russian and Caspian Petroleum 2008*, MMVIII Energy Intelligence Group, Inc., p.65.

[253] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.104.

[254] ConocoPhillips, (2012). *Annual Report 2011 of ConocoPhillips*, p.8. available at: <http://www.conocophillips.com/EN/about/company_reports/annual_report/Documents/ConocoPhillips%202011%20Summary%20Annual%20Report.pdf> (accessed on June 9, 2012).

[255] Kenny, Niam(ed.), (2008). *The Almanac of Russian and Caspian Petroleum 2008*, MMVIII Energy Intelligence Group, Inc., p.65.

[256] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.104.

[257] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.104.

[258] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.106.

the Yuriy Korchagin deposit. Korchagin is one of Lukoil's six large discoveries in the Caspian, touted as one of Russia's new oil and gas frontiers. And second largest discovery of the company is, the larger Filanov (*Filanovskoe*), is due onstream in 2014.[259] As a result, the company tries to diversify its resource base.

TNK-BP

TNK (Tyumen Oil Company) was one of the mini-major companies in Russian oil industry; the company was acquired by the AAR group - a consortium in 1997.[260] The components of the consortium are composed of Alfa Group, Access Industries, Renova. The components of the consortium are described by Yenikeyeff as follows:

> "ALFA GROUP (25% in TNK-BP) is a Russian financial-industrial group established by Mikhail Fridman, German Khan and Alexey Kuzmitchev in 1989. Alfa's main interests are in the financial sector, oil and gas, telecommunications, retail trade, and water services. (….)ACCESS INDUSTRIES (12.5% in TNK-BP) was founded by an American industrialist. Len Blavatnik, in 1986. His company's interests spread across continents, including the USA, Europe and South America and involve diversified investments in natural resources and chemicals, media and telecommunications, real estate, technology and retail. (….)RENOVA (12.5% in TNK-BP) was established by a Russian academic turned entrepreneur, Viktor Vekselberg, in 1990. Today Renova has a diversified investment portfolio encompassing the energy sector, utilities, mining, machine building, construction, telecommunications, nanotechnologies, chemical industry, precious metals, and the financial sector. Renova is particularly active in Russia, Switzerland, Italy, South Africa, the Ukraine, Latvia, Kyrgyzstan and Mongolia."[261]

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[259] Business Monitor International, (2011). *Russian Oil & Gas Report Q1 2011*, London, UK., p.106.

[260] Daniel Yergin, (2011). *The Quest: Energy, Security and the Remarking of the Modern World*, London, Allen Lane an imprint of Penguin Books. p.31.

[261] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.6. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

In late 1990's owners of TNK started negotiations with BP for a merger between BP and TNK; the negotiations ended successfully in 2003. The result was a 50%-50% joint venture between BP and TNK. John Browne from BP clearly stated that they could not own 51% of the joint venture; Putin approved the joint venture however Putin had a comment on this joint venture: "It is up to you, an equal split never works."[262]

This 50% - 50% merger has been an important question mark for people who are interested in Russian energy policy, Putin eliminated Khodorkovsky however a group of businessmen can make partnership with an international oil company that created an important player in Russian oil industry. There are some reasons for non-interference of Russian administration.

First, members of AAR consortium never opposed Russian administration; they worked with and for government authorities when it was needed.[263] Second, all agreements about TNK-BP were signed abroad with international standards that also made difficult to get shares of BP cheaper as it happened in Yukos.[264] Third, the breakdown of TNK-BP may change the balance of power in Russian oil industry, in

[262] Daniel Yergin, (2011). *The Quest: Energy, Security and the Remarking of the Modern World*, London, Allen Lane an imprint of Penguin Books. p.38.

[263] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.5. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

[264] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.5. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

this context acquisition of BP shares by one group is opposed by other groups in Russian oil industry.[265]

It is claimed that in 2007 BP started negotiations with Gazprom to replace AAR group with Gazprom, BP wanted to transport natural gas of Kovykta field - Eastern Siberian field by using pipeline monopoly of Gazprom. However such a joint venture could provide superiority for Gazprom in comparison with Rosneft; Gazprom could become the most dominant company in Russian hydrocarbon industry. However such a joint venture could increase the share of Russian administration in the industry to 51% that could deteriorate foreign investment climate in Russia.[266] Neither Putin nor AAR group wanted such a joint venture and Kovykta field was acquired by Gazprom for $700 million in 2011.[267]

In the eyes of Russian administration, TNK-BP has been a good example of cooperation between international oil companies and Russian companies. However the relations between AAR group and BP were not so healthy. The reason was mainly the composition of the joint venture and conflicting business strategies.

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[265] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.7-9. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

[266] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.7-9. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

[267] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.9. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

BP is an international oil company and believed that TNK-BP could be a good opportunity for investments in Russia. In this respect BP used the joint venture for investment in only CIS countries. However AAR group wants to invest both in Russia and abroad that was a competitive demand for BP side. Despite the 50-50 shares, decision-making process was also unequal; BP had a prominence; in the end decision-making process was locked in 2007 and 2008 and BP executives had to fly away from Russia… New agreement on decision-making was made and TNK-BP was transformed the company into an international oil company.[268]

Despite these hardships BP never thought to give up in Russia. We understand this from actions of the company in 2010 and 2011 after the accident in Gulf of Mexico. After the offshore accident, BP had to pay a lot of money for compensation and fines. In this context BP sold assets worth $45 billion; however they did not sell any assets in Russia. According to Yenikeyeff the importance of TNK-BP comes from many points. First of all, the company produced 16% of Russian oil output, daily production from January 2011 to June 2011 was 1.76 million barrels of oil equivalent; second, the company has shares almost in all major oil fields of Russia Western Siberia (Tyumen, Khanty-Mansiysk, Yamal-Nenetsk and Novosibirsk Regions); the Volga-Urals (Orenburg and Saratov Regions) and East Siberia (Irkutsk Region) and total proven reserves were 13.1 billion barrels of oil equivalent; third, refining throughput of the company was 761 million barrels a day; fourth, annual net income of the company was $5.2-5.8 billion in 2008-10 and $6.8 billion from January to September 2011.[269]

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[268] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.9-12. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

[269] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.4. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

In addition to that the Joint Venture provides many advantages for BP: first of all since 2003, the joint venture provided $16 billion in dividends; second, operationally the joint venture provided nearly 25% of BP's annual output and one fifth of BP's reserves; third, tenth of BP's profits in average years comes from the joint venture.[270]

In other words the company is very lucrative for BP to sell. For AAR Group the company is a good investment and despite the problems, BP provided modern production techniques that increased production 30%; also the company adopted western standards in management and technical issues with BP's partnership.[271] As a result TNK-BP becomes a sui-generis model in Russian hydrocarbon sector with 50-50 shares. Despite some problems the model works very well.

4.4 Decision-Making in Energy Policy and Issues in Russian Energy Policy

Russian energy policy is very ambitious in global level; chance of the country is the reserves that the country owns. In this context companies especially analyzed ones can use the resource base of the country very successfully in international competition.

Milov clearly summarizes the limitations of Russian energy diplomacy. First limitation is "certain upstream production constraints", particularly in the gas sector; Russian export infrastructure is constructed to export hydrocarbons to European

[270] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.17. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

[271] Shamil Yenikeyeff, (2011). *BP, Russian Billionaires and the Kremlin: a power triangle that newer was*. Oxford Energy Comment. Oxford Institute for Energy Studies. p.4. available at: <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/11/BP-Russian-billionaires-and-the-Kremlin.pdf> (accessed on June 9, 2012).

markets, in recent years Russia tries to diversify its export directions, however this policy needs massive capital investments, in this respect Russia tries to diversify its markets; also Russian domestic energy consumption is very inefficient and too high.[272] Russian natural gas subsidies cause huge natural gas consumption however this subsidy is also decreasing.

The second group of constraints is "structural and investment constraints": According to Milov, Russian authorities have great control on natural resources however there is no systematic approach and mechanisms that can influence actions of energy companies. Milov perceives lack of discipline and corruption as main reasons of lack of mechanism.[273] Russian energy diplomacy is not systematic, however there are borders of Russian energy diplomacy and it is expected for energy companies to move between these borders and "Yukos Affair" shows the borders of Russian energy policy.

