

OPEC+ panel revises down oil demand estimate before key meeting



(March 31): A panel of OPEC+ technical experts agreed to revise down oil-demand estimates for 2021, signaling a more negative view of the market just days before the group decides on production policy.

The OPEC+ Joint Technical Committee now estimates that global oil demand will expand by 5.6 million barrels a day this year, down from 5.9 million previously, according to delegates and documents seen by Bloomberg.

The revision, which mainly affects the next few months, follows a recommendation from OPEC Secretary-General Mohammad Barkindo earlier on Tuesday that the coalition should remain very cautious.

At the previous meeting, that sense of caution led to a surprise decision to maintain almost all of the cartel's output curbs, instead of boosting production in anticipation of the economic recovery from the coronavirus pandemic. The Organization of Petroleum Exporting Countries and its allies believe that decision has since been vindicated and the group is widely expected to take a similar stance this week.

The panel "noted with concern that despite the accelerated rate of vaccination roll-outs across the world, there are a rising number of confirmed Covid-19 infections globally, with lockdown measures and travel restrictions being reimposed in many regions," according to the documents.

The reduction is most pronounced from April to June, when on average consumption is now seen 1 million barrels a day lower than prior projections.

That implies that the cartel's primary goal for the coming months – running down excess fuel inventories built up during the pandemic – would only happen slowly unless its production cuts are maintained close to current levels.

While fuel demand in the U.S. has shown strong signs of a rebound, a resurgence of the virus has undermined the recovery elsewhere. That has convinced the cartel it made the right call at its last meeting.

"While last month saw many positive developments, it also witnessed reminders of the ongoing uncertainties and fragility caused by the COVID-19 pandemic," Barkindo said at the start of the videoconference of the OPEC+ Joint Technical Committee on Tuesday, according to a statement from the group.

In the days after the March 4 meeting, when OPEC+ shocked the market by maintaining most of its production cuts, Brent soared to US\$70 a barrel.

Yet the rally soon dissolved as parts of Europe reimposed

lockdowns to contain a virulent strain of the coronavirus, while India and Brazil contended with worsening outbreaks. Crude purchases in Asia slowed as a lackluster tourist season failed to stimulate fuel demand. Meanwhile, oil supplies swelled as Iran ramped up exports to China in defiance of U.S. sanctions.

Within a week of hitting a one-year high, oil futures had surrendered almost US\$10. Brent crude, the international benchmark, closed at US\$64.05 a barrel on Tuesday.

Russia has multi-pronged strategy to confront climate change: Official



The graphic is a promotional poster for the GECF Gas Lecture Series. At the top, there is a row of five small video call windows showing participants. Below this, the main title 'GECF Gas Lecture Series' is displayed in white text on a dark blue background. Underneath the title, the specific topic is listed: 'The Russian Federation's climate policy in the energy sector'. To the left of the title, there are two circular portraits of men. The first is HE Yuri Sentyurin, Secretary General of the Gas Exporting Countries Forum. The second is HE Alexey Kulapin, Director General of the Russian Energy Agency. The background of the lower half of the graphic features a landscape with power lines and a forest. In the bottom right corner, there is a blue box with contact information: 'For more information: events@gecf.org', a Twitter handle '@GECF_News', and the website 'www.gecf.org'.

GECF

GECF Gas Lecture Series

"The Russian Federation's climate policy in the energy sector"

HE Yuri Sentyurin
Secretary General
Gas Exporting
Countries Forum

HE Alexey Kulapin
Director General
Russian Energy
Agency

For more information:
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Russia has a multi-pronged strategy to confront climate change, by further developing its human capital, natural gas, hydrogen, and renewable assets, a senior national energy

policymaker said yesterday.

Speaking at the 51st edition of the GECF Gas Lecture Series, entitled 'The Russian Federation's climate policy in the energy sector', Alexey Kulapin, director general, Russian Energy Agency, noted that Russia's energy system is underpinned by the vision of a greener energy system on one hand and stability and security on the other.

"Russia's energy policy is based on the need to strike a balance between solving climate problems and the need to further provide the economy and population with affordable energy resources," explained Kulapin.

Calling access to affordable energy a fundamental right, in line with the UN Sustainable Development Goal No. 7, the GECF secretary general commended the steps being taken by many of the forum's 19 member countries to achieve net-zero emissions.

"We heard a lot about Russia today but our other Member Countries are also leading the way in transforming their business model. Qatar, for example, is playing a greater role in the area of environmental, social, and governance (ESG) investments. Yet another member, Egypt, has blanket banned issuing of all new vehicle licences unless they run on the cleaner natural gas," said Yury Sentyurin.

