The Challenges of the Russia's Energy Policy during the Covid-19 Crisis

PETRE PRISECARU, PhD
European Studies Center, Institute for World Economy, Romanian Academy
13 September Street, No. 13, Bucharest, ROMANIA
petreprisecaru@gmail.com

ANDREEA-EMANUELA DRĂGOI, PhD
European Studies Center, Institute for World Economy, Romanian Academy
13 September Street, No. 13, Bucharest, ROMANIA
andreeadragoi@iem.ro, http://www.iem.ro

Abstract: Currently, it is a well-known fact that Russia represents a major player on the global energy market with massive fossil fuel reserves and also with a high dependence on energy exports. While in the recent years Russia was the world's largest exporter of energy resources, ranking first in the global hierarchy of gas exports, second in oil exports and third in coal exports, the economic growth remained mainly driven by its "energy power". That proved to be a major vulnerability of Russian economy, especially since its energy sector is still characterized by high corporate concentration and a lack of market mechanisms amid very low domestic prices, a high energy intensity and low efficiency with no real interest from the major stakeholders for the decarbonisations process. As the main development directions outlined in the Russian Energy Strategy 2035 have stated, large state-owned companies depend on government subsidies, and this substantial financial support is all the more vital, especially in the context of the COVID-19 crisis. The "2020 energy crisis" – how it is known in the scientific literature – was mainly triggered by the oil price war between Russia and Saudi Arabia (both being major actors within OPEC+) and proved to have an important negative effect for the Russian energy sector development. Taking into consideration that the pandemic induced the decline of global demand for oil and natural gas, this evolution heavily affected the export volume and revenues of Russian companies. Given the expected prolongation of its reciprocal sanction regime with the West, Russia depends on China's energy demand and financial support. Given all these trends, our paper aims to highlight that the COVID-19 crisis is fundamentally relevant to the Russian energy sector, a sector which is an important sector for the Russian Federation. Our methodology is based both on a quantitative analysis and on highlighting the economic effects, constraints, and "weak points" of the Russian energy sector in the modern realities of the „2020 crisis".

Key Word: Russian economy, oil price war, energy exports, pandemic crisis, market reforms, decarbonisations process
JEL Classification: Q35, Q38, Q41-48

1 Introduction

Russia's energy policy undoubtedly represents both the "backbone" of its economic power, and its main lever of influence on the international relations field. While Russia has traditionally asserted itself as a vector of global power through hydrocarbon exports, the pandemic has led to great vulnerabilities for the global energy market, confronted with the demand and supply double shock, both being acutely felt by Russian producers. In addition, the outbreak of the "oil price war" in the first months of the COVID-19 crisis had a negative impact on Russia's budgetary and economic balance, raising questions about the viability of the country's model of economic growth that is highly dependent of energy exports. In the light of the above trends, this article proposes a radiography of Russia's energy policy in 2020 while underlying its implications for the Russian Federation's bilateral relations with other states, especially major oil and gas producers.

2 Russia's energy policy. Challenges in the pandemic era

In recent years, energy sector reform in the Russian Federation was the subject of many national and international studies arguing that even before the pandemic outbreak there were major reasons of concern

relating to Russian economy high dependence on fossil fuels (Mitrova, Melnikov, 2019; Kulachinskaya et al., 2020). Although Russia ranks fourth at global level regarding primary energy consumption and carbon dioxide emissions in the world, it has not yet a viable strategy for the decarbonisations of the energy sector. At the same time, Russian energy intensity (calculated as units of energy per unit of GDP) remains high due to relatively low energy prices, the development and share of solar and wind energy have been negligible (under 1%), the attitude concerning the problems of global climate change remaining among Russian stakeholders one of almost total indifference. The lagging state of reforms and the shock of the pandemic have brought serious challenges and have revealed the need to adopt a new strategy for the future development of energy sector, which will be under a huge pressure due to influence of the climate change agenda, increased global competition, technological isolation and gap, high financial constraints.

Russia is an important player in the global energy system because it provides 10% of global primary energy production, 5% of global primary energy consumption, and 16% of international energy trade. In recent years Russia was the world's largest exporter of energy resources, occupying the first place in gas exports, the second position in oil exports and the third in coal exports, according to British Petroleum and the International Energy Agency statistics. Russia also occupied the fourth place, after China, US and India, in the world hierarchy of primary energy consumption, in production of electricity and in carbon dioxide emissions due to the intensive use of fossil fuels. Russia's energy strategy and its policy concerning the energy transition and reforms are important not only for the country itself but also for the rest of the world. Considering the multiple challenges and the requirement to modernize and create a sustainable economy, the energy transition is urgently needed as the optimal means to reduce the country's reliance on hydrocarbon export revenues. In 2019 hydrocarbons had a contribution of 25% to GDP and 39% to the country's federal budget revenues, 65% to foreign earnings from exports, and almost a quarter of overall investments in the national economy.

