#### Carbon-Neutral Or Green LNG: A Pathway Towards Energy Transition



LNG producers have started to look for ways to minimise or counterbalance their carbon footprints, says Dr Hussein Moghaddam, Senior Energy Forecast Analyst, Energy Economics and Forecasting Department

According to the latest, 2020 edition of the GECF Global Gas Outlook 2050, the demand for natural gas is expected to rise by 50% from 3,950 billion cubic metres (bcm) in 2019 to 5,920 bcm in 2050, as gas remains the cleanest-burning hydrocarbon. In spite of that, meeting global targets for climate change mitigation is one of the biggest challenges. Significant emissions are released through the combustion of gas to drive the liquefaction process, while any carbon dioxide  $(CO^2)$ 

detached before entering the plant is frequently emitted into the atmosphere.

Subsequently, investors, regulators, and customers exert mounting pressure on the gas industry, as it needs to do more to accomplish climate objectives and focus on reducing emissions.

More than 120 countries have already developed a climate risk strategy that sets target to reduce greenhouse gas (GHG) emissions to net-zero by 2050. As natural gas has a central role to play in mitigating carbon emissions, LNG producers have started to look for ways to minimise or counterbalance their carbon footprints, thus ongoing LNG decarbonisation efforts are likely to expedite. Accordingly, top LNG producers, traders, and consumers have indicated their plans in order to decarbonise the LNG supply chain. This is being done in two ways: by offsetting emissions from individual cargoes retrospectively, as well as by building low-emission liquefaction terminals. As a result, the "Green LNG" term has appeared as a new product within the LNG industry.

The carbon-neutral or Green LNG market is an emerging prospect whereby "Green" indicates either the reduction of GHG, or the offset of GHG emissions, linked to some, or all elements of the LNG value chain — from production of upstream gas and pipeline transportation, to liquefaction, transportation, regasification, and downstream utilisation of natural gas.

Companies in the LNG value-chain can diminish GHG emissions in numerous ways. For instance, by using biogas as feedstock; by decreasing emissions from upstream, pipeline, and liquefaction facilities; by applying renewable energy to power their liquefaction plants; respectively, by using carbon capture, and storage (CCS), or carbon capture, utilisation and storage (CCUS) technologies by reinjection of  ${\rm CO}^2$  into the subsurface after it had been detained during the processing of the feed gas before liquefaction.

Therefore, it should be taken into account that carbon-neutral does not mean that the LNG cargo generates zero emissions, rather that LNG sellers can counterbalance their GHG emissions by obtaining offsets to compensate for all or part of their GHG emissions or the utilisation of carbon credits, which reinforce reforestation, afforestation or other green projects.

It is worth nothing that last year the leaders of the G20 endorsed the concept of the circular carbon economy (CCE) and the GECF is the part of this process. The CCE aims to include a wide range of technologies such as CCS/CCUS as a way to promote economic growth and to manage emissions in all sectors.

In contrast, Qatar Petroleum (QP) is the company that applies a combination of strategies to reduce its emissions. Its future LNG production will be low-carbon based, as the company is building a CCS facility alongside its 126 mtpa liquefaction capacity expansion by 2027.

As part of its new sustainability strategy, QP has announced that its aim is to reduce the emissions intensity of its LNG facilities by 25% by 2030. The capture and storage of CO² from its LNG facilities of about 7 mtpa by 2027 is another goal. Furthermore, QP aims to drop emissions at its upstream facilities by at least 15%, as well as cut flaring intensity by over 75% by the end of this decade. Additionally, by 2030, QP is attempting to abolish routine flaring, and by 2025, the company would like to minimise fugitive methane emissions along the gas value-chain by establishing a methane intensity target of 0.2% over all of its facilities.

In certain supply contracts of the company, environmental considerations are incorporated as well. In November 2020, QP signed the first long-term deal with "specific environmental criteria and requirements", which was designed to minimise the carbon footprint of the LNG supplies with Singapore's Pavilion

Energy, and to provide 1.8 mtpa of LNG over a 10-year period.