The third group of constraints is "future investment challenge": a lot of Russian fields are mature fields, for new fields investment is required. New fields are mainly in remote places or offshore fields that need also transportation infrastructure.[274]

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[272] Vladimir Milov, (2006). Use of Energy As a Political Tool, The EU-Russia Review, p.13. available at:

<http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[273] Vladimir Milov, (2006). Use of Energy As a Political Tool, The EU-Russia Review, p.14. available at:

<http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[274] Vladimir Milov, (2006). Use of Energy As a Political Tool, The EU-Russia Review, p.14. available at:

<http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

Russian government tries to overcome this issue and invest on new fields in Eastern Siberia and offshore fields need huge financial investment. Russian companies find credits or establish partnerships with foreign companies to overcome this issue.

Within the above mentioned framework sometimes Russian Foreign Policy triggers Russian Energy Policy and sometimes vice a versa. Pipeline projects that Russian companies try to build are kind of harmonization of Russian energy policy and Russian foreign policy. However such important projects need financial sustainability. So far no fiscal problem is heard about these major companies of Russia, however in 2009 Siberian Services Co. - a Russian domestic oil drilling firm could not pay its bonds and credit default swaps became harder for companies in 2009; in 2008 the capital flied out of Russian markets was more than $300 billion, despite the withdrawal of capital from the country, Russian bail out of RUSAL showed the determination of Russian administration about economy.[275] In this economic atmosphere, four Russian companies - Gazprom, Rosneft, Lukoil and TNK-BP - wanted Medvedev to give loans to refinance their foreign debts and continue expansion of their investments.[276] Maybe this was the result of ambitious energy policy. Such a complex energy policy integrated with foreign policy and domestic economic policy needs a comprehensive decision-making process. In this respect, Soviet heritage influenced Russian experience a lot.

Regulations and laws enacted by Russian administration reflect somewhat a Russian resource nationalism; Russian style resource nationalism here is implemented via

[275] Amy Myers Jaffe, Martha Brill Olcott, (2009). **The Future of the Russian Oil Industry**, the James A. Baker III Institute for Public Policy of Rice University, p.12, 13. available at: <http://www.bakerinstitute.org/publications/EF-pub-JaffeOlcottRussOilFuture-050609.pdf> (accessed on June 9, 2012).

[276] Amy Myers Jaffe, Martha Brill Olcott, (2009). **The Future of the Russian Oil Industry**, the James A. Baker III Institute for Public Policy of Rice University, p.13. available at: <http://www.bakerinstitute.org/publications/EF-pub-JaffeOlcottRussOilFuture-050609.pdf> (accessed on June 9, 2012).

clear modifications of certain fiscal regulations that was modified starting early 2000's. and via consideration of some natural resource sector of Russia to be regarded as strategically important sector as a law. For instance, in oil upstream industry with a law reserves over 500 million bbl is considered strategic assets in that Russian ownership can not be less that 51%. So, International Oil Companies can not exceed 49% in joint venture with any Russian National Company . In this respect, for investors in Russia there is a liberal logic and the only condition is to have access to the market and obey these rules.[277]

Russian domestic policy is a result of complex processes. Russian energy policy is influenced by this complex structure a lot. Different groups influence Russian domestic policy and a specific group for energy policy can be added to these groups: "production gurus" As mentioned before Russian oilmen close to administration can be called as "production gurus"; financial whiz kids have already been eradicated from business. In this respect production gurus either established - acquired their companies or appointed to work in state companies. It has to be noted that *siloviki* is also very influential on Russian Energy Policy, Russian administration also has influential institutions on energy policy.

Within the framework of Russian energy policy, it is not possible to talk about US-type influential groups in energy policy in Russia. Because Russian business elite in energy sector are mainly appointed by Russian administration or they are close to Russian administration. In this respect Russian administration can dominate decisions of Russian energy companies and this is the antithesis of the energy policy making process in US. In this respect it is not possible to talk about western type elite formation in Russia.[278]

[277] Interview with Tayfun Yener Umucu on July 23, 2012.

[278] Interview with Tayfun Yener Umucu on July 23, 2012.

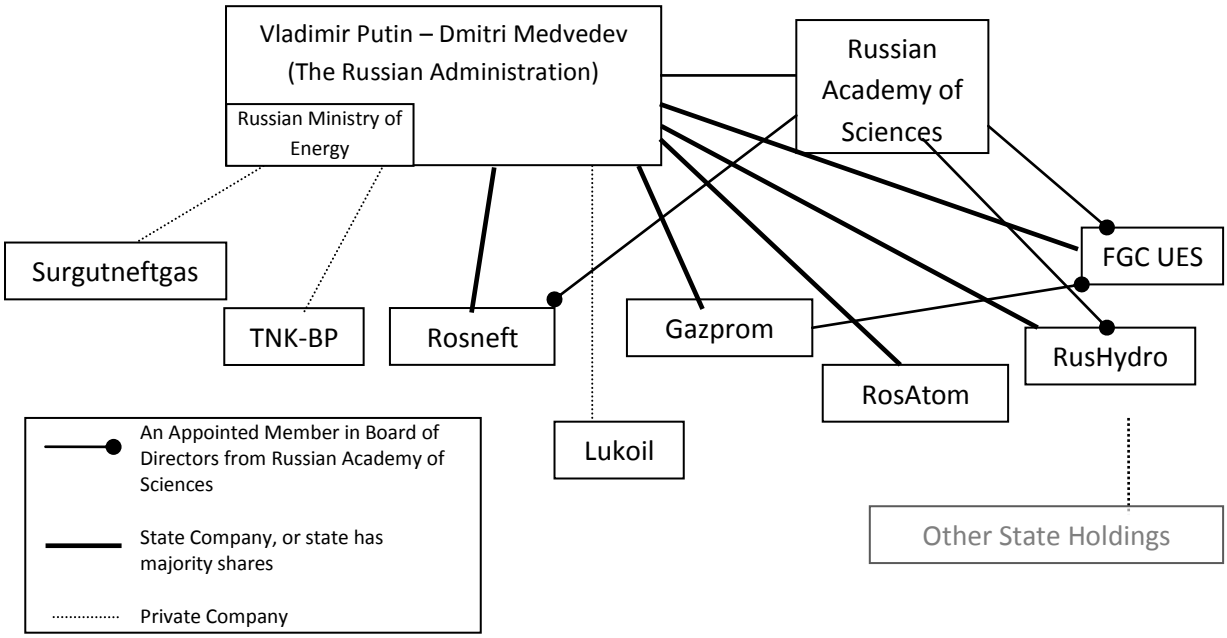

Figure 11. Russian State and Major Energy Companies

Russian Energy Strategy is an important paper that shows intentions of Russian Administration. Russian Ministry of Energy is important with the data that it collects about energy sector - harmonizes policy and appoints civil servants as executives to state companies. For Russian administration Rosneft and Gazprom are the most important players to implement Russian hydrocarbon policy. Representatives from Russian Academy of Sciences and Ministry of Energy are in board of directors of these companies. State shares are mainly used to shape the sector and allocate resources of Russia. It is known that one of the important aims of an energy policy is to find suitable energy with best prices. In this context the domestic pricing policy of Gazprom has a key position for Russian economy. In 2012 Rosneft also make some investments with ExxonMobil which is called as "strategic partnership" by Rosneft.[279] The result of this partnership will be seen in next years; however it is obvious that the partnership provides Rosneft to overcome its financial difficulties (especially debts of company), makes Rosneft's access to foreign markets easier via

[279] Rosneft (2011), Rosneft and ExxonMobil to join forces in the Artic and Black Sea offshore, enhance co-operation through technology sharing and joint international projects http://www.rosneft.com/news/pressrelease/30082011.html

ExxonMobil and provides technology for offshore activities - arctic licenses. Yukos issue taught private Russian companies how loyal they had to be. According to Poussenkova the issue taught five commandments of doing petroleum business in Russia:

> "1.Be a good corporate citizen.
>
> 2. Be a conscientious taxpayer.
>
> 3. Be politically correct.
>
> 4. Be patriotic.
>
> 5. Be sensible about your licenses."[280]

Among private companies Surgutneftegas remains the closest partner of Russian State, whenever state or Rosneft need help, the company allocate its funds for the need of them. Accounts and financial flows of the company are less open than other private companies. As mentioned above there are rumors that Putin holds assets of Surgutneftegas. The champion of 90's Lukoil also observes the developments in Russian energy policy carefully. The company has access to American markets too because of obedience to US economic standards, however the company sometimes keeps its silence not to become "second Yukos" when there is a lucrative project not overlapping with view of Russian administration. The sui-generis partnership in oil industry remains as TNK-BP. AAR group is very close to Russian administration and the administration wants to use the joint venture as a good example for foreign investment in Russia.