Although many market reforms based on legislative and institutional measures have been enforced in the energy sector, this sector is still characterized by high corporate concentration and a lack of market mechanisms. Decentralization is a concept that encounters strong resistance from both the central authorities and major business stakeholders and is quite frequently regarded as a threat to the stability and reliability of the national energy system, and to the national security. After a centralized and planned economy under the Soviet Union and after three decades of market economy, low prices for energy in Russia are still persisting and cheap energy does not create incentives for energy efficiency improvements or for reduction of the energy consumption and for decarbonisation process. Low energy prices are probably seen as a means of social protection, their increase arousing fierce opposition from consumers (Stambler, 2020).

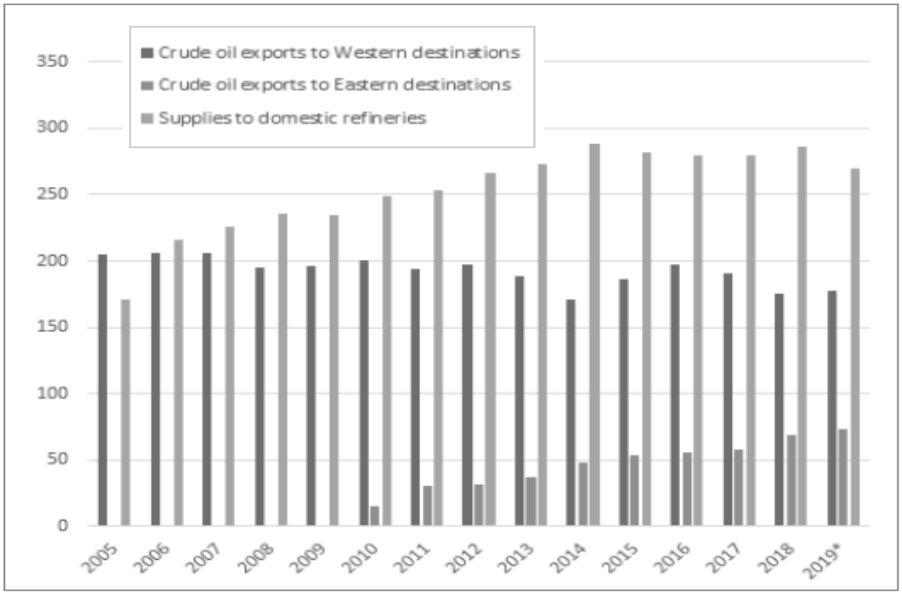
Russia produced 560.2 million tons of oil in 2019, 0.8% up from the previous year, as the preliminary data from the Russian Energy Ministry's unit show, the equivalent to 11.25 million barrels a day, making Russia the third largest oil producer worldwide in 2019. In the same year, the output of gasoline refining in Russia was 40.2 million metric tons, increasing by 1.9% compared to 2018. Furthermore, Russian refineries produced 78.4 million metric tons of Diesel fuel and 45.7 million metric tonnes of fuel oil in 2019. In the same year, Russia produced 679 billion cubic meters of natural gas, increasing the volume by approximately 10 billion cubic meters compared to the previous year. LNG production reached about 27 million tons. Thus, it ranked as the second leading producer of natural gas worldwide in 2019. In 2019 Russia's coal production was estimated to exceed 440 million tonnes which would be the highest figure for the country in the last 11 years, being the sixth largest producer of coal in the world, while exports amounted to around half of production, China with 33 million tonnes and South Korea with 28 million tonnes were the most important clients.

Russia's economy and budgetary incomes heavily depend on energy exports, which were severely affected during 2020 both by the outbreak of the COVID-19 pandemic and by the "oil price war". Theevolution of Russia's oil exports in 2005-2019 period is illustrated in the Graph 1.