In order to fulfil the objectives of decreasing GHG emissions, CCS also helped the case in Australia. Chevron is the operator of the 15.6 mtpa Gorgon LNG offshore Western Australia and has injected more than 4 million tonnes of CO2 in the CCS facility since its commissioning in August 2019.

Meanwhile, NOVATEK has embraced a long-term methane emissions reduction target by 2030 in Russia, mainly to diminish methane emissions per unit of production by 4% in the production, processing and LNG segments. Moreover, the company aims to decrease GHG emissions per tonne of LNG produced by 5% [5]. In this regard, NOVATEK and Baker Hughes, which provides engineering and turbomachinery at Yamal LNG, signed an agreement to introduce hydrogen blends rather than solely running methane from feed gas into the main process for natural gas liquefaction to reduce CO2 emissions from NOVATEK's LNG facilities.

Bio-LNG will have a significant role in the coming years to form the heavy road and water transport in the Netherlands. The construction of the first Dutch bio-LNG installation was launched in Amsterdam last November. Renewi (the waste management company), the Nordsol (for processes the biogas into bio-LNG) and Shell (to sell this bio-LNG at its LNG filling stations) have developed this project. Biogas is made up of roughly 60% methane and 40% CO2. An additional CO2 cutback takes place due to the recycling of the CO2 by-product in the market, which results in a 100% CO2 neutral fuel [7].

Inpex, which is Japan's biggest oil and gas producer, has recently disclosed its strategy to become a CO2 net-zero company by 2050 by developing its renewable and hydrogen energy together with the utilisation of carbon capture technologies. Japan has also stated in October 2020 that the country would become carbon-neutral by 2050.

Two major LNG importer regions, namely Asia-Pacific and Europe, have already set policies regarding long-term decarbonisation targets. It is worth noting that most of the carbon-neutral LNG cargoes have been supplied by companies are in Asia to a certain extent, where carbon policies and investor pressure are fairly fragile.

According to the 2020 Edition of the GECF Global Gas Outlook 2050, it is forecasted that LNG imports to Asia will increase to about 800 bcm (585 mt) by 2050, and with 71% of global LNG imports, the region is set to be the driving engine for global LNG demand growth. As concerns with air quality rise in numerous Asian countries, the most realistic solution to attain a decarbonised society in the future by minimising the level of CO2 on a global scale, is the combination of natural gas and renewable energy. Thus, emissions and cleaner-burning fuels are going to be the centre of attention.

Europe could be the predecessor for carbon-neutral LNG in the long-term, by sticking to its new methane strategy, which was revealed by the European Commission (EC), and in accordance with their 2050 carbon-neutral goal. Importantly, the EC suggested LNG producers to engage with their international partners to explore possible standards, targets, or incentives for energy supplies to the EU.

#### Which part of the LNG value-chain should take responsibility?

An LNG seller will probably need to diminish and offset GHGs, which emphasises the need for robust offset markets in order to be completely carbon-neutral through the entire LNG value-chain.

Accordingly, this highlights challenges for legacy LNG projects with limited means to decrease carbon, making them dependant on expensive market mechanisms. LNG producers have to keep the balance between the competitive fuel pricing and the expensive emissions reduction initiatives. Therefore, the

question of who pays the additional costs to produce Green LNG is yet to be decided.

As noted, the balance of carbon emission is feasible for any LNG facility and can lead to carbon-neutral LNG cargoes. Although, this is probably not a sustainable long-term process and does not directly cope with the project's emissions, it is a good transformation for general LNG decarbonisation.

However, the GECF proposes that both sellers and buyers have to contribute to achieving emission targets. The discussions with respect to these issues should involve all LNG industry players, such as sellers, buyers, traders and policymakers, respectively. A more focused perspective that targets minimising emissions in upstream and liquefaction might be more feasible for LNG producers. This will also associate with the already ongoing efforts from them, as they have to control their carbon footprints under more pressure from the public and investors.

In conclusion, as LNG demand keeps expanding, the demand for Green LNG will grow as well. Green LNG can help ensure that natural gas preserves its role as a crucial part of the energy mix, supporting climate goals over the energy transition period. As stated in the 2019 Malabo Declaration, at the 5<sup>th</sup> GECF Summit of Heads of State and Government in Equatorial Guinea [10], the GECF Member Countries, reiterate the strategic role of the development, deployment and transfer of advanced technologies for more effective production, and the utilisation of natural gas to enhance its economic and environmental benefits.