[280] Nina Poussenkova, (2004**).** *The Energy Dimension in Russian Global Strategy: From Rigs to Riches Oilmen vs. Financiers in the Russian Oil Sector*, the James A. Baker III Institute for Public Policy of Rice University, p.40. available at: <http://bakerinstitute.org/publications/from-rigs-to-riches-oilmen-vs-financiers-in-the-russian-oil-sector> (accessed on June 9, 2012)

CHAPTER 5

RUSSIAN FOREIGN ENERGY POLICY

5.1 Russian Energy Diplomacy

Russian energy diplomacy is the core of Russian energy policy. As discussed before, in 1990's energy was a matter of business however there were some signs of the logic that has used since 2000's. Systematic discussions about energy policy started in 2000's. Academicians discussed that Russia had to use its energy resources to increase its status in international arena.[281] Putin has a lot of knowledge and interest on energy issues, especially Gazprom and he openly expressed that Russia wanted to be an energy superpower; according to Milov, Russian decision-makers understand acquiring assets from this perspective.[282] In international arena Russian decision-makers use the only global asset that they possess, rather than a clear vision of Russia's future role as an 'energy superpower'.[283]

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[281] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.13. available at: <http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[282] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.14. available at: <http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[283] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.14. available at: <http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

Russian perception on energy was written in 2003 Energy Strategy that "significant energy resources and powerful fuel-energy complex" was "an instrument for conducting domestic and foreign policy and that 'the role of the country on global energy markets to a great degree determines its geopolitical influence."[284] According to Lough, Russian energy resources serves as three tools for influence: firstly, Russian energy resources are a source attraction for neighbors and partners; secondly, Russian energy resources "can be traded with neighbors of Russia for economic and political benefit"; and finally, Russian energy resources can be used for "achieving economic and political influence through non-traditional and sometimes non-transparent mechanisms."[285]

Russian energy resources are used in a variety of ways for different countries as a tool of influence. In this respect it is possible to group countries in accordance with the used methods of Russian decision-makers. According to Milov, four methods are used in Russian energy diplomacy for influence. The first one is "using the fact of energy dependence/energy supplies from Russia in order to achieve certain political goals in relations with countries that are purchasing Russian energy"[286]; the second one is "using the potential opportunity of future supply expansion, primarily through new oil and gas pipeline projects ('pipeline diplomacy') to promote certain Russian interests in various countries"[287]; third one is "engaging certain investors of the

[284] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series. Briefing Paper. p.2,3. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[285] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series. Briefing Paper. p.2. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[286] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.14. available at: <http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[287] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.14. available at:

energy importing nations to participate in upstream oil and gas production projects in Russia (i.e. partial access to development of Russian oil and gas reserves) to promote a certain bilateral relations agenda with these energy importing nations"[288]; and the fourth one is "getting control over the downstream energy assets (distribution and retail sales) in the energy importing nations in order to pursue both commercial and presumably, political goals."[289]

In accordance with the above mentioned methods Russian energy diplomacy prefers different ways in negotiations and political disputes. In this respect it is better to analyze the Russian energy diplomacy by focusing on regions.

5.2. Baltic States, Eastern European States

Russia linked its national interest with its near abroad directly, near abroad discourse perceived the actions of other possible powerful actors as hostile actions. In this respect Russia reacted NATO enlargement very harsh. Russia's energy policy has been also very strict in this region. With Milov's classification "using the fact of energy dependence/energy supplies from Russia in order to achieve certain political goals in relations with countries that are purchasing Russian energy" is chosen method for these countries.

<http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[288] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.14. available at: <http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[289] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.14. available at: <http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

The picture is diverse since Russia's energy sector remains tightly integrated with the CIS and Baltic countries through shared infrastructure from Soviet days. While this gives it a significant lever in relations with some of these countries, Russia also relies on Belarus, Ukraine and Estonia for access to foreign markets.

After the dissolution of the Soviet Union Russian Ukrainian relations continued closely. There have been a lot of problems especially political problems between two countries, however structures of economies triggered economic cooperation. According to Bertil Nygren, Russian investments in Ukraine saved Ukraine from recession, 60% of Ukrainian companies worked with Russian companies expressed by Putin in 2001; Russian investments focused on strategic sectors such as energy, aluminium, defense, telecom and banking.[290]

Ukrainian economy needed energy and the closest energy producer is Russia. Intermediary companies carried Turkmen and Russian natural gas to Ukraine. In 2005, Ukraine imported almost 78% of its natural gas demand 44% of it came from Turkmenistan and 30-33% from Russia and total consumption of Ukraine was 76.4 bcm.[291] In 2010, 33.8 bcm natural gas was imported by Ukraine and 52.1 bcm was consumed in Ukraine.[292]

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[290] Bertil Nygren, (2007). *The Rebuilding of Greater Russia: Putin's foreign policy towards the CIS countries*, Taylor & Francis e-Library (e-book). p.58.

[291] Arnaud Dubien, (2007). *The Opacity of Russian-Ukrainian Energy Relations*, The Institut français des relations internationales (Ifri), p.6. available at: <http://www.ifri.org/files/Russie/ifri_dubien_Russie_Ukraine_gaz_ANG_mai2007.pdf> (accessed on June 9, 2012).

[292] BP, (2011). *BP Statistical Review of World Energy June 2011*, p.28, 41. available at: <http://www.bp.com/assets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/pdf/statistical_review_of_world_energy_full_report_2011.pdf> (accessed on June 9, 2012).

Respublika, Itera, Eural Trans Gas, RosUkrEnergo worked as intermediary companies respectively. Itera which dominated Ukrainian market until 2003 had links with Gazprom and RosUkrEnergo was established for transit of Turkmengas in July 2004 with an agreement between President Putin and President Kuchma. In line with this agreement Gazprom acquired 50% of the new company.[293] Despite disagreements and attempts of Russians to control Ukrainian pipeline system, Russian-Ukrainian energy relations had gone well until orange revolution.

New Ukrainian administration wanted to limit its relations with Russia and improve with Western countries. However Putin stated clearly: "Ukraine should think twice about any such embrace of the West."[294] Ukraine wanted Gazprom to increase transit fees to Western standards which meant an increase from 1.09 $/tcm per 100 km to 1.75-2 $/tcm per 100 km.[295] Gazprom's answer was an increase in gas prices to western standards from 50 $/tcm to 160 $/tcm; in the last days of 2005 Gazprom decreased the amount of natural gas passing through Ukraine by claiming that the agreement between two states was over and it had to be renegotiated.[296] On January 4, 2006 a new agreement was signed between Russia and Ukraine. In accordance with this agreement Ukraine accepted to increase the price that it paid for natural gas to 95 $/tcm for "only 6 months"; RosUkrEnergo became the monopoly that deliver

[293] Arnaud Dubien, (2007). *The Opacity of Russian-Ukrainian Energy Relations*, The Institut français des relations internationales (Ifri), p.7. available at: <http://www.ifri.org/files/Russie/ifri_dubien_Russie_Ukraine_gaz_ANG_mai2007.pdf> (accessed on June 9, 2012).

[294] Marshall I. Goldman, (2008). *Petrostate: Putin, Power, and the New Russia*, New York, Oxford University Press, p.144.

[295] Arnaud Dubien, (2007). *The Opacity of Russian-Ukrainian Energy Relations*, The Institut français des relations internationales (Ifri), p.9. available at: <http://www.ifri.org/files/Russie/ifri_dubien_Russie_Ukraine_gaz_ANG_mai2007.pdf> (accessed on June 9, 2012).