According to some recent analyses (e.g. Mitrova, Yermakov, 2019), the energy policy of the Russian Federation represents the main lever through which the country maintains a relevant position within international trade partnerships, representing, together with its military force, one of the main bargaining advantages in the global hierarchy of power. Currently, the directions for the development of Russian energy policy are outlined in the Energy Strategy 2035, which aims to determine the path that Russia has to take for supporting the national energy sector: strengthening the state control over large companies or liberalizing markets. In the opinion of the aforementioned authors, international sanctions have had the effect of increasing state control in the energy sector, this fact being encouraged by the "tectonic changes" that have taken place on the international oil and gas markets. Currently, the share of independent producers in Russia's output, which is the driving force of

competitiveness and innovation, has steadily decreased, and, according to official data, in 2018 it barely represented 9% of the industry.

Graph no.1: The evolution of Russia's oil exports between 2005-2019 (millions tons)



Source: Authors based on Rosstat figures. For 2019 data are estimated.

Russia's oil and gas industry remains a force in the national economy, but the large state-owned companies depend on government subsidies, and its substantial financial support, especially in the context of the COVID-19 crisis, could collide with fiscal-budgetary targets undertaken by the authorities. The main subsidies granted to the Russian energy sector are: a) temporary export tax benefits for oil produced from new deposits in Eastern Siberia (approximately $ 4 billion); b) mining tax allowances for new deposits in Eastern Siberia (about $ 2 billion); c) property tax exemption for major oil and gas pipelines (approximately $ 1.9 billion); d) fiscal allowances for the mining tax for new oil fields on the territory of Okrug Autonomous Nenets and in the Yamal Peninsula of the Yamal-Nenets Autonomous District (approximately $ 1.5 billion); e) subsidized tariff for oil transportation through the Eastern Siberia-Pacific Ocean pipeline system (approximately $ 1.1 billion); f) reduction of the coefficient at the rate of mining tax for oil from depleted deposits (approximately 1 billion USD); g) temporary exemption from customs duty on gas exported to Turkey through the Blue Stream pipeline (approximately $ 0.8 billion); h) accounting of exploration and research and development costs for the purpose of calculating income tax (at least $ 0.6 billion); i) accelerated depreciation rates (at least $ 0.6 billion); j) state financing of geological exploration for hydrocarbon raw materials ($ 284 million).

In 2020 Russia's energy policy has faced the impact of the COVID-19 crisis in which caused a severe recession that has affected both the demand and supply of energy products and implicitly their prices. The collapse of oil prices in March and April 2020 amid the impact of the global pandemic and of the strong deceleration of oil demand and supply generated a strong shock for the global oil industry, but also led to declining prices for other energy resources. Compared to other oil-producing countries, Russia was better prepared to deal with this shock caused by the sharp decline in oil prices, because since 2014, Russia's economy has developed a certain resistance to possible oil shocks due to conservative monetary and fiscal policies. Large budgets and foreign exchange reserves, the floating exchange rate and the regressive tax on prices, together with the light fiscal burden, have contributed to the resilience of Russian economy, as the price of oil has fallen. However, the current situation raises the question: how serious will be the challenge posed by the Coronavirus pandemic to Russia's long-term economic model, which remains heavily dependent on oil and gas exports? The first phase of the global pandemic and blockage measures have frozen much of the world's economic activity, implicitly affecting Russia as well. In turn, energy demand fell sharply and oil and gas prices declined to unprecedented levels since the 1997-1999 Asian crisis and the Great Recession of 2008-2009, respectively (see Graph 2).

Graph 2: Historical evolutions of oil prices

Source: Authors, based on World Oil data.

The scale of market disturbance and price collapse was confirmedly astonishing in the magnitude and speed of the events. Subsequently, a significant part of the global economy began to reopen in areas such as China, the United States, the European Union and Russia, but the key question for Russian decision-makers remains the dilemma posed by the new crisis, whether this combined shock of demand and supply should lead to a rethinking of the economic development strategy and to a significant reduction in Russia's revenues from energy exports, reconsiderations needed and imposed by the prospect of fundamental changes in global long-term energy markets. In 2020, the world oil industry faced the deepest crisis ever, due to an unprecedented 30% drop in demand between April 2019 and April 2020. This decline has led to a dramatic oversupply of stored oil, which explains why West Texas Intermediate (WTI) crude oil futures prices in the United States traded below $ 0 per barrel on April 20th, while spot prices for Brent decreased by 87% from the end of 2019 to mid-April 2020.

3 Oil price war between Russia and Saudi Arabia

Since late 2016 and early 2017 the important role played by OPEC in the oil market in regulating export supply has been completed or rather replaced by OPEC+, which is an alliance/group consisting of 13 OPEC and 10 non-OPEC members, which together control over 50% of the world's crude oil supply and hold about 90% of certain oil reserves. The price fluctuations in 2019 were also caused by the uncertain situation of the market supply of some large producers, within the OPEC + alliance, which left its mark on the price dynamics.

