

BLUE FUEL

Gazprom Export Global Newsletter

2018/ Issue 48

"Perspectives on the Future of the European Gas Market", a Speech by Elena Burmistrova at ONS2018 in Stavanger Page 5

"Assessment of the Possibility of a Fuel Switch from Coal to Natural Gas in Germany" by Prof. Dr. Gerald Linke Page 9

NGV Rally "Gas to Engines" Successfully Completes its 10000 km Way! Page 13

TurkStream Gas Pipeline's Offshore Section Completed Page 15

Imperial capitals: St. Petersburg–Vienna. Masterpieces of Museum Collections Page 21

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In this issue

2018/ Issue 48

To our readers....4

"Perspectives on the Future of the European Gas Market", a Speech by Elena Burmistrova at ONS2018 in Stavanger....5

"Assessment of the Possibility of a Fuel Switch from Coal to Natural Gas in Germany" by Prof. Dr. Gerald Linke....9

NGV Rally "Gas to Engines" Successfully Completes its 10000 km Way!....13

Gazprom Export Successfully Launched the Electronic Sales Platform....15

TurkStream Gas Pipeline's Offshore Section Completed....15

Nord Stream 2 Has Laid over 200 Kilometres of Pipeline....17

Gazprom and OMV Sign Amendment to the Contract to Increase Gas Supplies to Austria....18

Gazprom Export and FC Austria Wien Signed a Sponsorship Agreement....19

Imperial capitals: St. Petersburg–Vienna. Masterpieces of Museum Collections....21

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To Our Readers

Climate change and how to combat it are probably the words of the autumn 2018. First, the UN Intergovernmental Panel on Climate Change warned about the risks of failing to curb the global warming at 1.5°C and urged for immediate and unprecedented changes. Then, at the end of November, the European Commission presented its climate neutrality strategy by 2050. Finally, in the beginning of December Katowice in Poland hosts COP24 United Nations climate conference, the landmark event aimed at putting into life the principles envisaged by the epochal Paris Climate Agreement. Not to mention Germany, the biggest European economy, which already for a while stands at the crossroads of its energy transition trying to solve the dilemma of finding a balance between demands of the environment and interests of society and industry.

For natural gas industry it is of crucial importance not to stay aside of these debates. In Gazprom's view natural gas can and must play a key role in Europe's shift to a low-carbon economy. Early November Gazprom presented in Brussels its three-stage vision of how natural gas can contribute to European climate neutrality by 2050.

At the first stage natural gas can substitute coal in power generation and oil products in transportation. Thus, Europe is able to meet 2020 climate targets. Further, a new elegant technological solution is introduced. Here we speak about hydrogen. The use of methane-hydrogen fuel in energy and transport without costly infrastructural changes will result in 25-35% emissions reduction, thus allowing Europe to achieve 2030 climate goals. Finally, a full-scale transition to hydrogen from methane offers the feasibility of the EU's challenging 2050 targets.

We are pleased to share a more detailed version of this discussion paper in our special edition of this Blue Fuel.

Such strategy is no longer a fantasy. More and more oil and gas companies join the club of hydrogen fans. Gazprom is no exception. The company is currently testing three hydrogen production units of various types in Samara, Ufa and Tomsk, and the latter test unit allows for zero CO2 emissions. Gazprom is also actively developing scientific cooperation to study hydrogen, its production and its application together with a dozen of partners from Germany, the Netherlands, France.

Even conservative assessments show that existing infrastructure allows transportation of a fuel mix with hydrogen content of up to 20%. The recent joint research carried out by Gazprom and VNG showed that modern gas pipelines like the Nord Stream can carry fuel mix with hydrogen content of up to 70%. With just a modest modification, European gas transportation system becomes well fit for the hydrogen economy. This means that thousands of kilometers of steel pipelines, underground gas storages, gas fired plants will be no stranded assets, but the core of the future low-carbon energy sector. Europe will save thousands of jobs and get all the advantages of a safe and reliable energy system at reasonable cost.

This is a long-term vision of a gas company. There are also different expert opinions on the position of gas in the energy transition of the nearest future. In this issue we are pleased to publish the article by Prof. Dr. Gerald Linke, Managing Director of DVGW, where he assesses technical and economic feasibility of a switch from brown coal to natural gas in German 'Energiewende' by 2020.