[296] Arnaud Dubien, (2007). *The Opacity of Russian-Ukrainian Energy Relations*, The Institut français des relations internationales (Ifri), p.9. available at: <http://www.ifri.org/files/Russie/ifri_dubien_Russie_Ukraine_gaz_ANG_mai2007.pdf> (accessed on June 9, 2012).

natural gas to Ukraine and the right of Naftogaz-Ukrainian national oil and gas company, to re-export Russian gas was given as concession; a new joint venture UkrGaz-Energo was founded to serve in domestic gas distribution. 50% of the company was owned by RosUkrEnergo which means finally Russians were in domestic market of Ukraine.[297]

The agreement signed on January 4, 2006 was a temporary solution, natural gas prices were set only for 6 months. From 2007 the disagreement on prices restarted and peak of the crisis was in January 2009. Putin declared that Russia reduced the volume of gas in pipelines due to debts of Ukraine, Ukraine started to use the gas in pipelines and European countries suffered from low level of supply[298] including Germany, France and Italy and others like Bulgaria, Slovakia and Serbia, faced interruptions. This event was also assessed by many analysts as Russia's desire to punish pro-Western Victor Yushchenko; despite the cost of interruption for Gazprom that was estimated as over $1 billion, Russia gave impetus to bypass Ukraine from pipeline infrastructure via South Stream pipeline.[299] In addition to that Ukraine accepted a sharply increased (but still discounted) gas price, in 2010 Russia and Ukraine made an agreement for ten years, the agreement proposed Ukraine a 30% discount on the gas price also the agreement included "extension of the lease for the

[297] Arnaud Dubien, (2007). *The Opacity of Russian-Ukrainian Energy Relations*, The Institut français des relations internationales (Ifri), p.12. available at: <http://www.ifri.org/files/Russie/ifri_dubien_Russie_Ukraine_gaz_ANG_mai2007.pdf> (accessed on June 9, 2012).

[298] BBC, (2009). *Russia to cut Ukraine gas supply*, available at: <http://news.bbc.co.uk/2/hi/europe/7812368.stm> (accessed on June 9, 2012).

[299] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p. 9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

Russian Black Sea Fleet at Sevastopol for minimum 25-year."[300] According to Lough this agreement showed that "Russia's ability to use its energy influence in pursuit of foreign policy goals."[301]

Belarus is one of the most politically loyal countries for Russia and the country was awarded with subsidized prices of gas. According to Jesper Roine, the country had one of the highest natural gas consumption per capita.[302] After the construction of Yamal-Europe pipeline in 1999, the importance of Belarus increased a lot. 15% of Russian gas export to Europe is carried through Belarus and since 1993 Russia has used Belarusian dependency as a threat.[303]

In 2006, Russia declared that the subsidies for Belarus would be decreased. Gazprom threatened a cut off in supplies on January 1, 2007, in case of any rejection by Belarus, Belarus agreed to pay more than double what it paid in 2006. Belarus's natural gas prices were scheduled to rise steadily, reaching world market levels in

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[300] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p. 9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[301] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p. 9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[302] Jesper Roine, (2010), *The Russia-Belarus energy relationship - a reluctantly continuing affair*, Baltic Rim Economies, available at: <http://www.tse.fi/FI/yksikot/erillislaitokset/pei/Documents/BRE2010/BRE%205%202010/BRE%205%202010_39.pdf> (accessed on June 9, 2012).

[303] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p. 9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

2011.[304] Gazprom clearly wanted to buy some shares of Beltransgaz - Belarusian pipeline company, to secure its interests in Belarus and Gazprom acquired 50% stakes of the company.[305]

The crisis between two countries has not ended with the natural gas crisis in 2007. In 2007 Russia imposed tariff for exported crude oil to and through Belarus, Belarus refused to pay the tariff and Russia reduced the volume of crude oil exported through Belarus.[306] Belarusian response was siphoning the crude oil destined to Germany and Poland. Belarus increased transit fees; the crisis ended with the increase of Belarusian export duty on crude and refined oil products to Western Europe to match that imposed by Russia, then Belarus agreed to give Russia 70% of the incomes acquired from its exports of refined oil products to the Western market. This figure rose to 85% in 2009.[307] Despite the solution, in 2010 Russia cut off or decreased the level of oil supplies to Belarus for two times during disputes about prices and a debt of $187 million of Belarus to Russia. Belarus claimed that Moscow has a debt of $260 million in transit fees.[308] Disputes with Belarus over oil transit arrangements

[304] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.13, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[305] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p. 9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[306] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.13, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[307] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.13, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[308] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p. 9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

have contribution for the decision of construction of a second Baltic Pipeline System.[309]

For the Baltic states of Lithuania, Latvia, and Estonia independence and political heritage of Soviet Union was very traumatic. Identity issues have become very sensitive in these countries and these states mainly followed pro-western policies. They became members of NATO and the EU. Crises have been regarded between Baltic States and Russia because of some reasons like rights of Russian minorities and transit access to Kaliningrad. According to Steven Woehrel about 90% of their oil comes from Russia, and 100% of their natural gas; they pay world market prices for their energy supplies.[310]

Mazeikiu refinery has been a difficult issue between Lithuania and Russia. According to Steven Woehrel, importance of Mazeikiu coplex comes from different point: "the Mazeikiu complex includes a large refinery, the Butinge maritime terminal, and a pipeline. It is the largest enterprise in Lithuania (accounting for about 10% of Lithuania's GDP) and provides vitally-needed tax revenue."[311] Russians cut oil flow nine times between 1998 and 2000 due to auction of Mazeikiu refinery. Russians wanted to buy the refinery in auctions when it was not possible, Transneft became visible and created difficulties about oil flow.[312] Lukoil worked hard to

[309] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p. 9,10. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[310] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.12, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[311] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.12, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[312] The process is summarized by John Lough as follows: "Russia tried to prevent its sale to an American operator. In 2006, shortly after the refinery had been sold again, this time to Poland's PKN Orlen, Transneft cut off supply after a pipeline explosion and never restored it. During the tender process for the refinery sale, Kazakhstan's KazMunaiGaz positioned itself aggressively for a bid. In

acquire the refinery. However the owner of the refinery Williams (1999-2001) sold the refinery to Yukos that used Western business practices and transparent management. However in 2006 the refinery was sold again due to bankruptcy process of Yukos. Lithuanian administration gave cold shoulder to Lukoil and former owner of the refinery Poland's PKN Orlen owned the refinery again.[313]

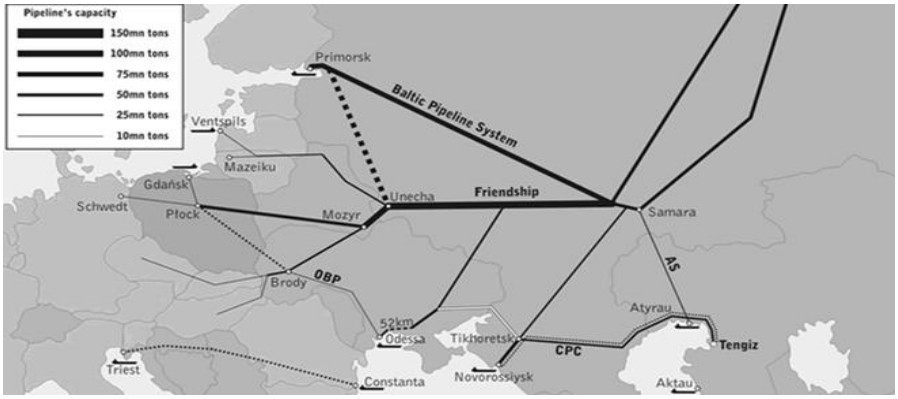

Figure 12. Russian Baltic Pipeline System and Ventsipls port

Source: Michel Chossudovsky, (2008). *Russian Baltic Pipeline System*, Global Research

The Latvian port Ventspils is important with its role as a crude oil and oil product terminal, currently there are two important pipelines total capacity of pipelines to Ventspils and Mazeikiu is 16 million tonnes a year.[314] In 2003 Russia increased its efforts to gain control of Latvia's Ventspils port; this followed a gradual reduction of Russian export volumes to the port that was widely seen as an attempt to bankrupt the business; Russian crude exports through Ventspils finally stopped with political consideration of Transneft.[315] Russia shifted its oil trade from Ventspils to Baltic

November 2005 Transneft refused to agree terms for transportation of Kazakh crude to Lithuania via Russia and effectively derailed the bid." (John Lough, Russia's Energy Diplomacy, p.8)

[313] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.12, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[314] LatRosTrans SIA , about the company, available at: < http://www.latrostrans.lv/?language=eng> (accessed on June 9, 2012).