Since the beginning of February 2020, the plans of the OPEC+ members to reach a rapid agreement to cut production/supply, imposed by the downward trend in prices, seemed to be in jeopardy, as the Coronavirus pandemic had already begun to affect crude oil and natural gas markets. Under these circumstances, the OPEC Joint Technical Committee (JTC), meeting in early February 2020, recommended a reduction of OPEC + production by another 600,000 barrels/day in response to the strong negative impact of the pandemic, but Russia did not agree with the proposal and called for more time to analyse the global supply situation. Practically, from the very beginning, there was a certain discord between Russia and Saudi Arabia regarding the amount of additional supply/production cuts. Subsequently, in the second half of February and the beginning of March, when the effects of the Coronavirus pandemic became more and more obvious, crude oil prices were already following a strong downward trend. As a result, OPEC proposed substantial reductions in production in order to prevent a further decline in prices, but Russia did not agree to sign the new agreement. Subsequently, on March 5 2020, OPEC representatives met in Vienna and announced a proposal for further reduction of supply of the OPEC + by 1.5 million barrels per day (75 million tonnes/year), representing a reduction of the supply/ production by 1 million barrels/day from OPEC and 0.5 million barrels/day from the non-OPEC coalition, respectively, but Russia did not sign the agreement. As a consequence the next day, on March 6, oil prices collapsed.

Although Russian President Vladimir Putin had previously stated that the Russian authorities were more or less satisfied with the level of oil prices, noting that the Russian budget can maintain its resilience even with lower oil prices, still it was hard to imagine why he did not agree with OPEC's proposal. Some analysts linked this behaviour to Putin's desire to stop shale oil production in the United States, a serious competitor for Russian oil, by causing a dramatic falling of oil prices. The survival of the OPEC + was called into question by Russia's refusal, especially since Russian economy proved to be resilient to larger supply/output cuts, not only because it had a powerful resistance to lower prices than its competitors from OPEC, but also because the oil market has for long time suffered by the so-called "demand trap", meaning that supply reduction could not save prices when global oil demand fell sharply.

Despite those realities, the impact of the oil price war on the Russian economy has been quite harmful. The Russian government initially estimated a budget surplus of 930 billion rubbles ($ 11.4 billion) in 2020, but after the outbreak of the price war, the budget balance has actually registered a deficit. The rubble rate has declined, falling by more than 30% from early 2020 to March 18. Major stock markets, such as New York, have also been hit by falling oil prices. Because of the devastating effect of the collapse in oil prices on the US shale oil industry, government officials of US Administration, members of the Senate and even President Trump had been heavily involved in mitigating a Saudi Arabia-Russia agreement. Towards the end of March, US President Donald Trump made efforts to convince Russia and Saudi Arabia to reach an agreement for cutting by 10-15 million barrels/day (500-750 million tons) the OPEC + supply. Saudi Arabia has called for an emergency OPEC meeting, but Trump's optimistic announcement has raised many questions because Russia had initially denied its acceptance, while lately Saudi Arabia declared also its scepticism in the matter.

Finally, in April 2020, OPEC + agreed on joint reductions of 10 million barrels/day, calling for Saudi Arabia and Russia to cut production by 8.5 million barrels/day for May and June, after which the reductions would gradually decrease, to 8 million barrels/day and then to 6 million barrels/day. The agreement was not well received by the markets, hence WTI and Brent brands reduced their prices. The OPEC + agreement was considered important, but still insufficient to cope with the sharp decrease in demand of 20-30 million barrels/day, especially as oil inventories were to increase in the months following its closure. The proposed reduction of 10 million barrels/day by OPEC + for May and June had prevent the world from physically testing storage capacity limits and prevent prices from falling into a deep abyss, but had not restored the desired market balance. Some analysts considered that there was still a considerable risk in price evolutions due to the fact that the reductions were not sufficient to prevent the accumulation of massive inventories in April and May (Watkins, Simon, 2020), and crude oil prices could have fallen despite supply cuts.