We fully support the climate commitments Europe is taking. Along with our partners from the gas industry we are ready to provide the Continent with natural gas and new technologically-intensive forms of energy like hydrogen so important to make gears of the European economy moving on the way to carbon neutral future.

Perspectives on the future of the European Gas Market

Elena Burmistrova, Gazprom Export Director General
ONS Conference, 27 August 2018, Stavanger



Let's look at what's currently happening on the European gas market. The first six months of 2018 were marked by a decrease in gas consumption by 7.9 bcm, or 2.6%. The main trend behind this was shrinking gas consumption in power generation, with a decrease of 4.2%, along with growing volumes of renewable generation and growing gas prices. On the other hand, the continuing general economic recovery was and remains a positive factor for gas consumption.

Another remarkable fact in these six months was the growing need for imported gas in Europe. In particular, gas was needed to fill the storages that were depleted during a cold winter. Net imports grew by 5.1% against the first half of 2017. Among the gas suppliers to Europe, Gazprom has shown the biggest growth in its exports, bringing to Europe 5.5 bcm more gas than in the first half of 2017. In contrast, LNG imports to Europe grew only slightly, by 0.1 bcm, or 0.3%. One reason for this, among other things, were high import prices for LNG in Asia, where the "Asian premium" grew up to 2.9$/mbtu and is expected to grow further or at least remain the same until the end of the year. It lured LNG away from Europe and was also a limiting factor for potential supplies of US LNG. While these can already break-even for certain deals in Europe, the bulk of supplies are driven to other, more attractive markets.

For the midterm, industry analysts have slightly increased their expectations for demand, so gas demand in Europe will be able to show some growth in the coming years. This growth is expected to be driven by power generation and the transport sector, while industrial and household gas consumption are likely to stagnate due to increasing energy efficiency.

What matters most for us as a supplier are the prospects for indigenous production in Europe. Here, experts are in agreement: it will fall further. Consequently, the need for imported gas will grow, both in the mid-term and long-term. The current consensus forecast of the leading think-tanks says that the need for additional imported gas in Europe could reach 80 bcm in 2030, and 84 bcm in 2040. For Gazprom, this provides more assurance that the gas that will be supplied through new transportation corridors currently being built will be in demand.



Looking at the European gas market itself, and at how it operates, we see a dynamic market structure, working well, and one that is able and determined to work even better. Physical interconnectivity is growing. Traded volumes are growing, and market liquidity is growing as well. This year, the churn ratios on NBP and TTF are again exceeding the 8 mark, as recommended by ACER as the criteria for a well-developed market.

And how will the European gas market look in the nearest future? At the moment, the natural limits for the gas price, reflected through competing fuels, are the price of coal as the minimum, and the price of oil as the maximum. Even if the EU successfully accomplishes its plans for a coal and oil exit after 2040, gas prices will most likely remain range-bound. As the global energy mix develops, we can expect coal will gradually lose importance, and the future bottom limit for gas prices in Europe will be more and more determined by the short-term marginal costs of US LNG.

The full cost of American LNG used to be regarded as the price ceiling. However, the developments of recent weeks show that the price for gas can go even higher. So the actual ceiling in the coming years will be dependent on whether the gas market will be 'tight' or 'loose'. The exact levels of these prices are yet to be established. On the demand side, the factors supporting gas consumption will, just as today, drive on demand in power generation and transportation. Energy efficiency is a natural longterm trend that reduces demand for gas in the industrial and household segments. However, this impact has its limits too. It would be 'blue sky thinking' to imagine that a 100% all-electric world were easily possible. Overall, we can safely expect that gas consumption will remain stable or grow slightly. Gas will be a bridge fuel for the decarbonized world, and after 2050 will become a major source for the production of hydrogen - an issue I will touch on a bit later. On the supply side, LNG imports to Europe are expected to grow against current levels, although the bulk of gas will still be arriving through pipelines. Indigenous production will fall even in the most optimistic forecasts.