## QP sees LNG bunkering a promising solution for shipping industry



Qatar Petroleum is actively pursuing to replace its existing bunker fuel for ships with LNG in a phased manner, which will significantly reduce QP's total shipping emissions in the LNG value chain by around 28%. Once the fleet is converted to LNG, the total CO2 reduction through this initiative will amount to approximately 1.9mn tonnes of CO2 equivalent per year, QP said in its Sustainability Report.

With a growing population, the demand for transport is anticipated to expand. More emissions also cause poor air quality, causing adverse effects on the environment and human health.

Meeting the increasing demand for transport while reducing emissions will only be achieved with a variety of solutions and technologies, such as lower-emissions liquid fuels, biofuels, and natural gas.

"More than ever, we are committed to decarbonise the transport sector by shipping LNG to destinations in a cost-effective, efficient and environmentally friendly way," QP said.

In 2019, QP and Shell entered into an agreement to establish an LNG bunkering venture. The creation of a joint venture company, owned equally by both parties, demonstrates QP's firm commitment to curbing emissions from the transport segment.

On the role of natural gas in power generation, the report said the electricity share of total energy demand is around 19% but is responsible for 40% of the overall energy sector's GHG emissions. When generated from lower-carbon energy sources, increased use of electricity will support emission reduction in the power sector, as well as in end-use industries through indirect emissions.

In addition, the combustion of fossil fuels and coal releases several pollutants that negatively affect air quality. QP monitors pollutants at affiliated power plants via a continuous emissions monitoring system (CEMS).

As of 2019, natural gas remains the only fuel to be burnt in gas turbines in Qatar, where pollutant levels are significantly lower than from oil or coal, making natural gas the key to maintaining good air quality.

"We strive to further enhance the environmental benefits of gas-fired plants, eg through lowering NOx emission," the report noted.

"We consider the industrial sector to be crucial for providing vital products for daily lives, from aluminium, steel, and cement to food packaging, paints, and others. However, metals, cement, chemicals and transport industries are also significant consumers of energy and hence emitters of GHG emissions.

"In 2019, the industrial sector accounted for 52% of domestic gas consumption and 19% of total CO2 emissions in Qatar (metals and petrochemicals only). Reducing energy demand and emissions from the industrial sector over the long term, without impacting economic and social development goals, will require effective implementation of energy efficiency strategies, switching to lower carbon fuels and raw materials, and leveraging the best available technologies for GHG

reduction.

"Our use of cleaner gas in these industries offers an unrivalled advantage to operate at significantly lower GHG emission and pollutant levels compared to those in coal or oil-based industries. Besides, the use of natural gas in industry has other significant benefits: gas almost completely combusts, while coal produces large volumes of ash and slag, which require costly handling and disposal and gas boilers supplied by pipelines do not require on-site fuel storage, loading, or waste disposal," QP said.

## GECF commences educational campaign on benefits of natural gas



The Gas Exporting Countries Forum (GECF) has activated a new communication campaign on its social media channels that

raises awareness about the benefits of natural gas as well as simplifies the facts of an industry often perceived as data heavy.

Being run on GECF's Twitter and LinkedIn channels, the 'Did You Know...?' series of posts provide easy-to-understand facts, figures, and data on an energy source that likely powers the batteries of the phones users will read the information on. It also calls to attention any misconception around this important source of energy found in abundance in pockets around the world.

"In the midst of an 'infodemic' it is increasingly hard to differentiate facts from the noise. Further, due to the complexity of energy systems, end-users rarely get to glimpse at the processes that eventually power most aspects of their daily lives, such as electricity at home, prospects for front-running technologies, fuelling of vehicles and so on," said GECF secretary general Yury Sentyurin.

Scientifically-grounded data and insights are championed at the GECF, which was established to bring a better understanding about technology that underpins the full spectrum of energy areas, to promote natural gas as the fuel of choice, as well as to promote cooperation at all levels of global energy system.