[315] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.8. available at:

Pipeline System (BPS-I) that is completed in 2001 so that Russia could bypass Ventspils port.[316] Currently the port is operated by a Russian-Latvian Joint Venture "LatRosTrans SIA"; Russians have 34% and Latvians have 66% of the company.[317] According to John Lough, this was the first example of bypass infrastructure built to reduce reliance on transit routes through neighboring countries, where the latter insisted on retaining ownership and control of the pipeline on their territory.[318]

In 2007 The Estonian authorities declared to remove a Red Army war memorial in Tallinn, a lot of people protested the action however Estonian administration did not stop.[319] Russian response was stopping Russian oil products and coal exports through the port of Tallinn accounts for around 25% of Russian oil product exports by rail despite the financial impact of this move on Russia.[320]

Hungary was one of the first supporters of South Stream project; the government believed that close relations with Russia was good for Hungary and no one from the

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<http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[316] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.8. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[317] LatRosTrans SIA , about the company, available at: < http://www.latrostrans.lv/?language=eng> (accessed on June 9, 2012).

[318] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.8,9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[319] BBC, (2007). *Estonia removes Soviet memorial*, available at: <http://news.bbc.co.uk/2/hi/6598269.stm> (accessed on June 9, 2012).

[320] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

government reacted the acquisition of 21% of shares of MOL - Hungarian energy company by Surgutneftegas from OMV.[321] This acquisition gave Surgutneftegas voting power among shareholders and representation in the board of the company. However MOL administration opposed the transaction, due to company's position that is a supporter of Nabucco project and due to court process on legality of the acquisition Surgutneftegas could not used its above mentioned rights.[322]

In Poland, Lukoil tried to buy the Gdansk refinery that had 20% of market power of Poland; however its methods to gain political support in Poland caused reaction in Poland and according to Anita Orban, Polish government saw possible acquisition of Gdansk refinery by Russian companies as a mistake and does not want to privatize the refinery[323]; in October 2010, PGNIG - the Polish gas company signed a long-term gas contract that exclude re-export of Russian natural gas by PGNIG. This issue created inconsistency between EU regulations and the contract, also the Commission wanted Yamal Pipeline that runs through Poland to operate jointly for "non-discriminatory use" of pipeline and install of "additional compressor" for transportation of natural gas from west to east in case of any need."[324]

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[321] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.12. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[322] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.9. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012); Hungary managed a buy back operation for Surgutneftegas shares, *Annual Report of Mol 2011*, p. 254. available at: <http://ir.mol.hu/sites/default/files/en/2012/Annual%20Report%202011.pdf>

[323] Anita Orban, (2008). *Power, Energy and the New Russian Imperialism*, (1.ed) Westport,Praeger Security International. p.87.

[324] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.12. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

In Czech Republic the counterintelligence service warned on Russian industrial espionage activities especially in energy sector in 2010; according to this report Gapzrom uses "shell companies", quasi companies in Western Europe to increase its influence in many European countries.[325] In Czech Republic Vemex is controlled by Gazprom through Austrian, German and Swiss based companies.[326] In addition to that Russians use lobbyists and have influence on left wing politicians in Czech Republic.[327] In December 2008 Gazprom Neft bought 51% of Serbian NIS for $ 400 million that was less than 25% of total value of the company. The reason of this cheap acquisition was Serbian demand for Russian diplomatic support.[328]

5.3. Western European Countries and Turkey

EU published a lot of policy papers on energy policy. The main purposes of these papers are to harmonize the energy policies of member countries and create an efficient market. In 2006 with the Green Paper of the Comission EU clearly stated that "acting together, has the weight to protect and assert its interests"; the dispute between Ukraine and Russia on natural gas in 2006 increased the position of energy

[325] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.13. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[326] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.13. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[327] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.13. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[328] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.13. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

on agenda and energy security became a priority in the EU; also very ambitious targets on energy are set by European Comission called as "20/20/20 plan" EU countries will reduce its emission of greenhouse gases 20% and increase use of renewable sources to 20% until 2020.[329] In addition to that an EU country could not dependent on one supplier country more than 30% on hydrocarbon resources.[330] However EU countries can not establish a consistent and binding common foreign energy policy. Each country follows its national interest as usual rather than obeying the rules and Russia uses its bilateral relations to keep its markets. According to Milov the methods that Russia uses for energy diplomacy with Western European countries is increasing the supply, construction of new pipelines for increasing supply; and also encouraging companies of certain countries for investment on Russian upstream production projects.[331]

Table 10. Major Consumers of Russian Natural Gas and Their Dependence with 2008 data[332]

Source: Mert Bilgin, (2009). *Geopolitics of European natural gas demand: Supplies from Russia, Caspian and the Middle East*, Energy Policy 37, 4482–4492. p.4485.

Country	Imports (Bcf/yr)	Imports (BcM/yr)	Share of domestic consumption (%)
Germany	1291	36.56	43
Italy	824	23.33	30
Turkey	630	17.84	65
France	406	11.49	26
Hungary	294	8.32	62
Czech Republic	252	7.13	84
Austria	246	6.96	70
Poland	226	6.40	47
Slovakia	226	6.40	108
Finland	148	4.19	105
Romania	140	3.96	23
Fmr Yugoslavia	134	3.79	57
Bulgaria	101	2.86	89
Greece	85	2.40	96
Switzerland	13	0.36	12

[329] Richard Youngs, (2009), *Energy Security Europe's New Foreign Policy Challenge*, Routledge. Oxon. p.23-30.

[330] Richard Youngs, (2009), *Energy Security Europe's New Foreign Policy Challenge*, Routledge. Oxon. p.81.

[331] Vladimir Milov, (2006). *Use of Energy As a Political Tool*, The EU-Russia Review, p.14. available at: <http://se2.isn.ch/serviceengine/Files/RESSpecNet/48826/ichaptersection_singledocument/E4B84F48-ED7E-47DB-8AEF-C2A253F58B19/en/2.pdf> (accessed on June 9, 2012).

[332] Mert Bilgin, (2009). *Geopolitics of European natural gas demand: Supplies from Russia, Caspian and the Middle East*, Energy Policy 37, 4482–4492. p.4485.

In this respect Russian decision makers influenced European energy policies a lot. Especially Russian relations with Germany and Italy are very important in this context. In 2008 Germany provided 43% of its natural gas demand from Russia. Since 1973-1974 Germany has been using Russian gas[333] and currently German companies E.oN, Ruhrgas and BASF/Wintershall have very close relations with Gazprom.[334] Also German Chancellors Schröder and Merkel have very close relations with Putin. Germany provided $ 1 billion loan guarantees for Nord Stream and Former German Chancellor Schröder who also worked as Chairman of Nord Stream's shareholders' committee, has personal friendship with Putin and Merkel did not change the tendency of the relationship with Russia.[335] Schröder's efforts among EU countries contributed to the Nord Stream project a lot. Similar efforts continued between 2008 and 2010, intergovernmental agreements with Austria, Bulgaria, Croatia, Greece, Hungary, Serbia and Slovenia were signed in this period that also shows Russian determination about South Stream project; Russia decreased natural gas prices 5-7% for Bulgaria to keep the country in the project.[336]

Italy also has very close relations with Russia. Italian Eni was the first company that tried to bring Soviet gas to a West European country in 1966 however negotiations were not successful. The Italian oil company, Eni worked in many projects with

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[333] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.104.