We at Gazprom, as a major player, cannot stand aside from the current trends that drive and affect the functioning of the market. The market is changing. And so is our company. Gazprom has successfully proved that it can work in accordance with new market rules, as shown by the results of the antitrust settlement with the European Commission. We will continue to proceed by picking the best of the models available, and applying them to our business. We broadly incorporate hub pricing into our contracts. By the way, I am proud to introduce Gazprom Export's newly launched electronic platform aimed at selling gas in Europe. It is only a few weeks old. We believe it will grow into a robust trading tool, and will be able to provide additional revenues for our company, and additional supplies and flexibility to our clients. Looking into the future, I am sure that lots of new inventions and improvements lie ahead, both in the market rules and in contract models.

How do we see ourselves and our position in Europe in the coming years? No one can predict the future in extensive detail, but still, I can expect that Gazprom's positions will remain stable for many years to come. Despite the growing share of renewables in Europe, our gas exports are growing as well. Knowing that our gas is competitive and in demand in Europe, and having vast resources available, we at Gazprom are able and ready to provide Europe with as much gas as it needs. The achieved level of Russian gas exports at 190-200 bcm a year is recognized as a 'new market reality', backed by objective factors and developments.

Natural gas today is a self-sufficient, permanent element of the new global energy system. For traditional as well as developing energy systems, gas provides affordable, reliable and clean solutions. And the gas grids that Europe can boast offer the most efficient and cheapest way to transport energy. In Germany, as recently published by the German Water and Gas Association, gas grids annually transport almost double the energy transported by electric networks. The costs of transporting a unit of energy through the gas grid are only about one-fifth compared to the costs of transporting by electric networks. This is the perfect example to counter any concerns about whether Europe already has too much gas pipeline capacity.

And that brings us to the more general issue about what will happen to our industry in 20 or 30 years. In the gas industry, with its longer investment periods, everybody needs to have clarity now about what will happen in several decades' time, to be able to secure the investments needed for the future. Let me openly name the question that everyone in the industry is worried about today: it is whether natural gas will be squeezed out, or not; and what will the consequences be?

Let's be realistic. Looking at the current trends, and at political ambitions that often push business far away from efficient solutions, my answer is the following. If there is indeed a strong determination to squeeze gas out in the coming decades, technically this could well be done. However, this would not be good for anyone. A world without gas is definitely less stable, less economical, and, in many cases, surprisingly less clean than a world with gas.

Technically, an 'all-electric' world as such is achievable already in the nearest years. However, the additional costs and installations needed to provide security would not outweigh the benefits this electric world might bring. The easiest example is that some sectors may simply not be capable of abandoning natural gas immediately, while others could do this only in exchange for expensive alternatives, and all this in turn would damage the competitiveness of the whole economy. I believe this is not something Europe can afford to risk.



What's more, natural gas can positively contribute to tackling the problem of energy poverty. In Germany, 30% of the population now spend more than 10% of their income on energy. The International Energy Agency describes such a situation as 'energy poverty'. It has also found that 200 million people in OECD countries, or 15% of the population of those countries, spend more than 10% of their income paying energy bills. Cheaper energy, for Europe, is something worth striving for, both in the name of its industry as well as for its citizens.

Furthermore, it's important to remember that Europe isn't just some relatively small part of the world, but rather a visionary which sets global trends. Europeans must bear in mind that their current energy policy could influence global energy development. Today, over 1 billion people in the world do not have any electricity at all, and about 2.5 billion people have only limited access to electric power. That means almost half of the world's population suffers from real energy poverty. So gas can play a humanitarian role, considering the relatively cheap and easily available power generation opportunities it provides. And that's why we should avoid abrupt, ill-considered steps that could ruin the investment prospects for the gas industry.

In our view, natural gas has plenty of opportunities ahead, even in a world of strong environmental commitments. Switching to gas from coal generation brings Europe closer to the targets of the Paris climate agreement, and allows for immediate CO2 reduction at no additional cost. Using gas and existing gas infrastructure allows a smooth transition to a low-emission economy. Further progress with reducing emissions can be achieved by switching transport to natural gas as well. Together with switching from coal to gas in generation, this could allow the immediate reduction of GHG emissions in the EU by 13-18% compared to existing levels. And in the transport sector, which is the most polluting, gas offers perfectly tuned and readily available solutions for heavy-load transport, where electric technologies cannot fit the specifics in the best way.