The forum recently entered a landmark MoU with Unesco to further enhance its role in environmental protection and to cultivate a "culture of energy responsible behaviour".

"Our campaign's goal is to de-mystify the world of energy and, really, democratise it for every one's understanding. Today, as we live in times of rising appetite for energy, everincreasing struggle for climate protection and better future for all, social media has become a tool in global geopolitics.

The 'Did You Know...?' campaign aims to empower the community around the world with a new appreciation and understanding about an element that holds such a powerful impact on people's quality of life," the forum's representative noted.

According to the latest available projections, quantified through the use of unique and highly granular GECF Global Gas

Model, fossil fuels will maintain a leading role in the global energy mix, accounting for at least 71% in 2050 (against 81% in 2019) of the world's energy need.

Meanwhile, natural gas will be the only hydrocarbon resource to increase its share from 23% today to 28% in 2050.

"Natural gas is often lumped together with other traditional fuels due to its origins as a hydrocarbon fuel without recognising the attributes that distinguish it for its lowemissions and dynamic flexibility. As a platform dedicated to promoting the use of this cleanest of the fossil fuels, we felt it is important to broaden people's understanding of its economic and environmental advantages," Sentryurin emphasised. To follow the 'Did You Know...?' campaign, visit the GECF website www.gecf.org, Twitter @GECF\_News, and GECF LinkedIn page.

# Qatar's growth helps maintain GECF's status as largest coalition of global LNG supplier: Sentyurin



#### GECF amplifies role of natural gas at OLADE Ministerial Meeting



Upon an invitation of the Latin American Energy Organization

(OLADE), the Gas Exporting Countries Forum (GECF) participated in its 50th jubilee Meeting of Ministers, dedicated to the topic "The energy sector during the crisis and its role in a post-pandemic economic recovery" and held on 19 November via videoconference.

The OLADE governing body has proved to be the foremost gathering of the Energy Administration Heads in the Latin American and Caribbean region providing an umbrella access to membership of 27 countries and engagement of peer international organisations, such as GECF, IEA, IEF, IRENA, and Inter-American Development Bank.

Assuming the office from HE Antonio Almonte, the Dominican Republic's Energy and Mines Minister, the Meeting's President HE Senator the Honourable Franklin Khan, Minister of Energy and Energy Industries of Trinidad and Tobago shared his vision of the energy sector as "the engine of the post-pandemic economic recovery" and stated that "energy industries have always played a fundamental role in providing society with the conveniences of modern living".

Addressing the policymakers, the GECF Secretary General Yury Sentyurin, linked to the significant deterioration in OLADE countries' economies due to COVID-19 pandemic and noted that "the GECF estimates that despite the challenging environment, the region's primary energy demand will rise by 60% by 2050. Natural gas will make the most prominent contribution to this growth, as an inevitable component in building more sustainable energy systems with prominent emissions mitigation potential through larger deployment of decarbonisation options, including carbon capture, utilisation and storage (CCUS) and hydrogen developments."

The GECF Secretary General commended the decisive actions taken by OLADE countries to facilitate energy transition and stimulate energy systems' decarbonisation. In this regard, he recalled the recently taken final investment decision to

construct Energia Costa Azul LNG project in Baja California, Mexico — the first ever LNG export facility on the Pacific Coast of North America.

Meanwhile, the UNFCCC COP25 chair Chile shared more details on its pledge to phase out coal by 2040 and to achieve carbon neutrality by 2050. The Chilean Energy Undersecretary Francisco Javier López particularly mentioned hydrogen and noted that its production was "a high priority area of work to further energy sector developments".

Speaking about Argentinian energy mix, HE Dr Javier Papa, Undersecretary of Energy Planning at the Energy Secretariat described natural gas as an integral element to succeed energy transformation. Argentina has recently announced its plans to liberalise its gas market by offering repatriation for gas investment.

"These are encouraging news in favour of natural gas and collectively they sound even more impressive" — continued GECF authority, citing the Forum's Global Gas Outlook 2050, which forecasts the share of gas in the Latin American and Caribbean regional energy mix to grow from currently 24% to 33% by 2050. "Natural gas will be the harbinger of a sustainable and environmentally-friendly prosperous future for Latin America" — HE Yury Sentyurin stated.

