



Lifelong Learning Programme

EMPOWERING EUROPE

Energy, Security, and Environment



università degli studi FIRENZE



Empowering Europe: Energy, Security and Environment



Preface

The School of Political Science of the Università degli Studi di Firenze is pleased to present the second newsletter of its new course on the fields among energy, environment and international relations at European level.

The course "Energy, Environment and European Security" aims at presenting a comprehensive analysis of the issues of energy, environment and European policy from a strong multidisciplinary perspective, as this new course encompasses three different disciplines (Energy Economics, Environmental Economics and International History).

The course, entirely taught in English, is part of the postgraduate program in International Relations and European Studies.

Lecturers are Rossella Bardazzi, Maria Grazia Pazienza, and Alberto Tonini, associated professors at the School of Political Science. Being part of the Lifelong Learning Programme, the course has been awarded as a Jean Monnet Module by the European Union order to enlarge and deepen the field of European integration studies. This funding support is employed to finance both incoming professors (seminars and visiting professors from other countries) and short exchange periods for students interested in theses on energy issues (incoming and outgoing).

This newsletter is intended to stimulate the debate on energy issues and to promote the activities, which have been proposed during the entire course, to the international academic and non academic network.

This second issue focuses only on a cycle of lectures held by Professor Kryukov, Russian Academy of Sciences, Siberian Branch, Novosibirsk. These lectures have been devoted to the Russian Oil and Gas sector.

Practical information and links close the newsletter.

Disclaimer

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Russian Oil&Gas Sector: The Same Hydrocarbons but Quite Differente Assets

Professor Valeriy Kryukov, Russian Academy of Science

Each country has specific technologies and methods of extraction. In order to better understand the Oil&Gas sector of a specific country, being aware of the technologies used is necessary. However, it is necessary also to look at the amount of investments, the assets and solutions applied. Finally, it is also required to look deeply to the political, economic, and social environment where the O&G sector develops.

Russian oil production is quite unstable. In 1990 there were no investments in oil production in Russia. So the production decreased dramatically. There are different oil fields in Russia, which are located all over the Russian territories. For example, the Ukhta area which was not highly developed due to its distance from the industrial centres. There are also the Perm Ural, Surgut and a very disputed area which is the Polar area, the Kara Sea and Barents sea mostly. Also Sakhalin Island is a very important area of production of oil and gas for Russia.

The Soviet Legacy of Russian O&G Sector

The economic and political institutions can deeply affect the oil and gas production and they are important for a fast growth. The institutional environment, i.e. taxes, policies, services available and so on, can affect deeply the result of the O&G sector.



There is a difference between resources and reserves. The latter is that amount which can be extracted physically and such an action must be economically affordable.

An important feature of the O&G sector is the economy of scale. It is necessary to reach a certain level of production in order to let the unit cost decrease to a level which is economically viable. That has a consequence in terms of strategy and fields development and it means that finding big fields is necessary to cut the cost of drilling and extraction.

The Russian oil sector is based on big fields since these allow to easily achieve economies of scale which let maintain extraction activities also during low oil price periods.

In the middle of '60s, separation of oil and gas activities took place since oil fields were in different areas with respect to gas ones. Moreover, natural gas needs different techniques





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to be extracted. In the case of gas extraction, natural gas flows naturally out of the ground if there is the right pressure inside the field. Thus, compression stations are necessary in order to let gas come out from the earth. However, compression stations are not only needed for extraction but also for delivering of natural gas to consumers.

As a consequence, an adequate technology for compressors is required to extract and provide natural gas to consumers. In the USSR period, there was a lack of this capacity. Italy was one of the providers of compressor stations to USSR. Italy built the proper materials and machineries for the gas extraction in return for Soviet natural gas supply.

Russian O&G economics has specific features. In USSR quite different types of drilling were invented. As argued by János Kornai, the central planned economy of USSR was a shortage economy which forced USSR to think to new methods of drilling and specific solutions. Despite the lower quality of metals used for drilling machineries, USSR used a different method than the American one which however permitted to Moscow to extract O&G even though poorer materials were used.