The high volatility of crude oil prices in March, a feature of the first quarter, but also of the last two decades, worsened in April, on April 13th the price of WTI crude oil on the New York commodity exchange (NYMEX), being $ 22.41/barrel, decreasing at $ 18.27/barrel on April 17th, and on Monday, April 20th, collapsing completely and entering a negative margin. This latest development was due to the fact that there was no demand at all, but instead there was a massive supply, including of Saudi crude oil (37 million barrels in oil super tankers), along with very large inventories and a massive overproduction in the US. As a result of these unfavourable developments, the price of oil fell further by $ 55.90/barrel in one day, reaching -37.63 $/barrel, but also the spot price (for immediate delivery) reached the same level. The historic collapse in oil prices is an indication of the major vulnerabilities from a market dominated by oversupply, hence the reduction of supply by OPEC + by 485 million tons, will not compensate for the dramatic fall in global demand, estimated at 1-1.5 billion tons if the pandemic will persist in the medium and long term.

On the issue of cutting production to avoid oversupply, if Saudi Arabia can easily reduce production in the desert, the same cannot be done by US producers, drilling at great depths or offshore, with much higher costs and high risks if production stops, a situation that also applies to Russian producers from Siberia. If on the short term the situation is quite dramatic, especially for oil producers, the medium and long term impact of these very low prices can also be catastrophic, while the chain of bankruptcies and financial disasters creates a favourable ground for a great insufficiency of oil supply and significant price increases in the future, which would undoubtedly hardly affect oil consumers.

The OPEC + agreement managed to strengthen the market and stimulate the slight advance of the oil price to over $ 40/ barrel and it was extended for the third and fourth quarters. Basically in July, August, September and October the oil price slightly fluctuated around about $40/barrel for WTI and $43/barrel for Brent, levels that have become familiar to the market, but in late October and the beginning of November the strong resurgence of the pandemic in Europe and the US has caused a new decrease of prices. The initial optimism displayed in October by OPEC + members and their hopes for a gradual reduction in production cuts from 2021

have no chance of being confirmed, especially since the Persian Gulf states do not like the perpetuation of prices at these relatively low levels. “We expect to be able to gradually increase production, in accordance with the terms of the agreement, without affecting the market, "said Alexander Novak in an article in the October issue of Energy Policy” (Khrennikova, Tanas, 2020). In conclusion we may state that while the agreement concluded in April helped to support the world oil industry severely affected by the pandemic, it should be noted that these optimistic estimates were not made in the framework of the growing number of global coronavirus cases, leading many industry analysts to question whether OPEC and its allies should not now change the agreement, which provides for an increase in oil supply from January 2021. If the agreement is maintained, the market may have great difficulty in absorbing additional quantities, according to IEA estimates.

Recently, Saudi Crown Prince Mohammed Bin Salman and Russian President Vladimir Putin have negotiated a detailed recovery plan for the global energy market, agreeing that it is important that all oil-producing countries will continue to cooperate and abide by the OPEC + agreement for the benefit of both producers and consumers. After tensions that lasted throughout the first half of 2020, the "oil price war" showed that it was vital for Russia and Saudi Arabia to work closely together to keep the global energy market stable. While some tensions persist within OPEC over the level of supply cuts and related to non-compliance with reduction commitments of some member states, OPEC + members need to consider economic diversification, which has to be implemented, even if its effects will only be felt on the long term.

4 Other important challenges for Russia’s energy industry

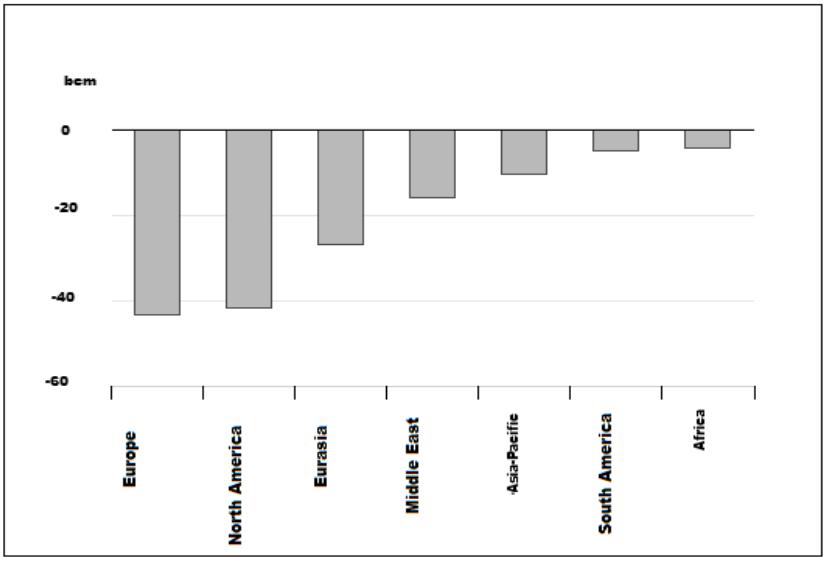
The pandemic-induced global demand decline in natural gas, deceleration being largely concentrated in the industrial and commercial sectors, resulted in an average annual global decrease of 4%, according to International Energy Agency estimates. In the graph 3 one can see the sharp decline of natural gas demand at the regional level in 2020.