Reflecting on the challenges posed by the year 2020, the GECF Secretary General highlighted the Forum's Member Countries' outstanding discipline and resilience in the continued fulfilment of their obligations towards all contracting parties. He also recalled his counterpart OLADE Executive Secretary Alfronso Blanco saying that "the strengthened collaboration can support the achievement of deeper energy transitions in the region."

"The GECF has been continuously supporting its partner organisation and is eagerly looking forward to making even

greater tribute in the OLADE-GECF activities, as well as its Member Countries' practices through joint studies and outreach activities, exchange of unique expertise, comprehensive data sets, and analytics and multifaceted experience" — HE Secretary General Sentyurin reiterated. He also added that the GECF is ready to assist those on board to emerge stronger, wiser, technologically guided, data driven, and ever more agile, when entering the post COVID-9 world of growth and prosperity.

#### Lebanon sets starting point for sea border negotiations with Israel



BEIRUT (Reuters) — President Michel Aoun on Thursday specified

Lebanon's starting point for demarcating its sea border with Israel under U.S.-mediated talks, in the first public confirmation of a stance sources say increases the size of the disputed area.

Israel and Lebanon launched the negotiations last month with delegations from the long-time foes convening at a U.N. base to try to agree on the border that has held up hydrocarbon exploration in the potentially gas-rich area.

A presidency statement said Aoun instructed the Lebanese team that the demarcation line should start from the land point of Ras Naqoura as defined under a 1923 agreement and extend seaward in a trajectory that a security source said extends the disputed area to some 2,300 square km (888 sq miles) from around 860 sq km.

Israel's energy minister, overseeing the talks with Lebanon, said Lebanon had now changed its position seven times and was contradicting its own assertions.

"Whoever wants prosperity in our region and seeks to safely develop natural resources must adhere to the principle of stability and settle the dispute along the lines that were submitted by Israel and Lebanon at the United Nations," Yuval Steinitz said.

Any deviation, Steinitz said, would lead to a "dead end".

Last month sources said the two sides presented contrasting maps for proposed borders. They said the Lebanese proposal extended farther south than the border Lebanon had years before presented to the United Nations and that of the Israeli team pushed the boundary farther north than Israel's original position.

The talks, the culmination of three years of diplomacy by Washington, are due to resume in December.

Israel pumps gas from huge offshore fields but Lebanon, which has yet to find commercial gas reserves in its own waters, is desperate for cash from foreign donors as it faces the worst economic crisis since its 1975-1990 civil war.

Additional reporting by Ari Rabinovitch in Jerusalem; Writing by Ghaida Ghantous; Editing by Janet Lawrence

## Athens responds to US State Department's claim that Greek air space is only 6 nautical miles



Regarding the report by the US State Department, which was forwarded to the US Congress on March 18 and in the framework of the provisions of the "Eastern Mediterranean Security and Energy Partnership Act," diplomatic sources pointed out that

the borders of Greece's territorial waters, as well as the maritime borders between Greece and Turkey, have been clearly defined for years on the basis of international law and are not in any dispute.

In particular, they stated in response to the State Department that regarding the Southeastern Aegean and the Eastern Mediterranean, the maritime borders have been defined by the Italy-Turkey Agreement signed in Ankara on 4 January 1932, as well as the minutes which was signed in Ankara on December 28, 1932.

Greece, as the successor state under the Treaty of Paris of 1947, gained sovereignty over the Dodecanese without any change in the maritime borders, as agreed between Italy and Turkey.

Regarding the sea borders in Thrace (up to the point of a distance of three nautical miles from the Evros Delta), they emphasise that these were defined by the Treaty of Lausanne of 1923 and the Athens Protocol of 1926.

Finally, regarding the sea borders between the above two areas (from Thrace to Dodecanese), where the territorial waters of Greece and Turkey intersect, they pointed out that the sea borders follow the middle line between the Greek islands and islets and the opposite Turkish coasts.

The same diplomatic sources noted that Greece's external borders, including its territorial waters, are at the same time the external borders of the European Union.