Instead of constructing many wells, due to the economy of shortage, another option was



introduction of gas in the oil field, pressure would increase and hence oil production would be raised up. The injection of gas and, then, water permitted to extract more oil, having fewer wells. However, until nowadays, Russia hasn't yet used such a technology on a large scale due to extreme temperatures in the drilling areas and the lack of compressors. The solution was found in the substitution of gas with water enriched with additives. In the short-term such a technique is more efficient, more economic viable and more reliable. However, in the long run these qualities disappear and such technique becomes more costly compared to the one which uses gas instead water. Moreover, in Russia, extraction and administration of oil and gas fields are easier than in the USA since there are few giant fields which concentrate the most important part of Russian oil and gas production. Furthermore, in order to reduce costs, the structure of pipelines in the USSR (Russia) was (is) quite simple whereas in the USA the pipeline infrastructure has a web structure.

adopted the injection technique. Through the

In the '90 there was the idea to privatize the production through a market-oriented transaction but an infrastructure able to let the market act was necessary.

During that period, in Russia the economic issue was not so important, improving the available resources was the core issue, whereas in Western countries the attention was and is placed on the economic factors since many extraction companies are listed on Stock Exchanges. Thus, hydrocarbon extraction has to be economically convenient while in Russia it had to be technically convenient. However,



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nowadays the cost of oil production in Russia is one of the lowest since the most important investment decisions were taken during the Soviet era. The costs borne by Soviet States for investments were privatized in an anomalous way which allowed the new oil companies to pay less than what they bought.

By 1980, the cream of the resource based in Western Siberia was skimmed. The investment crisis became evident as the oil industry had to turn to more normal-sized fields, having exhausted the development of the giant ones. As a consequence, the system based on the economy of scale almost came to an end since investments required for new fields were bigger than the previous ones and realizing the same economy of scale as in previous decades was, by the time, impossible.

Reorganization and transformation of Oil

sector between 1980 and 2010

Between the end of the '80s and the beginning of the '90s, it was decided that the basic element of transformation in the Russian economy had to be enterprises. In that period, the O&G sector was divided among different agencies and all different stages of the O&G activities weren't under one single entity. Each stage reported to a separate Ministry. Integrating all these different stages in a unique company was the key idea of that period. The idea of integrating led to the creation of Gazprom, for all gas activities, and Lukoil, for oil.

However, the privatization of the O&G sector is not the only important aspect of the reorganization and transformation of this Russian sector. In fact, the most important and crucial part of the transformation of O&G sphere would have been the creation of new principles for the licences which permit to use the resources of subsoil and set specific parameters for extraction activities. However, between the end of the '80s and the beginning of the '90s, such a mechanism was not introduced. That means that the companies, which extracted at that time oil or gas from the subsoil, drew out

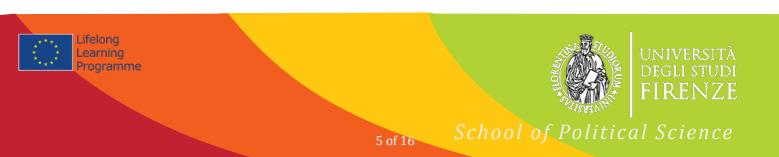


subsoil resources as much as possible. Thus, no investments were made during these years.

During the privatization period, one of the most important issues was how to transform assets held by multiple enterprises into organization to assets held by only one company. Such an issue was solved through the creation of holding companies which were able to formally possess all the assets in a vertical way.

During such a sweeping change, the majority of actions taken were not driven by economic reasonsbut by political aims since the O&G sector within the Soviet economy was a factor of power and influence for many people of the conservative area of the former Soviet party.

With a political view, in 1995 the oil sector was privatised as well. No public holder company was created. All the holder companies were



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private. That influenced, and still does, the Russian O&G sector and will affect the path of this sector for the following years.

In 1990, the resource/production ratio of oil was close to 46 years whereas for gas was more than 70 years. For international oil companies the ratio is usually around 12-14 years. Such difference is due to political determinants. For oil companies is unprofitable to put a lot of money in order to have a long period of production, whereas on Soviet times the view was different and that permitted to have such a resource/production ratio.

The distribution of shares of Russian oil companies changed during the second half of the '90s since the shares of some oil companies were put as collateral for loans given to the Russian government by International banks. Whereas in 1992 the state ownership was around 45%, in 1995 the share fell around 27%. All the most important O&G companies were transformed from state-owned companies to private companies except Rosneft. The transformation from state-owned to private companies produced a change also in the behaviour of these companies. Moreover, instead of efficiency-oriented companies, several monopolies were established.