In Europe, the gas market was over-competed, especially by LNG exporters from the US, Qatar and other countries, while the accumulation of large inventories/deposits led to sharp declines in exports from countries such as Russia and Norway. But globally the situation has been much less dramatic than the disruptions suffered by the oil industry. Gazprom, Russian gas production giant company, was hit severely and its natural gas export revenues through pipelines fell by 53% in the first five months of 2020 compared to previous year. Between January and May 2020, the energy giant's revenues fell to $ 9.7 billion, according to data provided by the Russian Federal Customs Service. The company's gas exports fell by 23% to 73 billion cubic meters. During May, the large Russian company exported 11.9 billion cubic meters of gas worth about $ 1.12 billion, a 15% month-on-month decrease. Therefore, 2020 will be a difficult period for Gazprom, as the Russian gas giant will most likely face a decline in its turnover and revenues (Russia Monitor, 2020).

The crisis has not spared the liquefied natural gas sector either. The combined export earnings of Sahalin Energy and Yamal LNG decreased by 16% compared to the previous year in the first five months of 2020. Between January and May 2020, energy products reached $ 3.4 billion, with a decline in revenue, despite a 9% year-on-year jump in LNG exports. Russian energy companies have sold 27.6 billion cubic meters of liquefied natural gas to their foreign partners.

Between January and May 2020, revenues from crude oil exports decreased by 33% compared to 2019, reaching $ 33.7 billion. During that period, crude oil exports fell by 3% to 104.4 million tonnes, the decline being sharp after oil prices fell globally. In May 2020, the country's earnings from oil exports fell by 19% compared with the previous year reaching $ 3.6 billion, while their volume has decreased by 12% to 19.3 million tons. According to the Russian Federal Customs Service, the volume of oil exports from the country decreased by 1%, to 60.14 million tons between January and May. However, export earnings from Russian petroleum products fell by 23% to $ 22.2 billion during this period. In May, oil exports fell by 16% month-on-month to 12 million tonnes, while revenues fell by 15% to $ 2.67 billion. At the same time, gasoline traded much better than diesel oil, the collapse of diesel exports being detrimental to all data on petroleum products (Russia Monitor, 2020).

Graph 3: The decline of natural gas demand at the regional level in 2020



Source: Authors based on IEA data

For Russia, the decline in energy markets has led to a significant reduction in export earnings, lower profits for energy companies and reduced funding for the state budget. Even in the most optimistic scenario, revenues from oil exports will account for about half of what they were before the crisis. Revenues from Russian gas exports have also been significantly affected, although their impact on the budget is much smaller. Judging by the results of the first quarter and the decrease in import demand from European states until the end of the year, gas supplies from Russian pipelines to Europe could fall by 25-30 billion cubic meters and contract deliveries will have lower prices. Market oversaturation, warmer weather and lockdown measures implemented in EU by Member States have led to lower gas prices in Western Europe. However, prices in the main gas hubs have shown a sharp upward trend in the last two months (60% of Gazprom's contracts are related to price movements in European hubs). The market pessimism persisting during Spring and early Summer that halved gas prices and cut oil prices by a third compared to 2019 had some roots in the market events from the second quarter, but the situation may not be as dramatic, especially that a severe winter is forecasted in the Northern hemisphere. Confirmation of this pessimistic scenario would mean however a combined decrease of 20-25% in the volumes of Russian oil, gas and coal exports, which is equivalent to a loss of 50% in export earnings. For the budget, this means a sharp decrease in total revenues (around 25%), and the public and private sectors would need a substantial state support in this context.

The spread of Coronavirus on several production platforms has affected their output level but also the fulfilment of some new projects. Declining revenues from the energy sector will inevitably affect other adjacent industries, such as petrochemicals, metallurgy and machine building. In this context, the capacity of the energy sector, as the main revenue generator, to cross-subsidize industries from other fields will decrease, implicitly. Given the many challenges facing the Russian energy sector in the context of the COVID-19 crisis, greater state involvement in the economy seems to be the solution to overcoming this very difficult period for the Russian economy. To protect its strategic energy industry, the Russian government has proposed a number of fiscal and financial measures, including the creation of strategic oil inventories, which would account for 10% of Russia's annual oil production (Shagina, 2020). Following international trends, the majority of Russian energy companies have announced reductions in capital expenditures by 20-30%. In order to optimize their investment expenses, companies would eliminate new capital-intensive projects or projects with secondary priority from abroad. At the same time, high value-added sectors, such as LNG, oil refining and petrochemicals, have gained momentum. Based on the strategy of ensuring the highest possible market share, big companies such as Gazprom, Rosneft, Novatek have not given up to some ambitious projects.