Gas can be green, and gas can be decarbonized, and this isn't just a dream anymore, but a tangible reality. Today, biogas already enjoys all the benefits of existing gas networks and appliances, it can be mixed with natural gas, and it leads to substantial emissions reduction. And an innovative low-emission methane-hydrogen fuel can offer even more.

Gazprom is now developing and testing cost-effective technologies for the production of zero-carbon hydrogen from natural gas through cracking, pyrolysis, cold plasma etc. If widely used, hydrogen could result in up to an 80% reduction in emissions in the EU by 2050, compared with current levels. The existing transmission and storage infrastructure is fit to accommodate natural gas containing a certain proportion of hydrogen.

On top of that, gas is an ideal bridge fuel and partner fuel which, hand in hand with renewables, can lead Europe into a new, low-emission, sustainable and competitive energy reality already today.

We've seen more than once how natural gas rescued Europe's energy supply during dark and windless winter days. We've seen how gas was able to significantly reduce emissions in transport, heating and power generation. And we've seen how switching from other fossil fuels to gas reduces costs. I firmly believe that all of this is a strong business case that, if treated in a fair way, has every chance of benefitting the whole of Europe in the years to come.

"Assessment of the Possibility of a Fuel Switch from Coal to Natural Gas in Germany" by Prof. Dr. Gerald Linke

Prof. Dr. Gerald Linke, Managing Director of DVGW, The German Technical and scientific association for Gas and Water, Bonn



The existing gas-fired power stations can replace power generated using lignite (fuel switch). This fuel switch in the power sector would allow climate protection targets to be reached in the near future.

In the opinion of DVGW, the following action is required to accomplish the fuel switch:

- the rapid discontinuation of lignite firing, and
- at the same time, the consistent use of available gas-fired power station capacity.

The "DVGW Energie-Impuls" (www.dvgw-energie-impuls.de) provides a consistent concept for achieving climate protection goals with natural gas, renewable gases and the existing gas infrastructure rapidly, reliably and in a socially compatible way. The concept is based on the three key elements of the energy transition – content switch, modal switch and fuel switch, including the substitution of existing gas-fired power stations for lignite firing (read more in the info box). If these measures, which could potentially take effect rapidly, were implemented by 2020, they would play a key role in achieving climate protection targets. In addition to the planned share of



65% renewable energies in the power sector in 2030, other steps which will take effect rapidly will be required.

However, the question arises as to whether the different locations of lignite- fired and natural gas-fired power stations will have a significant negative impact on power grid security. A study commissioned by DVGW considers this point.

Key results of the study carried out by RWTH Aachen University[1]:

With a fuel switch from lignite to natural gas in Germany in the reference year of 2020:

• grid security can be guaranteed, taking into consideration the grid reserve which will still be required. The existing gas-fired power stations are located in the right positions in the power grid;

• the volume of feed-in management can be reduced from 3.34 to 2.13 TWh per year. As a result, it will be possible to use more power from renewable sources at an early stage;

• there will be an additional reduction in CO2 emissions of about 70 million t per year;

• the changeover to natural gas will result in additional cost of about €3.5 billion per year as lignite is currently above natural gas in the merit order. This additional cost will be equivalent to CO2 avoidance costs of about €53 per tonne of CO2.

As part of the investigations carried out by RWTH Aachen, grid operation with typical weather situations and typical availability of power stations and transmission systems was simulated for a fuel switch to natural gas, on the basis of the expected situation of the power grid and power stations in 2020. It was assumed that the gas-fired power stations in Germany would supply the power no longer available from lignite power stations. The study assumes that individual lignite power stations will remain part of the grid reserve which is still required.[2]

[1] Univ.-Prof. Dr. Albert Moser, Institute for Power Systems and Power Economics of RWTH Aachen University

[2] The individual lignite power stations which it is assumed will be included in the grid reserve will allow secure operation under the typical weather situations considered with typical availability figures for the power station fleet and transmission system. The actual demand for reserve capacity will be higher and will require more detailed analysis as stress situations, redispatch across national borders and different network topologies need to be considered.