A striking current feature of many Russian companies is the not transparent ownership structure. The blocking share of more than 25% is controlled by a small group of individuals. The dominant insider groups in most of the private oil companies were less concerned with long-term development of production than they were with financial indicators and increased capitalization.

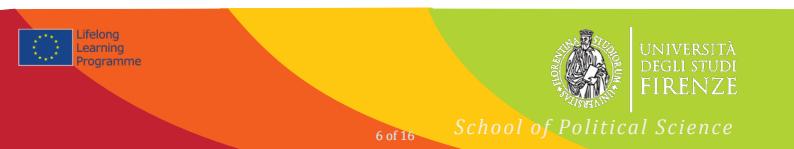
In order to make an investment in the O&G sector, onecould take different actions:

- 1. To take a loan
- 2. To sell shares (insider dilemma)
- 3. To increase production
- 4. To cut costs

The free-float in case of Russian Oil Companies is much lower compared to the free-float of IOCs. The stock exchange is not so important in Russia, other institutions are much more important in order to gather the required funds for investments.

The problems of a private company within an unclear and weak institutional environment are peculiar:

- 1. The dominance of short-term goals over long-term ones: mergers, acquisitions, and speculative operations in the securities markets.
- 2. Maximizing control over the company, thus preventing hostile takeovers in a situation with incomplete legislation and little enforcement.
- 3. Exit strategy, buying asset cheaply, securing rapid capitalisation, and then selling them at a high price to strategic investors. Russian oil companies acted much like financial speculators.
- 4. Active use of administrative resources.
- 5. Not transparency in operations as well as in distribution of income was possible for companies holding inexpensive assets and who did not need to attract large outside investors.
- 6. Many integration processes had a hostile character.



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In 2004 the state share began to grow again. In fact, state companies started to take over parts of or even entire private companies. Also the number of companies has been decreasing in the last years. Moreover, the role of independents is decreasing since the production is still concentrated. 73 fields give almost the 45% of the entire oil production. Hence, oil production in Russia is still concentrated.

Moreover, the discovering of new fields and oil well productivity have been decreasing dramatically since 1970s. Russian government is trying to concentrate oil and gas production in few hands in order to rationalize it. For example, Rosneft has become the most important oil company in terms of production. However, such supremacy does not exist in terms of efficiency and capitalization.

The absence of an effective resource management system triggered a change in policy. Moreover the impression that the state was not receiving appropriate tax revenues triggered the decision of Russia to become a more direct actor in the management and operations concerning hydrocarbons. Another key aspect that pushed such a change is the realization that further developments of petroleum sector would have been contingent in opening up new regions such as Russian Far East. This area was very attractive to fast growing countries, e.g. China. Such circumstance needed huge investments which, it was common to think, were not so easy to undertake by private sector.

During that period, Yukos was one of the biggest companies operating in the O&G sector. It was one of the most aggressive and developed companies that was controlled by Mikhail Khodorkovsky, a Russian businessman, who was incarcerated in 2004. Yukos became to be more limited to develop its business since it had been becoming too powerful and too independent with respect to Russian government. The stateowned Rosneft acquired Yukos, which disappeared. Khodorkovsky was a very able businessman who succeeded in increasing the productivity and was able to understand the importance of the most advanced technologies (e.g. hydrofracking) for the Russian O&G sector. His success derives also from the acquisition of Yukos in 1994. In 1993, Yukos had acquired one of the biggest not-developed fields in Russia, such an acquisition permitted to Khodorkovsky to have a very big field to exploit and a big cash flow from it. After the acquisition of Yukos by Khodorkovsky, the company managed to increase aggressively its productivity but also to elude big amounts of taxes.

In recent year of the recovery rate (oil extracted/ reserves) of private companies decreased from 50% to around 30%. That proves that companies had been extracting the most attractive part of the fields but they did not invest enough to extract the remaining part of oil. In the same period, in the USA the recovery rate was growing.

However, although no new fields have been developed during Putin's era, Russia managed to increase its production using new techniques. Indee Russia started to use hydrofracking technology. The use of this technique for several months on the same field brings to a fast decline of the productivity of the well. As a consequence, using different technologies is needed in order to maintain the productivity of the field. Another method could be the horizontal drilling



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technique which has increased as well. Such a technique is more sophisticated and expensive but also economically more efficient. However, despite using a mix of technologies, developing new fields is necessary in order to maintain the overall oil production.