Asymmetric relations between Russia and China will intensify, while the COVID-19 pandemic will intensify Russia's dependence on China's energy demand and financial support. As one of the first countries to emerge from the lockdown, China's economic recovery will be crucial for Russia to offset some of its budget losses and continue to fund its ambitious projects. However, China new post-COVID-19 energy strategy, focusing on local or regional supply chains, which could seriously affect Russia's economic recovery. In the

current relatively low-cost environment, financing Russia's ambitious projects will be a particularly vulnerable issue. Moscow's options for finding advantageous external financing are quite weak, and its dependence on Beijing's financial sources will intensify. Difficulties in attracting capital could delay the final investment decision for Arctic LNG-2, which, before the pandemic, was going to mobilize up to $ 11 billion on the foreign financial markets. Other projects scheduled for 2021-2023, such as Gazprom's Baltic LNG, are likely to be abandoned on the medium and short term.

Decarbonisation strategies and climate change policies are becoming increasingly important for Russia's main export markets, especially in the EU. Governments and companies have already begun to change their strategies by abandoning the fossil fuel sector. In addition, the Green Deal Pact to be implemented in the EU aims to increase the share of low-carbon resources, especially renewable energies, and achieve neutrality in terms of greenhouse gas emissions by 2050. As a result of these trends, a number of Western commercial banks have announced plans to stop lending for Arctic oil and gas projects. If properly implemented, these decisions will have a serious impact on Russia's budget revenues and exports. On the other hand, the instability of the oil market and the high volatility of prices will strengthen the position of renewable energy, which is attracting increasing attention from international investors (Mitrova, 2020).

As for coal production, the Russian Ministry of Energy left mostly unchanged its forecast released in July on the drop of coal production in Russia to 395 million tons (-43.8 million tons or -10% compared to 2019) in 2020. In January-August 2020 Russian coal production lowered down to 259.15 million tons (-26.14 million tons or -9.2% y-o-y). Under a recent statement of the deputy Minister of Energy Anatoly Yanovsky, coal exports may shrink by 5% in 2020. Over the course of January-August 2020 coal exports dropped to 147.7 million tons (-11.01 million tons or –7.5% y-o-y). The main reasons for the downward trend in the industry are the decline in world prices for steam and metallurgical coal amid negative consequences of Covid-19 pandemic (Coal Hub, 2020).

The renewable energy market will also face most probably significant challenges in the near future. Although there is a global trend for cutting the carbon footprint in the energy sector and introducing mechanisms to stimulate this process, such as carbon taxes or emissions trading systems, Russian authorities consider these as a threat to hydrocarbon export revenues, and to Russian economic security and thus the climate agenda and the drive for decarbonisation are not yet essential factors in the energy strategy of the Russian Federation (Mitrova, Melnikov, 2019). It is perhaps edifying that The Paris Agreement is mentioned only once in the draft version of the ‘Russian Energy Strategy Up to 2035’, while this key document is setting the strategic development path of the country’s energy policy for the near future. The explanation is related to the climate change scepticism being prevalent among Russian stakeholders, and maybe due to the impact of recent coronavirus crisis, combined with the fact that Russian electricity sector has a lower carbon footprint (in terms of g CO2 per kWh) than many other countries. Around 35% of electricity is generated in carbon-free nuclear power plants and large hydropower plants, while only 48% comes from gas, which largely replaced coal and petroleum products in the fossil-fuelled power plant fuel mix. Due to financial constraints created by the recent crisis and to large needed investments, incentives to set ambitious national decarbonisation targets are very low.