The recently released State Department report states that Greece claims an airspace that extends up to 10 nautical miles and a territorial sea of up to 6 nautical miles, but that "under international law, a country's airspace coincides with its territorial sea."

"The US thus recognizes an airspace up to 6 nautical miles

consistent with territorial sea. Greece and the US do not share a view on the extent of Greece's airspace," the report said.

The State Department report adds that although Athens currently claims up to a 6-nautical-mile territorial sea in the Aegean, "Greece and its neighbors have not agreed on boundary delimitation in those areas where their lawful maritime entitlements overlap."

"Lack of such delimitation means there is no clarity on the extent of Greece's territorial sea and corresponding airspace in these areas rendering any assessment of total violations not feasible," the report said.

The State Department report said Washington encourages Greece and Turkey "to resolve outstanding bilateral maritime boundary issues peacefully and in accordance with international law."

#### Nakilat completes second phase of fleet management transition



Qatar-based shipping and maritime company Nakilat has completed the second phase of its fleet management transition from Shell International Trading and Shipping Company.

A total of seven liquefied natural gas (LNG) carriers transitioned to its in-house operational and technical management.

During the second phase transition, Q-Max LNG carrier Lijmiliya was the last vessel to transition from Shell to Nakilat Shipping Qatar Limited (NSQL) on 27 October.

Currently, the fleet size fully managed by NSQL stands at 26 vessels with 22 LNG vessels and four liquefied petroleum gas (LPG) carriers.

Over the past several years, Nakilat has been working closely with its long-term partner Shell for a smooth transition of vessel management.

Nakilat CEO Abdullah Fadhalah Al Sulaiti said: "This milestone achieved in a safe and timely manner, despite the challenges

presented by the global pandemic, is especially meaningful and demonstrates our strong commitment to safety, reliability, and efficiency through the provision of quality shipping and maritime services."

Al Sulaiti continued: "Over the past years, Nakilat has grown in leaps and bounds with the steady expansion of its LNG fleet, which is the largest in the world. The management of our vessels centrally controlled from Qatar allows us to further capitalise on existing synergies with our main charterer (Qatargas), realise operational efficiencies, and optimise costs. I would also like to express our gratitude to Qatargas for their cooperation and the continuous support provided throughout our long-term strategic partnership and the entire vessel transition phases.

"We strive to steer forward through tactfully formulated strategies, seizing potential long-term growth opportunities, strengthening ship management capabilities, and enhancing operational excellence in our vision to be a global leader and provider of choice for energy transportation and maritime services."

Phase one of the fleet management transition, involving ten LNG carriers, began in 2016 and was completed in August 2017.

In a separate development, 11 projects were inaugurated in Iran's Anzali Port in the Caspian Sea.

Among the projects inaugurated, there is a grain depot with 50,000t capacity and a general cargo warehouse with an area of  $4,509m^2$ .

## Qatar gas delivers first LNG cargo on Q-Max vessel to Tianjin Terminal in China.



Qatargas Operating Company Limited (Qatargas) announced today the delivery of the first cargo of liquefied natural gas (LNG) on a Q-Max LNG carrier to the Tianjin LNG Receiving Terminal in China.

The cargo aboard the Qatargas-chartered LNG vessel, 'Al Mafyar,' was loaded at Ras Laffan on 21 October 2020 and delivered to the Tianjin Terminal, located in the northern port city of Tianjin, near Beijing, on 10th November 2020.

This is the first cargo discharge operation by Qatargas to this LNG terminal involving a Q-Max LNG carrier. The Q-Max is the largest LNG vessel class in the world and has the ability to deliver 266,000 cubic metres of LNG.

The Tianjin LNG Receiving Terminal is owned and operated by the China Petroleum & Chemical Corporation (Sinopec), one of China's largest state-owned enterprises. The terminal has a capacity of six million tonnes per annum (MTPA) and is currently being expanded to handle up to 10.8 MTPA by 2022. The Tianjin LNG receiving terminal received its first LNG cargo in February 2018 and has received more than 200 LNG cargoes so far.