Another issue that affects deeply Russian O&G sector is taxation. Usually, there exist two different approaches: income-based and profitbased. The first one is easy to administer. Taxes based on profits are more complicated since several institutions and actors are involved. The taxation system introduced in Russia in 2002 had an income-based tax approach, a very easy system but, at the same time, very inflexible which, sometimes, over-taxed the companies more than their incomes.

The tax system made it rational for oil industry to develop the easiest, high-yield fields and leave aside more complex projects, with subsequent delays for the development of the latter. The absence of legal and tax incentives for developing fields in new regions has meant that an overwhelming share of production takes place in the old regions.

Another key issue is the decreasing level of investments. On average, they amounted to US\$ 6 billion per year in 1998-2004, and they reached about 19billion.

The above mentioned institutional framework is the cause of the decrease of medium-small companies role in the Russian O&G sector. The lack of regulation policy, primitiveness of taxation, not-transparent activities regarding transportation and refining systems are the main causes of such a decreasing role of medium-small firms which entails also a decrease in investments.

Competition in Russia is difficult to reach since Russia lacks infrastructure. During the Soviet Era selling gas was forbidden in Siberia. Thus, pipelines are not well developed in Siberia and the usage of natural gas is not so common. Moreover, each region has a predominant company which does not permit to establish a free market situation.

Besides, infrastructures and pipelines necessitate to have a clear regulation and not only a distribution of shares among companies.

Reorganization and transformation of

Natural Gas sector between 1980 and 2010

The natural gas sector is one of the most important sectors of Russian economy. Today, Russian gas sector accounts for 8% of GDP, it represents 20% of the country's tax revenue and provides 20% of Russia's hard currency earnings. Domestic consumption of natural gas is approximately 400 bcm per year, about 70% of the entire production while the rest is exported.

However, the structure of the gas sector is still the same of 1960. Russia relies on giant and super-giant fields and on a long-distance pipeline system where consumption centres are located, on average, at 2500 km from the production areas. With such a situation, economies of scale could be realized during the production phase only since transportation costs have a big impact on total costs (about 70-75%). However, big natural gas fields (e.g. Urengoy, Yamburg, Medvezh'ye) are starting to rapidly come off their plateau (Gazprom estimates an average -7.2% per year decrease of production in its main fields), requiring new efforts for the



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discovery of new fields. Despite such a decreasing trend, Russia, with a 24% of the world total gas reserves (Statistical review of World Energy, 2011), has still the biggest proven gas reserves in the world. Its reserves are two times bigger than the Iranian ones and 2.5 times than the reserves of traditional gas in North America.

Nowadays, gas production structure shares some fundamental organizational characteristics with the oil sector, e.g. mapping, exploration, production, transportation, and refining. As mentioned for oil industry, also the natural gas sector is heavily constrained by Russian infrastructures developed during the centrally planned economy period. In fact, during the Soviet era many pipelines towards Western Europe were constructed in order to supply natural gas. Today, such a Soviet heritage is still the main backbone for the supply of Russian natural gas to Western countries. Such pipelines were/are connected to very productive fields and use a high-pressure transportation system (75 atmospheres) which reduces the cost of transport.

Moreover, the Russian gas industry is deeply influenced by a contradictory institutional environment established after the dissolution of the Soviet Union.

In fact, the gas industry was separated from the oil one in 1966, where the Ministry of the Gas Industry (Mingazprom)was established. At that time, significant new discoveries containing predominantly natural gas with some liquid components were made. In the second half of the '50s, output from north Caucasus and Ukraine expanded rapidly and Volga-Urals fields would have been developed few years later. In the first years, gas was consumed mainly close to the production site. However, a long-distance pipeline was already constructed, connecting Moscow with Caucasus. In the '60s the distance between production sites and consumption centres increased dramatically after the discovery of giant and super-giant fields in Central Asia (Uzbekistan and Turkmenistan), in the Southern Urals (Orenburg) and in the Komi Republic. Starting from mid-'70s Tyumen Oblast, in West Siberia, became a dominant region for natural gas production.