[334] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.5. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[335] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.11. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[336] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.11. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

Gazprom and both companies have very close relations, in November 2006, Gazprom acquired the right to sell 3 bcm per year directly to Italian consumers with "a strategic partnership agreement" between Eni and Gazprom[337] and Eni is currently a partner of Gazprom in South Stream project In 2008 the country met 30% of its natural gas demand from Russia.[338]

Turkey[339] is the third country as the consumer of Russian natural gas, and has a dependency with 65%.[340] Energy relations between two countries started in Soviet era with 1984 Natural Gas Agreement Turkey accepted to buy 120 bcm from the Soviet Union for 25 years. In line with the agreement, purchase of natural gas started in 1987 from Western Pipeline for 6 bcm/yr and in 1998 amount of natural gas bought from Russia increased 8 bcm/yr more with a contract.[341] In 1997 the Intergovernmental Agreement between Turkey and Russia was signed for the construction of Blue Stream pipeline; construction of the pipeline lasted from 2001 to 2005 and Eni's participation to joint venture led by Gazprom made Gazprom Eni relations closer.[342] In 2012 Turkey has agreement three agreements with Russia: Western Pipeline-1 in 1986 for 6 bcm/yr; Western Pipeline-2 in 1998 for 8 bcm/yr;

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[337] Nina Poussenkova, (2010). *The Global Expansion of Russia's Energy Giants*, Journal of International Affairs, Spring/Summer 2010, Vol. 63, No.2. p.120.

[338] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.6. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[339] Despite the geographical position of Turkey type of energy relation between Turkey and Russia is similar to Russian-German and Russian-Italian Relations, because of this reason Turkey's relations are evaluated under this subject.

[340] Mert Bilgin, (2009). *Geopolitics of European natural gas demand: Supplies from Russia, Caspian and the Middle East*, Energy Policy 37, 4482–4492. p.4485.

[341] Mark Mozur, (2011). *Turco-Russian Energy Relations: Interdependence and Prospects for Energy Security*. available at <http://www.thewashingtonreview.org/articles/turco-russian-energy-relations-interdependence-and-prospects-for-energy-security.html> (accessed on June 9, 2012).

[342] Mark Mozur, (2011). *Turco-Russian Energy Relations: Interdependence and Prospects for Energy Security*. available at <http://www.thewashingtonreview.org/articles/turco-russian-energy-relations-interdependence-and-prospects-for-energy-security.html> (accessed on June 9, 2012).

Blue Stream for 16 bcm/yr in 1997. Despite the expiring date of 1987 agreement, Turkey still uses the agreement and despite delay in process it is planned to grant the right for transportation of Russian natural gas from Western pipeline to private sector of Turkey.[343]

It is quite visible that Western European countries face no supply disruption whose reason is directly Russia. South Stream project and Nord Stream pipelines can decrease the level of disruption. Because these two pipelines give Russia direct access to consumer countries and consolidates position of Russia as a natural gas supplier.

5.4. Central Asia and the Caucasus

Russia has very close relations with new independent states. During Soviet era these states were parts of the same economy and after the dissolution of the Soviet Union relations between these countries have continued in high profile. In energy field relations have been also developed. Structurally, soviet pipeline system was rooted to Russia and these export routes are controlled by Transneft and Gazprom that gave Russia power for control of the exports mainly Central Asian and Caucasus regions. As a response to this issue was US and Western backing pipeline projects. Also China emerged as a new energy demand focus in Asia that cannot be controlled by Russians so easy.

Among Central Asian countries Kazakhstan, Turkmenistan and Uzbekistan are very rich with their hydrocarbon resources. In 1990's Moscow's believed its

[343] Enerji Enstitüsü, (2011). *Batı Hattından Doğalgaz İthalatına Yoğun İlgi*, available at: <http://enerjienstitusu.com/2011/11/23/bati-hattindan-dogalgaz-ithalatina-yogun-ilgi/> (accessed on June 9, 2012).

transportation infrastructure and Russian companies mainly Lukoil[344] and Gazprom as units of power in the region.[345] Russian desire for the control of the energy infrastructure of the Caucasus and Central Asia is not ended. Russia suffers from lack of strategic assets in domestic markets of Central Asian countries. According to Palazuelos examples of Russian presence in Kazakhstan are minority presence of Lukoil in Karachaganak and Tengiz and shares of Transneft, Lukoil, and Rosneft in the Caspian Pipeline Consortium, "though not without some heavy geopolitical wrangling."[346] Currently most of the Kazakh oil flows from Primorsk and Novorosiisk to European countries that accounts for half of Kazakh oil flow and 30% of Kazakh oil is bought by Russia to sell European countries. China buys 14% of Kazakh oil exports.[347]

China emerged as an energy demander for Central Asia and supported pipeline projects financially. China's emergence created new circumstances for Russia; Russia could dictate the natural gas prices in Central Asia due to landlocked geography of the region. However China can purchase the materials with their market prices. As a result Russia increased the natural gas prices for the gas that Russia bought from Central Asia. According to Policy Report (no.39) of Baker Institute, Moscow felt pressure to offer more global, market-based prices for Central Asian resources. Because China's new Central Asian pipeline system "that will cross Turkmenistan Uzbekistan and Kazakhstan" creates a threat against Russian pipeline

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[344] Foreign investments participated by Lukoil in 1990's can be found in page.29.

[345] Isabel Gorst and Nina Poussenkova, (1998). *Unlocking the Assets: Energy and the Future of Central Asia and the Caucusus: Petroleum Ambassadors of Russia: State Versus Corporate Policy in the Caspian Region*, The James A.Baker III Institute for Public Policy, Rice University. p.5. available at: <http://www.bakerinstitute.org/publications/petroleum-ambassadors-of-russia-state-versus-corporate-policy-in-the-caspian-region> (accesed on June 9, 2012).

[346] Palazuelos, E., Fernández, R., (2012). *Kazakhstan: Oil endowment and oil empowerment*, Communist and Post-Communist Studies, Volume 45, Issues 1–2, March–June 2012, pp. 27–37, p.5.

[347] Palazuelos, E., Fernández, R., (2012). *Kazakhstan: Oil endowment and oil empowerment*, Communist and Post-Communist Studies, Volume 45, Issues 1–2, March–June 2012, pp. 27–37, p.8.

monopoly.[348] In addition to that Georgia, had an important role for US backed pipeline project to overcome the landlocked structure of the region like Caspian Pipeline Consortium (CPC), Baku-Tblisi-Ceyhan, Baku Tblisi-Erzurum.[349] Despite the competition about transportation infrastructure, "the Caspian and Central Asian oil and gas producers (Azerbaijan, Turkmenistan, Kazakhstan and Uzbekistan)" still use Russia as a transit country; however the development of transportation infrastructure of these countries decreases the dependency of these countries to Russia that is around 70% in 2009 for natural gas.[350]

In this respect Azerbaijan poses a direct threat to Russian monopolization efforts because of its direct access to international markets via Baku-Supsa, Baku-Tibilisi-Ceyhan pipeline and Baku-Tbilisi-Erzurum pipelines; Also Azerbaijan bought natural gas from Russia to meet domestic consumption until 2007, however natural gas production of Azerbaijan increased after 2007 and Azerbaijan stopped buying gas from Russia and in 2009, gas production reached to 23.3 bcm and was expected to increase 28.5 bcm in 2010; "about 66% of total production is used to meet domestic demand and 34% exported mainly to Russia, Georgia and Turkey,"[351] and

[348] James A. Baker III Institute for Public Policy of Rice University, (2009) *Russia and the Caspian States in the Global Energy Balance*, Number 39, Baker Institute Policy Report, p. 11,12. available at: <http://www.bakerinstitute.org/publications/EF-pub-PolicyReport39-052209.pdf> (accessed on June 9, 2012).

[349] James A. Baker III Institute for Public Policy of Rice University, (2009) *Russia and the Caspian States in the Global Energy Balance*, Number 39, Baker Institute Policy Report, p. 11,12. available at: <http://www.bakerinstitute.org/publications/EF-pub-PolicyReport39-052209.pdf> (accessed on June 9, 2012).

[350] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.7. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[351] Aitor Ciarreta and Shahriyar Nasirov, (2012). *Development trends in the Azerbaijan oil and gas sector: Achievements and challenges*, Energy Policy 40, 282–292, p.286.