Currently China has a total of 22 LNG receiving terminals (including 3 small scale terminals), 11 of which can accommodate Q-Max LNG vessels. Qatargas has to date delivered LNG cargoes to 13 LNG terminals in China. Ever since the first LNG cargo was delivered to China in September 2009, more than 62 million tonnes of LNG was delivered to China in total.

Al Mafyar is the first Q-Max LNG vessel to call at the Tianjin LNG receiving terminal and the 100th LNG vessel to call at the terminal in 2020.

Source: Qatargas

#### GECF ministers upbeat on natural gas outlook despite pandemic



The full promise of natural gas will unfold once the world is past the coronavirus pandemic, upbeat energy ministers of the leading gas exporting countries said at a recent GECF 'Ministerial Roundtable' held virtually

The full promise of natural gas will unfold once the world is past the coronavirus pandemic, upbeat energy ministers of the leading gas exporting countries said at a GECF Ministerial Roundtable held recently.

Natural gas is available in abundance, flexible enough to reach far-flung corners of the globe and less polluting to the environment.

As a sideline event to the 22nd Ministerial Meeting held under the auspices of Algeria recently, the virtual dialogue aimed to confront the array of challenges brought on by Covid-19 and the opportunities that are expected to propel natural gas to the top of the global energy mix by 2050.

The gathering of policymakers from the 20-member grouping featured two separate themes of short- and long-term perspectives, with the first session held under the title of "Natural gas in a post-Covid-19 world: A short-term view", and the second entitled "Natural gas: a transition fuel or a destination?"

The first session was moderated by Stuart Elliot (S&P Global Platts) while Dr Bassam Fattouh (Oxford Institute for Energy Studies) was the second session moderator.

In his opening speech, Abdelmadjid Attar, Minister of Energy

of Algeria, said, "I wish to underline the important role of natural gas in satisfying world energy needs. Natural gas is widely available. It is clean. It improves air quality, emits much less carbon dioxide than coal. It is flexible. These qualities of natural gas are recognised by many, if not all" Attar, whose country is regarded as a pioneer in LNG with the first liquefaction plant commissioning in Arzew, Algeria in 1964, considered access to modern energy and protection of environment as two pressing issues.

"We need to ensure that the pandemic will not hinder progress on these two challenges. I wish to encourage the gas industry to strengthen its efforts in dealing with the issue of methane emission. This is important for natural gas to play a more important role in the energy transition that the world has engaged in," explained Attar, while adding that Algeria's vast gas resource will witness \$20bn worth of investment in the next years.

GECF secretary general Yury Sentyurin advanced these comments by noting that natural gas is an energy option that achieves a harmonious balance between the environmental, social, and economic dimensions of sustainable development.

"GECF members are committed to strengthen global energy security as reliable suppliers of natural gas in order to meet the world's growing energy demand. They showcased remarkable determination in their fulfilment of all contractual obligations to the customers. This indicates confidence in the strength of their economies and abilities to absorb major economic crises, notwithstanding numerous challenges and decline in revenues," Sentyurin noted.

GECF's Global Gas Outlook 2050 shows natural gas is growing at its fastest-ever rate and will become the largest global primary energy source by mid-century, from 23% today to 28% 2050.

Long-term demand is expected to grow by a remarkable 50%, from 3,950bn cubic metres (bcm) in 2019 to 5,920bcm in 2050.

Asia Pacific, North America, and the Middle East will carry more than 75% of this expected spur in demand.

Whilst the future looks promising, the short-term outlook seems dotted with perils for an industry being troubled by oversupply, bulging inventory, and now an economic recession.

Experts at the Roundtable noted that in 2020, for the first

time in more than a decade, global gas consumption was expected to decline by 2-3.5% from the 2019 level. This slump in gas consumption has been driven by a combination of notable events, including above-normal temperatures in the northern hemisphere, weaker gas demand from the power, commercial, and industrial sectors due to lockdown measures, and weaker economic growth.

Next year, global gas demand is expected to grow between 1.5-4%, but will depend mainly on the extent of lockdown measures associated with the resurgence of the pandemic, the recovery in gas demand lost due to Covid-19, as well as the weather condition in the upcoming winter.

For the medium term, sustained growth in developing Asian countries, particularly China and India, are expected to contribute to an uptick in gas consumption in the coming years.