Effects on Germany of the 2020 scenario	'Lignite on the market' (reference)	'Fuel switch -'	'Fuel switch +'
Remaining bottleneck energy [TWh/a]	0	2.8	0
Feed-in management of renewable energy plants [TWh/a]	3.34	3.45	2.13
Redispatch volume [TWh/a]	10.9	11.7	13.2
Balanced CO_2 emissions (after redispatch)	100 %	69 % (- 68.9 mio. t)	70 % (- 68.4 mio. t)
CO_2 avoidance cost after market and redispatch (€/t)	–	54.2	52.9

Three scenarios were investigated:

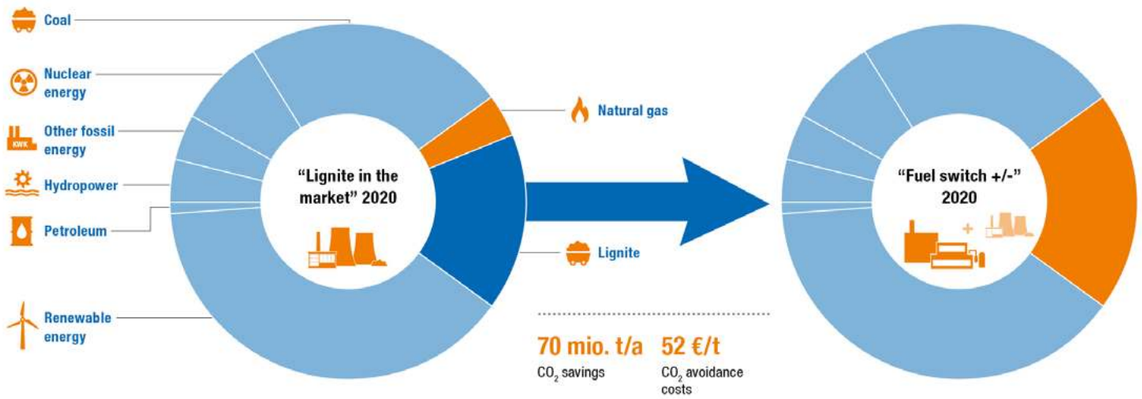
• Lignite on the market (as reference)

• Fuel switch - (decommissioning of all lignite-fired power stations in Germany, gas-fired power stations in the grid reserve return to the market, i.e. reduced grid reserves)

• Fuel switch + (as for "fuel switch -" except that some lignite-fired power stations are transferred to the grid reserve)

As a result of lower redispatch potential and a lower grid reserve for capacity increases, it will not be possible to eliminate all the bottlenecks which may occur with the fuel switch - scenario. This will be possible with the fuel switch + scenario. The redispatch volumes will be of the same order of magnitude as with the scenario "lignite on the market". In the fuel switch + scenario, redispatch from lignite-fired stations in the grid reserve with a volume of 3.6 TWh/a will be required; the need for feed-in management will be reduced.

Power generation and CO_2 emission structures
in the scenarios modelled for 2020





DVGW Energy Impulse – the strategy in detail:

In 2017, the German Gas and Water Association (DVGW) has developed a strategy on how to stay within the national carbon budget. Since then, this strategy has been verified by various scientific studies and findings from first demonstration projects. It consists of three steps and it is applicable to all relevant segments: Power generation, heat generation and transport.

The first stage, the so-called Fuel Switch, involves the emissions-intensive energy sources of coal and oil to be replaced by natural gas and the establishment and expansion of gas infrastructures in all sectors of energy generation and consumption. The aim is to largely stop the use of coal and petroleum products as energy sources in the medium term and to initiate more widespread use of a combination of renewable energies and gas-based technologies.

The Content Switch is a process which starts parallel to the Fuel Switch and involves a continuous increase in the share of gases from renewable energy sources in the gas infrastructures. Green gases from renewable sources (biogas, biomethane, green hydrogen, synthetic methan) can be produced in substantial quantities using known, market-ready and tested technologies and put to decentralised use or transported via the gas grid infrastructures.

The Modal Switch is the third element in the climate protection measures, enabling ever larger quantities of renewably produced gases to be used as energy sources that can flow freely across sectoral boundaries, with the capacity for seasonal and long-term storage and for deployment in the areas of electric power, heat, mobility and industry. Power-to-gas refers to the conversion of renewable power to hydrogen by means of electrolysis or its further processing to create synthetic methane. This allows surplus power from renewable energy sources such as wind power and solar energy to be saved and transported in large quantities.