John Lough clearly expresses: "Moscow is working hard to ensure that some of the production from the Shah Deniz 2 field is sold to Russia and not Europe."[352]

Russia also controls 80% of Turkmenistan's gas exports and China's presence gives an important card to Turkmenistan.[353] In 2009 an explosion in the gas pipeline from Turkmenistan to Russia in 2009 was regarded; two sides accused each other of causing the explosion; the explosion occurred when Russia had to increase natural gas prices paid for Central Asian gas; that meant the loss of profit gained from transit gas trade.[354] According to John Lough by early 2009, because of significant drops in demand in Ukraine and other markets, Gazprom did not need the same volume of gas from Turkmenistan; the explosion occurred when a significant fall in gas exports from Turkmenistan to Russia was regarded (down to a third of anticipated volumes).[355]

Relations with Uzbekistan in energy field also increased in 2000's. Transit fees paid to Uzbekistan increased with the changing conditions in the region; after the diminishing demand in western markets the income that Uzbekistan got from transit

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[352] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.8. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[353] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.7. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[354] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.10. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

[355] John Lough, (2011). *Russia's Energy Diplomacy*, The Means and Ends of Russian Influence Abroad Series, Briefing Paper, p.10. available at: <http://www.chathamhouse.org/sites/default/files/19352_0511bp_lough.pdf> (accessed on June 9, 2012).

pipelines also decreased like in Turkmenistan. However Russian companies still look for investment for development of Uzbek natural gas fields.[356]

Armenia has very close relations with Russia, Armenian economy is too dependent on Russia. In this respect natural gas provided by Russia for Armenia; in 2006 Gazprom declared that it would increase the natural gas prices and tried to acquire controlling assets in a proposed Iranian-Armenian pipeline.[357] This pipeline could decrease the level of dependence and because of this issue Russia gave cold shoulder to project.[358]

5.5. Russia and China

Russia and China have very volatile relations and problematic issues in their foreign policies; however a resource rich country like Russia and a country with huge energy hunger like China could not ignore each other. Improvements on border disputes between two countries are regarded in 2000's. In this respect economic relations and energy relations are also increased.

An oil terminal at Kozmino near Nakhodka for the oil trade in Pacific Rim was opened in December 2009 in Russia.[359] In 2009 China and Russia reached a very

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[356] Osman Karimov, (2010). *Russia and Uzbekistan: oil and gas cooperation*, (originally published in International Affairs magazine by Vladimir Paramonov, Oleg Stolpovsky, Alexey Strokov) available at: <http://en.rian.ru/international_affairs/20100720/159879904.html> (accessed on June 9, 2012).

[357] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.14, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[358] Steven Woehrel (2009), *Russian Energy Policy Toward Neighboring Countries*, p.14, available at: <http://www.fas.org/sgp/crs/row/RL34261.pdf> (accessed on June 9, 2012).

[359] Kevin Rosner. (2010). *Sino-Russian Energy Relations in Perspective*, Journal of Energy Security. available at: <http://www.ensec.org/index.php?option=com_content&view=article&id=260:sino-

important agreement: China provided $ 25 billion loans for Russia, $10 billion of it was allocated for Transneft and $ 15 billion for Rosneft by Russia; repayment of the loan will be 110 million barrels per year of Russian oil supply from 2011 to 2030.[360] In this respect, first phase of Eastern Siberian-Pacific pipeline has been already completed and with the completion of the second phase of the pipeline the amount of oil transported to China will increase.

Developments on energy are not limited with only ESPO pipeline, Sino-Russian Energy Investment Company bought 51% of Suntarneftegaz, a Russian oil and gas company; China won development and production rights of two Eastern Siberian natural gas fields.[361] In 2010 China offered Russia $ 6 billion loans for coal imports from Russia for 25 years.[362] According to Bloomberg following 2010 Russia raises "shipments to China to at least 15 million metric tonnes of coal annually in the next five years and more than 20 million tonnes in the following 20 years."[363]

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russian-energy-relations-in-perspective&catid=110:energysecuritycontent&Itemid=366>(accessed on June 9, 2012).

[360] Kevin Rosner. (2010). *Sino-Russian Energy Relations in Perspective*, Journal of Energy Security. available at: <http://www.ensec.org/index.php?option=com_content&view=article&id=260:sino-russian-energy-relations-in-perspective&catid=110:energysecuritycontent&Itemid=366>(accessed on June 9, 2012).

[361] Kevin Rosner. (2010). *Sino-Russian Energy Relations in Perspective*, Journal of Energy Security. available at: <http://www.ensec.org/index.php?option=com_content&view=article&id=260:sino-russian-energy-relations-in-perspective&catid=110:energysecuritycontent&Itemid=366>(accessed on June 9, 2012).

[362] Kevin Rosner. (2010). *Sino-Russian Energy Relations in Perspective*, Journal of Energy Security. available at: <http://www.ensec.org/index.php?option=com_content&view=article&id=260:sino-russian-energy-relations-in-perspective&catid=110:energysecuritycontent&Itemid=366>(accessed on June 9, 2012).

[363] Bloomberg, (2010). *China to Import More Russian Coal, Lend $6 Billion*, Bloomberg News. available at: <http://www.bloomberg.com/news/2010-09-07/china-will-take-more-russian-coal-imports-in-next-25-years-arrange-loan.html> (accessed on June 9, 2012).

As a result Russia is an important partner for China in terms of energy. Growth rate of Chinese energy demand is the highest in the world and Russia as a resource rich country may meet some of Chinese energy demand. On the other side, this relation is also beneficial for Russia. Russian the least developed part is East Siberia; and Russia have to develop not only its gas and oil fields but also transportation infrastructure to sell the hydrocarbon resources to Europe, emergence of China as a customer may solve the problem of transportation infrastructure because China is closer than Europe to East Siberia. In this context it is an acceptable argument that energy relations between two nations will develop further.

5.6. Russia and OPEC Countries

Russia is not an OPEC member however it is the biggest oil producer with 10.270 million b/d in the world (and Saudi Arabia is the second with 10 million b/d) with statistics of BP[364], and Russia's oil production accounts for 1/3 of total production of OPEC and 1/8 of world total production. In this context decisions of OPEC and Russia can affect world oil markets. As a result Russia observes OPEC summits very carefully.

In energy field Russian and OPEC countries relations have not developed much as other areas. Russian RosAtom gave support for modernization of Iranian Bushehr reactor has been continued by RosAtom however this is almost everything on energy between Russia and OPEC countries.

[364] BP, (2011). *BP Statistical Review of World Energy June 2011*, p.8. available at: <http://www.bp.com/assets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/pdf/statistical_review_of_world_energy_full_report_2011.pdf> (accessed on June 9, 2012).

Gas Exporting Countries Forum was established in 2001, however Russians have a project like a "gas OPEC" Alexander I. Medvedev from Gazprom suggested that "a gas trio" that controls gas production and transportation with Iran, Qatar, and Russia,[365] that owns 53% of world natural gas reserves in 2010. Despite some anxiety in consumer countries, this project cannot go further. There are some reasons for that:

Firstly, Qatar has already had lots of natural gas reserves however conventional gas trade is based on pipelines and with the current pipeline infrastructure and among resource owner countries pipeline infrastructure was not developed and consumer countries were too far for a pipeline. In 1997 Qatar developed its LNG infrastructure and became a major player in LNG world. LNG also increased flexibility of natural gas and gives great chance to routes to more demanding regions.

Secondly, natural gas world has changed in recent 10 years a lot. Natural gas production with unconventional methods has been known since 1990's. However it was not found feasible for production. Due to developments in technological fields, production cost for unconventional natural gas has decreased a lot (especially in fields where there is huge natural gas reserve). In this respect many countries started to assess their unconventional production opportunities and this increased the number of natural gas producers in the world.[366] With the spread of LNG processing technologies it is expected that number of natural gas exporters is increasing. Currently US shale gas revolution caused a lot of changes in world natural gas trade; with the increasing US production of natural gas, natural gas import of the country started to decrease. In this respect natural gas trade started to change its routes, with the increasing unconventional gas production not only in the US but also in other parts of the world creates abundance of natural gas that creates difficulty to control natural gas trade.