The development of the sector accelerated during the '70s when a series of super-giant fields in Yamal-Nenets autonomous district (Northern part of Tyumen Oblast) were connected to the pipelines. Moreover, the first wide-diameter pipelines (1420 mm) were introduced in 1975. By 1990, such type of pipelines constituted about 25% of the total Soviet trunk pipeline network (about 220.000 km).

As part of economic reforms of 1987, the socalled state concerns with technologically connected industrial enterprises were established with the aim of loosening up the inflexibility caused by strictly vertical ministerial structures and the narrow sector approach to various problems (vedomstvennost). The most notable result of this process was the establishment of the State Gas Concern Gazprom in 1989. The next steps in the reform process also reflected the specifics in the structure of the sector. In the Presidential Decree No. 1333 of November 1992, Gazprom was transformed into the State Joint Stock Company Gazprom, 100% owned by the state.

Starting by 1993, the state's ownership of



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Gazprom was reduced to 40% of its share, in line with the general privatization trend in the energy industries of that period. In 2005, a new legislation expected that the state should have owned a minimum of 50% plus one share in Gazprom, achieved in 2006. Such a move reestablished the full control of the company in Russian government's hands. The main responsibility of Gazprom in its different incarnations has been and remains to secure an uninterrupted flow of natural gas to domestic consumers as well as exports. However, these important responsibilities were associated with formidable privileges granted to this company. Already in 1992, Gazprom obtained exclusive rights to deliver gas for state export contracts. Such a move was made to control export gas prices and not to have price competition within foreign markets. Moreover, the company had the right to retain 38% of foreign currency revenue. a share that increased to 45% few years later. In 1992, a presidential decree gave control to Gazprom over operations on the entire gas sector. Gazprom obtained also the management of natural gas fixed assets, i.e. the huge Russian trunk pipeline network. Licenses for future developments in the Yamal Peninsula, the most promising area for natural gas in Russia, and Sakhalin Island were given to Gazprom. Thus, the company had licenses for 81 fields, representing almost 70% of Russian gas reserves by 1995.

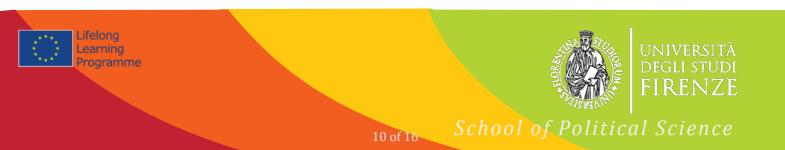
However, additional exclusive rights were given in 1999 when Gazprom became the unique owner of the pipeline system. Moreover, a complete export monopoly was legally formalized in 2006, eliminating the large theoretical potential for other producers to export. Finally, in 2008 Gazprom obtained the exclusive rights on "strategic" gas fields as well as all gas fields on the continental shelf.

However, during this period, fields have been getting smaller and Gazprom does not have a precise idea about how to exploit the potential of these fields in a viable way. The structure of Gazprom is oriented to big fields and big infrastructures. As a consequence, no specific and deep knowledge about small fields has been developed during these years, entailing a lack of competencies at the present time.

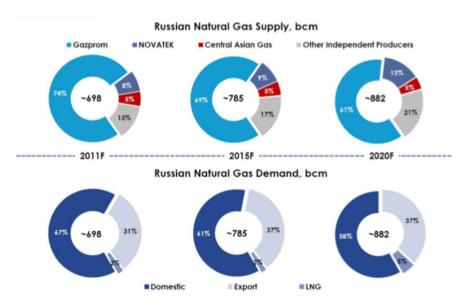
Thus, Gazprom's monopoly has influenced Russian gas industry which continues to have the same weaknesses of the Soviet era. The distribution pipeline system is underdeveloped. Mobile and flexible service organizations and companies are still lacking. Finally, there still exists a primitive monitoring activity of production since production levels are measured from whole field rather than from individual wells or groups of wells.

Despite these issues, the Russian gas industry is expanding in other areas of the country thanks to other private companies which are not part of Gazprom. For example, large oil companies have entered into gas industry since oil fields, sometimes, may have also relevant gas reserves that let oil companies produce associated gas. Gas comes out with oil, through a separation system natural gas and oil are separated and they can be sold to consumers separately. Also the Italian company Edison operates with its know-how to extract gas from oil by petrochemical processes, delivering its solutions to Russian firms.