NGV Rally "Gas to Engines" Successfully Completes its 10000 km Way!



On a windy chilly day of October 4, 2018, the ceremonial finish of the natural gas vehicles rally along the Europe — China transport route took place in St. Petersburg. "The weather in China was quite opposite", – Andre Schumann from Uniper, dressed in a corporate-colored thick winter jacket, casts back his mind to Rudong, a small town in Jiangsu province in Eastern China, which was selected as a starting point for the NGV's rally. Rudong is a place for CNPC's LNG regasification terminal. Andre is one of few drivers who took part in all Blue Corridor NGV rallies that were organized by Gazprom and Uniper in Europe for the last seven years.

But this year NGV crews accepted totally new challenge. They needed to drive their natural gas powered vehicles for nearly 10.000 km across China, Kazakhstan and Russia. Spectacular that the whole way to the starting point and coming back home after the finish ceremony all participants have passed on their own wheels!

All in all 10 trucks and passenger cars, as well as buses using liquid and compressed natural gas have driven the whole route of the rally. And much more NGVs have joined them at national stages. The caravan included trucks, buses, cars and mobile NGV refuelers produced by Russian and Chinese manufactures – KAMAZ, GAZ Group, AvtoVAZ, UAZ, Ankai, Yutong, Shaanxi Shacman, Hanzhong and vehicles of RariTEK company.

A unique NGV rally along the Europe — China transport route was organized by Gazprom, CNPC and KazMunayGaz. The goal was not only to demonstrate economic and ecological benefits and effectiveness of natural gas as a motor fuel, but also to stimulate development of related infrastructure, to identify best sites for future natural gas filling stations. Only across the Russian part of Europe – China transport route Gazprom plans to build a network of 14 LNG/CNG filling stations.

During the rally Xian, Almaty and St. Petersburg hosted round tables devoted to the promotion of natural gas use as a motor fuel. NGV manufactures and dealers, LNG and CNG vehicles users and service providers, government officials as well as potential consumers of natural gas as a motor fuel joined the discussion on NGV market development challenges and opportunities.

Top management representatives of the rally organizers, Gazprom, CNPC and KazMunayGas, highlighted the importance of the rally for the promotion of natural gas use as a motor fuel. Vice-President of CNPC Qin Weizhong emphasized that development of natural gas fuelling



infrastructure along the Europe — China transport route could boost economic growth of the neighboring territories, and would make a significant contribution to natural environment protection. Deputy Chairman of the Gazprom Management Committee Vitaly Markelov in his video message expressed his confidence that the rally will demonstrate economical and ecological benefits of natural gas as a motor fuel, especially for long distance heavy-duty trucks, and will become another important step in developing trade and economic cooperation of these three countries. Chairman of the Board, General Director of JSC KazTransGas Rustam Suleimanov in his speech highlighted that expansion of environmentally friendly transport was one of the state priority for Kazakhstan on the transition to the 'green' economy.





LNG truck URAL Next saved around $1800 on fueling expenditures during the rally using gas instead of diesel fuel.

Gazprom Export LLC Launched Electronic Sales Platform for Sales of Natural Gas

Gazprom Export LLC launched its Electronic Sales Platform (ESP) on August 17, 2018. The platform is designed to physically sell natural gas to the European consumers, in addition to supplies under existing contracts. The first sales session was held on September 20, 2018.

"This tool will allow to improve the interaction with our customers in Europe, making the gas sales mechanism even more effective", said Director General of Gazprom Export Elena Burmistrova. "Along with that, we expect this platform to become an additional mean to optimize supplies of gas", she added.

As of the end of November 2018 more than 1 bcm of natural gas were sold through the Electronic Sales Platform to delivery points in Slovakia, Germany, Austria.

TurkStream Gas Pipeline's Offshore Section Completed

On November 19, 2018, the Pioneering Spirit pipelaying vessel completed the construction of the offshore section of the TurkStream gas pipeline in the Black Sea.

The command to weld the final joint of the gas pipeline's second string was given by Vladimir Putin, President of the Russian Federation, and Recep Tayyip Erdogan, President of the Republic of Turkey.