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[365] James A. Baker III Institute for Public Policy of Rice University, (2009) *Russia and the Caspian States in the Global Energy Balance*, Number 39, Baker Institute Policy Report, p.3. available at: <http://www.bakerinstitute.org/publications/EF-pub-PolicyReport39-052209.pdf> (accessed on June 9, 2012).

[366] TPAO, (2010). *2010 Crude Oil and Natural Gas Sector Report*. p.12.

Finally disruption of natural gas flow from Russia to Europe showed that European countries quickly shifted to LNG. That means Qatar and Russia are competing powers at the moment. In this context Russian energy relations with OPEC countries did not develop much, weak possibility of a gas OPEC is reason for that.

5.7. Strengths and Weaknesses of Russian Foreign Energy Policy

Russian energy diplomacy is a complex set of policy-implementation. As mentioned above for different regions Russia uses different methods in its energy diplomacy. In this context, it is hard to claim that Russian energy diplomacy has an ideological implementation. In contrary Russian energy diplomacy has a very pragmatist implementation and generally this implementation is used for more power in global system.

For pro-Western countries that are perceived as anti-Russian market prices for natural gas are set. And many problems like transit fees and disruption due to high debts, natural gas imports are regarded between Russia and these countries like Ukraine and Georgia. For "good neighbors "subsidized natural gas prices are regarded as "prize", however in last years this method is used less for neighboring countries. There are some reasons for that:

First, Russia could import natural gas from Central Asian countries with the prices that Russia dictated. However Chinese energy hunger, capital allocated for new pipelines and promise of buying for market prices increased the natural gas prices in Central Asia for Russia and Russia also increased transit fees because of the increasing market sense in the region.

Second LNG in world markets increased the flexibility of natural gas in the world. Natural gas with pipelines need lots of investment and capital because of this issue supplies want to see guarantee for demanded natural gas, however LNG needs only

investment for processing units (for liquefaction and gasification) of natural gas and it can be transported where natural gas demand is regarded. In this regard, EU countries used LNG when they faced any disruption. And Gazprom that uses an oil indexed gas price formula had to decrease the natural gas prices in 2011 because of stable natural gas prices although oil prices increase.

Russian energy diplomacy also starts construct ambitious pipelines. Even these projects like Nord Stream and South Stream are very expensive Russia want to construct these pipelines because these projects give Russia direct access to consumer countries and bypass "problematic" transit countries.

It is obvious that foreign policy and energy policy influence each other. However energy policy and foreign policy can not copy each other. In this respect Russian energy companies Gazprom and Rosneft as National Oil Companies (NOC) serve sometimes for purposes of Russian foreign policy. While serving for purposes of foreign policy NOC's have to balance their commercial performance and foreign policy priorities. In this respect Russian companies balance these parameters very well, market strategy of Gazprom is very successful.[367]

[367] Interview with Tayfun Yener Umucu on July 23, 2012.

CHAPTER 6

CONCLUSION

Main aim of this thesis is to evaluate dimensions of Russian energy policy and parameters that have an impact on Russian energy policy in 2000's. In this respect Russian energy policy is analyzed in different aspects.

First, the historical background of Russian energy industry and roots of complex decision making process are summarized. In this framework, it is obvious that energy industry of Russia affected from the difficulties that Russia tried to overcome. In non-payment crisis upstream companies affected a lot and Russian oligarchs used the crisis and debt requirement of Russian administration as a trump, get Russian giant companies with very low payments. In this era energy became a matter of business rather than a matter of politics. Shining star of the era was Yukos in terms of innovation; however Lukoil was the best with total amount of output. Rosneft faced many difficulties due to being a state company and supported by no one in this era. Gapzrom faced also many problems however the advantage of the company rooted in this era: structure of natural gas industry was not liquidated, it was protected under the flag of Gazprom.

Second, the energy composition and resource base of Russia is evaluated. Mainly most developed region of Russia in terms of transportation infrastructure is Western Siberia. However the trade trend in the World shows that Russia has to develop its other resource-rich regions to get more income, and overcome the problem of aging fields. In this respect Kovykta, Shtokman, Yamal are very important projects that also need investment. Emergence of China as a new market for energy may be a

good opportunity for Eastern Siberian fields that are costly to develop transportation infrastructure. Electricity sector is very important with the shape that it gained via the electricity reform, although the reform liquidated RAO UES, companies close to Russian administration got very important share in electricity sector at the same time, hydroelectricity and nuclear energy companies - RosHydro and RosAtom are owned by Russian state. RosAtom plays an important role in Russian energy diplomacy that is not so visible as other energy companies actions. The company makes long term investments in foreign countries that establish long term mutual dependence because of financial solutions of RosAtom's projects like in Akkuyu. In addition to that Russia did not change its nuclear energy policy after Fukushima disaster in Japan and plans to continue its investments in nuclear power plant area.

Third, domestic energy policy of Russia and the situation of Russian companies in 2000's are evaluated. In this respect it is undeniable that Russian economy has recovered a lot since 1998 economic crisis and due to increasing oil prices political decision makers prefer a valuable currency. Establishment of an oil fund is an important development against possible economic crisis. The characteristic of this era is creation of national champions and reining in the oligarchs. The example of it was Yukos affair. 90's were bad times for Rosneft, in comparison with 2000's. Rosneft increased its share among Russian energy companies with the support of Russian administration. Gazprom also plays an important role in Russian energy policy and Russian economy. Gazprom has an important role for cheap natural gas prices that Russian economy needed. However the natural gas prices increase and Gazprom removes subsidies slowly.

While Russian companies consolidated their positions, people close to Putin were appointed to executive posts in these companies. In this respect Gazprom and Rosneft are important examples for that kind of action. After the appointments, energy that was a matter of business in 1990's, become a matter of politics and Russian energy policy started to harmonize with Russian foreign policy. Russian

companies started to develop ambitious upstream projects to sustain its future supply. In addition to that, for Russian administration TNK-BP still remains the important example that Russian energy sector is appropriate for investment.

Fourth, outputs of Russian energy diplomacy are analyzed in this study. In this respect it is regarded that Russia uses different methods for different regions. Near Abroad of Russia faces more hard diplomatic tactics, increase of subsidized natural gas prices in winter, disruption of supply depending on debts of these countries like in Ukraine; sometimes political problems triggered disruptions like in Estonia and Georgia. In addition to that Russian companies used nontransparent transactions and established non-transparent companies like Trojan horse that move parallel with Russian companies but have no formal link with Russian giants. When supply to developed countries disrupted due to problems with transit countries, Russia proposed new pipeline projects that bypass these transit countries; this can be commented as the result of political ambition. Russia implemented more moderate methods with Western European countries and always provided gas that it promised with market price.

Russian energy policy is influenced by many parameters. First, Russian mind set - mind set of especially decision makers inherited from Soviet Union; liberal mind set is not appropriate for these people. When Putin came to power he gave the cold shoulder to oligarchs and forced them to obey Putin's rules. The time of production gurus started, and energy policy of Russia harmonized with foreign policy of the country. As a transit country Russia tried to forestall other export routes for Central Asia in this respect emergence of China with energy hunger caused price increase of natural gas in Central Asia; as a resource rich country Russia seeks demand guarantee and no disruption. In this respect Russia started to construct direct pipelines to consumer countries in Western European countries.

There is no action set directly used by Russia to all countries in the world. Russian energy diplomacy is implemented with a pragmatist approach. In this respect resource nationalism in the country is quite obvious, however ambitious projects need capital and for the capital Russian companies may make partnerships with other companies as it happened between Rosneft and ExxonMobil. The key rule of this is "Russians have to be executive in Russia." As TNK-BP joint venture shows us. In addition to that this motto is very visible especially in projects with over 400 million barrels of oil reserves.

Within the neoclassical realist approach perception of elites about Russian energy resources can be understood within the above mentioned information in this respect energy structure of Russia perceived as the "material power capabilities" and Russian domestic energy policy can be regarded as the mobilization of resources within the perception of Russian administration. Russian foreign energy policy is the reflection of Russian energy power.

As a result only determining factor on Russian energy policy is not only Russian foreign policy. Russian energy structure and domestic politics of Russia have impact on Russian energy policy and the interaction between these dimensions proves our hypothesis.

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