However, there are significant companies for which natural gas is the main business and



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which are not part of Gazprom. Then, there exists a third group of production companies in which Gazprom has ownership stakes. Despite this, all the "independent" companies control around 30% of Russian gas reserves and account for 25% of production.

One of these companies is Novatek, established in 1994. With its different approach compared to the Gazprom's one, Novatek succeeded in becoming a really efficient player. In fact, the strategy of the company is based on developing small fields which were passed over by Gazprom and were not fully explored. Such a strategy received active support from the authorities of Yamal-Nenets region. Despite its innovative approach, the strongest growth of this company took place after a close cooperation with Gazprom, which bought 19.9% of Novatek's shares in 2006.

However, the importance of independent firms is growing steadily, according to the graph shown in the next page Gazprom will lose shares in the total Russian natural gas supply within 2020.

Furthermore, a key issue for independent producers is the physical access to longdistance pipelines. With almost 161.000 km of trunk pipelines, Gazprom owns the integrated pipeline network in Russia. Moreover, it has the monopoly of underground storage and possesses stakes in 200 of the 318 regional gas distribution organizations accounting for 80% of the gas distribution networks. The

other Russian companies have the right to access to the trunk pipelines by Russian law. However, such an access depends on spare capacity in the pipelines and only Gazprom determines whether such capacity exists or not. Moreover, this information is confidential. According to oil companies, access to gas pipelines should be preferential for associated gas since its extraction is hard to regulate without harming the wells.

Concerning gas prices, they have remained heavily regulated and the surplus gained from gas exports has been transformed into a subsidy to Russian consumers who pay below-cost prices for natural gas. By 2008, despite a domestic consumption around 70% of Gazprom's production, only 18% of Gazprom's gross income derives from domestic sales.

Despite the "liberalization", the system for price formation remains very similar to the Soviet one. Federal Tariff Service sets the regulated gas price with heavy input by Gazprom, based on a



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"cost-plus" basis. On the other hand, considerable volumes are traded at market prices thanks to independent suppliers, which in 2011 had a share around 27%. Gazprom still charges its industrial customers with negotiated prices for volumes in excess of annual allocation plans. Higher gas prices produce an increase in Gazprom's income which does not automatically produce an increase in investments for new production. In fact, higher regulated prices in a monopoly situation are likely to encourage higher costs in existing activities, costs that can now be covered by higher profits. Moreover, thanks to the increased profits Gazprom could expand its business in other sectors of Russian economy as already done with its investments in the electricity sector and activities unrelated to energy. Furthermore, in the past years Gazprom has increased its dividend pay-outs up to 25% of net income, showing a strong commitment to return cash to shareholders.

In such an environment there is no stimulus for Gazprom to become more efficient. Export prices and export volumes remain crucial factors. If export volumes increased, the need to raise domestic prices would be lessened but, if they remained at present levels or even fall, the pressure to compensate with higher domestic prices would be strong. The consequences of such a situation include different aspects. First of all, there is no incentive to lower costs and limit prices increases since prices are determined on a "cost plus" basis. Moreover, there could be limited competition for incumbents and high entry barriers for new companies in the gas business. In addition, there could be low efficiency in the use of natural gas due to the absence of market signals.

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As for reforms, these are no debated at present. Since summer 2001, when the issue of a broad structural reform was raised, neither the government nor the presidential administration has had any serious interest in restructuring Gazprom. Apparently, they are not convinced that transferring production or distribution to private actors would mean more competition and more inflow of investments. There is a concern that budget revenues from gas sector would fall drastically in case of a genuine renovation.

Thus, the system of regulation of Russian gas sector remains inconsistent and eclectic. Thanks to the Soviet heritage, Gazprom continues to play a role reminiscent of the old planning system. The company decides who shall receive gas at government-regulated prices and the quantity of it. It can be argued that the liberalization attempts may result in worsened market access for independents. In 2010, the mineral extraction tax for natural gas was imposed at around 7% of the wellhead value whereas for oil it was about 30%. The discussion between Gazprom and Russian Government concerning taxes and export fees has ended for many years in favour of Gazprom. Somehow, it could be argued that, nowadays, the Soviet heritage is still living in Russia.



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Exchange Programme Report. The experience of

three Italian Students.