"Construction of TurkStream – a new gas pipeline connecting Russia and Turkey via the Black Sea – is entering its final stage. The work is well ahead of schedule: the offshore section of the gas pipeline was completed as early as today instead of in December as planned earlier.







The swift pace of this project can be attributed to the concerted and coordinated efforts of the project team. In late 2019, the gas pipeline will be brought into operation. It will become an additional guarantee of energy security in Turkey and the countries of southern and southeastern Europe", said Alexey Miller, Chairman of the Gazprom Management Committee.

TurkStream is the project for a gas pipeline stretching across the Black Sea from Russia to Turkey and further to Turkey's border with neighboring countries. The first string of TurkStream is intended for Turkish consumers, while the second string will deliver gas to southern and southeastern Europe. Each string will have the throughput capacity of 15.75 billion cubic meters of gas per year. South Stream Transport B.V. is responsible for the construction of the gas pipeline's offshore section.

The construction contractor for both strings of the TurkStream gas pipeline's offshore section is Allseas Group. The Group is a global leader in offshore pipelaying and subsea construction. Allseas is focused on comprehensive project implementation, including design, material and equipment procurement, construction, and commissioning.

Pioneering Spirit is the world's largest construction vessel (477 meters in length and 124 meters in width). The vessel is designed to lay pipelines in deep-water areas, as well as to install and dismantle large oil and gas offshore platforms. The ship is owned by Allseas.

In Russia, a landfall has been built near the town of Anapa and the ongoing start-up operations will be finished in 2018. In Turkey, a receiving terminal is being constructed near the settlement of Kiyikoy.

Nord Stream 2 Has Laid over 200 Kilometres of Pipeline

The Nord Stream 2 Project is progressing as planned. Over 200 kilometres of pipeline has been laid in the Baltic Sea as of November 6, 2018. Some 20 vessels are operating simultaneously to ensure timely completion of the pipeline.



Pipelay barge Castoro Dieci has completed her scope in the Bay of Greifswald in Germany. Audacia continues pipelay in the German territorial waters, while Solitaire is laying pipe in the Finnish Exclusive Economic Zone. All works are being carried out according to the permits received.

All 200,000 steel pipes required for the pipeline have been delivered from the pipe mills to the two coating plants. So far, over 72 percent of them have been concrete weight coated and are being delivered to pipelay vessels from the logistics hubs around the clock.





Gazprom and OMV Sign Amendment to the Contract to Increase Gas Supplies to Austria



A working meeting between Alexey Miller, Chairman of the Gazprom Management Committee, and Rainer Seele, Chairman of the Executive Board of OMV, took place on November 5, 2018 in St. Petersburg.

In the course of the meeting, the parties signed an Amendment to the contract on gas supplies to Austria. According to the document, gas deliveries to Austria will be increased by 1 billion cubic meters per year beyond the contractual amount for the entire contract period.

"Over the past few years, Gazprom has been setting new records for exports to Austria. In the first ten months of 2018 alone, gas supplies to the country have grown by a third compared to the same period of 2017, reaching 8.8 billion cubic meters. The signing of a document on additional exports beyond the contractual amounts serves as yet another proof of the high demand for Russian gas on the part of our European consumers", said Alexey Miller.

"Europe's demand for gas will rise primarily as the result of gas-fired power plants successively replacing coal, coupled with the simultaneous decrease in European production. By increasing gas supplies to Baumgarten in Lower Austria, we are making an additional contribution to security of supply in Austria – as well as to other European countries", said Rainer Seele.

In addition, the parties discussed further steps in the implementation of the agreements signed in October of this year, such as the document establishing a Joint Coordinating Committee for the purposes of collaboration between the companies, as well as the upcoming deal during which OMV will obtain a stake in the project for developing Blocks 4A and 5A in the Achimov formations of the Urengoyskoye field.

OMV AG is Gazprom's main partner in Austria. The companies cooperate in gas production, transportation and supplies.

Since 2017, OMV has been partnering with Gazprom in the Yuzhno-Russkoye oil, gas and condensate field development.

On June 5, 2018, an Agreement was signed to extend until 2040 the existing contract between Gazprom Export and OMV Gas Marketing & Trading GmbH for Russian gas supplies to Austria. The contract had been valid until 2028.