According to the draft Energy Strategy of Russia for the period up to 2035, the renewable energy share in Russia’s total primary energy consumption would increase from 3.2 to 4.9% by 2035, including Russia’s approved plan to expand its total solar photovoltaics (PV), onshore wind, and geothermal capacity to 5.9 GW by the end of 2024. The growth of renewable energy in Russia is supported by Decree 449, passed in 2013, which created a legal framework for increasing the renewable energy capacity system in the country. Since 2013, annual renewable capacity additions rose from 57 MW in 2015 to 376 MW in 2018, of which 320 MW solar and 56 MW wind. Technology policy is the main driver of Russia’s interest in renewables, so Russia is focused first of all on building its own renewables manufacturing capacity and has set a fairly high level of local content required to qualify for the highest tariff rates, an essential component of the long-term feasibility of many Russian renewables projects. The share of Russian-made equipment required to avoid tariff penalties was relatively modest at the beginning of the auction system, but has risen to 65% for wind farms and small hydro and to 70% for solar until 2020, with the long-term target of localization set by the government at 80%. The requirements have encouraged foreign firms to partner with Russian power companies and manufacturers.

5. Conclusions

Currently, Russia's "energy power" has shown its vulnerabilities through two major events: the negative impact of the "oil price" war with Saudi Arabia and the chain effects of the collapse of global demand for natural gas in the context of the shock of global markets triggered by the COVID-19 pandemic crisis.

Hence, the revival of Russia's energy policy in a post-pandemic world could follow the traditional trajectory or take the form of an accelerated transition to other forms of energy. In the first scenario, low oil prices will stimulate demand for fossil fuels, which will start to rise again rapidly. However, the failure to invest or preserve existing capacity during the crisis will be felt more and more strongly, eventually leading to rising oil and gas prices, which in turn will rekindle interest in alternative energy sources and increase energy efficiency. In the second scenario, the state could make a more decisive choice in favour of green energy, which offers a significant advantage to the sectors that compete with oil and gas.

Energy-exporting countries such Russia could emerge from the crisis with transformed energy systems, strict carbon footprint restrictions on any imported raw materials and a permanently reduced demand for hydrocarbons.

Under current conditions, the Russian oil and gas sector must not only survive, but also consider long-term options for restructuring the entire industry and integrating hydrocarbons into the green development agenda. A key role in this could be played by the decarbonisation trend of oil and gas: a complex, expensive process that requires new technologies and capabilities that Russia does not currently have. In our opinion, for the time being, however, there are no other viable options for ensuring the long-term stability of Russia's oil-based economy.

References

[1] IEA (2020). *Oil refining and retail industry risks losing 50 million jobs worldwide*, FXStreet, 3 Aprilie, Retrieved 3 April 2020

[2] Khrennikova, D., Tanas, O., (2020). *OPEC+ Aims to Stick to Output Deal amid Virus Surge*, Russia Says, Bloomberg News, 14 October

[3] Kulachinskaya, A., Akhmetova, I.G., Kulkova, V.Y., Ilyashenko, S.B. (2020). *The Challenge of the Energy Sector of Russia during the 2020 COVID-19 Pandemic through the Example of the Republic of Tatarstan: Discussion on the Change of Open Innovation in the Energy Sector*. *J. Open Innov. Technol. Mark. Complex.* Pp. *6*, 60.

[4] Mitrova, Tatiana (2020).* The Oil Price Crash: Will the Kremlin's Policies Change? *RUSSIA MATTERS, 8 July;

[5] Mitrova, T. and Melnikov, Y. (2019), Energy Transition in Russia, ResearchGate, 28 August,https://www.researchgate.net/publication/335766396_Energy_transition_in_Russia

[6] Mitrova, T., Yermakov, V. (2020). *Russia's Energy Strategy 2035 – Struggling to remain relevant*, https://www.ifri.org/sites/default/files/atoms/files/mitrova_yermakov_russias_energy_strategy_2019.

[7] Pdf;

[8] Russia Monitor (2020). *Gazprom's Oil and Natural Gas Exports Fall Sharply*, Warsaw Institute, 7 July, https://warsawinstitute.org/gazproms-oil-natural-gas-exports-fall-sharply/;

[9] Stambler, M. (2020). Russia Needs a New Strategy for Its Energy Sector, Climate Scorecard, April, https://www.climatescorecard.org/2020/04/russia-needs-a-new-strategy-for-its-energy-sector/

[10] Shagina, M. (2020). *Double Shock: The Impact of Covid-19 and the Oil Price Collapse on Russia's Energy Sector*, Eurasia Program, Foreign Policy Research Institute, 4 June, https:// www.fpri.org/article/2020/06/double-shock-the-impact-of-covid-19-and-the-oil-price-collapse -on-russias-energy-sector/

[11] World Bank (2020). *Russia Economic Report,* 6 July, www.worldbank.org › country › russia › publication

[12] Oilprice.com (2020). *Market Reports,* February-November.