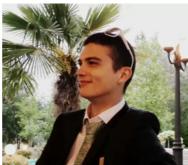


<u>DORIANA FORLEO</u>

Carrying out a period of research at the Novosibirsk State University was an e d u c a t i o n a l opportunity from many points of view. First of all, my

colleagues and I had the chance to develop our own research projects studying topics related to the management of Russian energy resources in collaboration with sector experts who provided us all necessary assistance to success in our intent. Professors involved in the exchange project organized very interesting seminars, and gave us a Russian and personal perspective on the development of the Russian economy in the post-Soviet time.

Moreover, the direct co-operation with Russian Professors compensated for the inability to personally analyse that part of material produced in Russian language. Professors demonstrated a sincere interest in communicating the results of their researches. That gave us the chance to analyse issues related to the development of energy resources, in Russia in general and Western Siberia in detail, from a very privileged observatory. To sum up, despite the obstacles posed by cultural and linguistic barriers, difficult to overcome in two weeks, the kindness and hospitality of all people involved in the project allowed us to live an educational experience under a human and academic point of view.



ALAN MARAZZI

Akademgorodok is Novosibirsk State University's campus and, contrary to what somebody could expect, is surrounded by the

green Siberian taiga and is very liveable. Inhabitant's cordiality and generosity are wellreceived given the extreme weather and the difficulty of approach for not Russian speaking people.

Regarding academic opportunities, they are multiple given the long tradition on university and research campuses of scientific and economic subjects. In particular, the chance to talk and discuss with whom had lived the transition from USSR to the modern Russia was very stimulating and, in stops and starts, illuminating since the Western perception of such a huge and complex country is still simplistic and stereotyped.



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Many meetings with researchers and teachers were very precious as a source of information on the actual Russian energy situation. In fact, there still exists a closure mood and a lack of transparency on energy issues in Russia. Given that, having access to key information is very difficult, so having such meetings in a confidential way was very useful. As for me, thanks to this experience I received a new push to specialise myself on hydrocarbon issues.

The opportunity to visit and touch a piece of Siberia was surely one of a kind and pleasant thanks to the many guided tours not available to normal tourists.



<u>MARCO SIMONCINI</u>

From November the rd to 21, three RISE (International Relations and European Studies Class) students visited Novosibirsk State University. Situated between East and West, Novosibirsk is a multi-ethnic and dynamic city.

The university is in Akadem Gorodok, a town built during Kruscev's times in order to be an university campus and a showcase of Soviet science.



Once in Akademgorodok we were warmly welcomed by Professor Valeriy Kryukov of the Russian Academy of Science, and by Professor Alexander Baranov of the Novosibirsk State University. Indeed, as you may know, in Russia research activities are separated from teaching, being responsibility of the Academy and the State Universities respectively.

Professor Kryukov made available journals and studies and gave us the opportunity to visit research institutes' magnificent museums, which, sadly, are often closed to public. Moreover, we had the opportunity to observe closely the most important economic and scientific institutions of Novosibirsk thanks to the visits to research centres and industries.

Professor Baranov arranged several meetings with experts of energy economics, giving us the



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opportunity to collect useful material for our researches while students from Novosibirsk University took care of all cultural visits.

I firmly believe that the continuous contact and exchange of opinions with people living in a completely different cultural environment represented the best part of this voyage. Personally, I would not have been able to deeply understand the structure of the energy industry in Russia without dialogue with people such as Professor Kryukov, Professor Tagaeva, Professor Suslov, and Vice-Professor Gimuldinov. This experience gave us the opportunity to comprehend what means for Russia to be on the border between West and East, what is the heritage of communism, how the aggressive entry of the market economy gave birth to a peculiar economic system.

Considering the important economic connections between Europe and Russia, I believe that our efforts in understanding the economic system upon which our energy supply depends are vital. Such experience, although demanding, proved to be very stimulating. hope that Florence University will continue this collaboration and maintain contacts with this distant but, at the same time, very close world.





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School of Political Science

http://www.sc-politiche.unifi.it/mdswitch.html

International Relation and European Studies

http://www.rise.unifi.it/mdswitch.html

Empowering Europe: Energy, Security and Environment web site.

http://www.eu-ese.unifi.it/mdswitch.html

Jean Monnet Pole, University of Florence

http://www.unifi.it/vp-7361-cattedre-jean-monnet.html

Other events in Tuscany: Festival of Europe

http://www.festivaldeuropa.eu/en



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