June 1, 2018, marked 50 years since signing the Agreement on natural gas supplies to Austria.

On October 3, 2018, Gazprom and OMV signed the Basic Agreement on Asset Sale.

On October 4, 2018, Gazprom and OMV inked the Memorandum on Strategic Cooperation.

In 2017, Gazprom set a new record for gas exports to Austria at 9.1 billion cubic meters, a rise of 50.3 per cent (3 billion cubic meters) from 2016 (6.1 billion cubic meters) and 33.7 per cent (2.3 billion cubic meters) from 2005, when the previous record had been reached (6.8 billion cubic meters).

Gazprom Export and FC Austria Wien Signed a Sponsorship Agreement

In the beginning of August 2018, Gazprom Export signed a sponsorship agreement with FC Austria Wien. The agreement is aimed at projects of the Austrian football club for the support of youth and junior sport through FC Austria Youth Academy.

Gazprom has a long-lasting and close economic relationship in gas supplies with Austria that lasts for 50 years. In 1968, the first agreement for supplying natural gas from the USSR to Austria was signed with Österreichische Mineralölverwaltung (ÖMV). Today, Austria is among the major buyers of Russian gas. In 2017, exports reached a record 9.1 billion cubic meters.







Gazprom Group supports a range of globally renowned football clubs, and is an official partner of the UEFA Champions League.

FC Austria Wien is one of the most famous football clubs in the Republic of Austria. The club includes the regular team, the Young Violets (19-21 years), and the Youth Academy that consists of the Junior Football Academy (7-14 years) and the Premium Football Academy (15-18 years).



Imperial capitals: St. Petersburg–Vienna. Masterpieces of Museum Collections

On October 3, 2018, in the Twelve-Column Hall of the State Hermitage Museum, President of the Russian Federation Vladimir Putin and Federal Chancellor of the Republic of Austria Sebastian Kurz opened the exhibition titled "Imperial Capitals: St. Petersburg–Vienna. Masterpieces of museum collections" that presented a joint project of the State Hermitage Museum and the Vienna Museum of Art History.

The exhibition comprised 28 paintings from two museums, including landscapes, portraits, and ancient mythology themes, reflecting various trends of Western European painting from Renaissance to early neoclassicism, presented in pairs, united by one painter, proximity of content or compositional unity. The State Hermitage Museum visitors will be able to get acquainted with the works of such famous painters as Peter Paul Rubens, Jacopo Tintoretto, Anthony Van Dyck, Sandro Botticelli and others.

The exhibition has previously been shown to the Austrian public: in the summer of 2018 it was a great success in the Vienna Museum of Art History. Its opening ceremony was attended by Russian President Vladimir Putin and President of the Republic of Austria Alexander Van der Bellen.

The exhibitions in St. Petersburg and in Vienna were organized with the support of Gazprom PJSC and Austrian company OMV AG within the framework of the Memorandum of Understanding in the field of joint cultural project implementation signed on April 1, 2016, and were timed to the 50th anniversary of cooperation between the companies.











Besides the official opening, on October 4, 2018 a ceremonial event dedicated to the exhibition was held in the State Hermitage Museum. The event was attended by participants of the XVIII Saint Petersburg International Gas Forum, representatives of the world's largest energy companies and other organizations, employees of the State Hermitage Museum and the Vienna Museum of Art History.





To compliment the viewing of the exhibition, the program of the event included a small concert held on the Hermitage Theatre stage. Stars of the opera stage — one of the most famous countertenors in the world, soloist of Vienna State Opera, Max Emanuel Cenčić and People's Artist of Russia, soloist of Mariinsky Theater Olga Borodina — performed for the guests. Young violinist Valeria Abramova, member of the All-Russian Youth Orchestra under the baton of maestro Yuri Bashmet, also performed at the concert. Works of Russian and Austrian composers were performed by the Mikhailovsky Theatre symphony orchestra conducted by Valentin Bogdanov. Video support was a special type of accompaniment to the musical pieces: using modern visual techniques, director Viktor Kramer, one of the most sought-after representatives of his profession in Russia, was able to create an incredible atmosphere of the two imperial capitals and the two largest museums in the world, demonstrating the pictures from their collections to the viewers in a new perspective.

The entire event was organized by the Gazprom Group.







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