"Being a world-leading coalition representing more than 70% of an important natural resource (natural gas) brings with it a remarkable weight. We strive to achieve actions that put nature, people, and planet at the heart of value creation."

Echoing these sentiments, Kulapin noted that Russia, as one of the largest players in the international energy markets, fully supports the efforts of the world community to combat climate change.

He highlighted that in November 2020, the Russian President signed a decree to reduce the country's greenhouse gas emissions (GHGs) as part of Russia's implementation of the Paris Agreement.

However, according to him, until new sources of energy are able to provide uninterrupted energy supply, natural gas, including liquefied natural gas (LNG), will remain the

cleanest energy resource and will even serve as a transitional fuel to a low-carbon economy. In this regards, projects such as the Power of Siberia 1 and 2, Turkish Stream, and Nord Stream 2 were highlighted.

Currently, Russia enjoys a total LNG production of nearly 30mn tonnes per year (mtpy), which is set to increase by 2 to 2.5 times to 80-140mn by 2035, in line with the newly-adopted 'Energy Strategy 2035'.

Work is also underway to increase the use of gas in the transport sector. In the period 2018-20, a total of 250 refuelling stations offering compressed natural gas came alive, an increase of 60% on previous capacity.

In the area of electricity, Kulapin asserted that Russian already has one of the cleanest electricity structures, as 80% of generation comes from nuclear, hydroelectric, steam gas, and thermal cogeneration sources. This compares to United States (65%), Germany (57%) and China (below 30%) in terms of low-emission energy sources for electricity generation, he said.

"Despite this, the country has a deliberate policy aimed at improving the efficiency of energy production and consumption, which allows reducing greenhouse gas emissions in the energy sector."

On hydrogen, the official noted his optimism on its potential in various fields, as the 'Energy Strategy 2035' envisions competitively priced hydrogen exports of up to 7mtpy by 2035 and 33mtpy by 2050.

"Russia can provide competitive hydrogen both in the European and Asia-Pacific markets. The cost of producing low-carbon hydrogen from natural gas in Russia is at \$1-1.5/kg, whilst the cost of producing hydrogen electrolysis is \$3.5-4/kg. We are ready for mutually-beneficial cooperation with partners overseas," he said.

The Oil Industry's Biggest Spending Driller Is Now in China



(Bloomberg) – China's fear of dependence on foreign suppliers means its biggest oil company plans to be the world's top-spending driller this year, even as it says the nation's demand for crude is plateauing.

PetroChina Co. plans 239 billion yuan (\$37 billion) in annual capital expenditure, the company said Thursday in its annual results. That's more than global majors including Saudi Arabian Oil Co., Exxon Mobil Corp. and Royal Dutch Shell Plc, who're trimming spending as they handle the fallout of the coronavirus pandemic on oil prices and fuel demand.

China's quick recovery from Covid-19 means that its demand for oil and gas has fully recovered from the pandemic-induced swoon of early 2020, and President Xi Jinping continues to make energy security a top priority. The government earlier this month called for increased domestic production of coal, oil and gas over the next five years, an effort that's ostensibly at odds with Xi's long-term plan to decarbonize the economy.

The nation's demand for crude oil has already reached a plateau, and refined product consumption will peak and begin to decline in the next decade, Duan Liangwei, PetroChina's outgoing president, said on a conference call Thursday.

Demand for natural gas, one of the cleaner fossil fuels, is still expected to grow, and PetroChina is focusing its upstream operations there.

CNOOC Ltd., the country's biggest offshore driller, is budgeting 90 billion to 100 billion yuan in spending for this year, compared with a bit less than 80 billion in 2019, although the figure could still be adjusted, Chairman Wang Dongjin said Thursday during the company's annual earnings call.

Still, PetroChina's world-leading capex plan doesn't compare to pre-pandemic levels. The firm had intended to spend 295 billion yuan last year, before lockdowns beginning in January crippled the economy. It ended up shelling out about 246 billion yuan.

PetroChina and CNOOC, along with China's third oil major Sinopec, were forced to cut spending as oil prices cratered on the impact of the pandemic in 2020. Crude has rebounded this year amid production cuts and optimism that vaccines will help revive demand. Sinopec reports its earnings on Sunday.

Green Energy Their focus on fossil fuels aside, China's oil giants are still expected to help the country meet its

ambitious goal of reaching net-zero emissions by 2060. PetroChina didn't identify spending targets on green energy on Thursday, although it did say it planned to incrementally increase such spending every year going forward.

The company is looking to peak its carbon emissions by 2025, and achieve "near-zero" emissions by around 2050, although it didn't specify whether that relates only to its own operations, or whether it includes the much vaster challenge of accounting for the emissions from the fuel it sells.

Chairman Dai Houliang said the company plans to utilize wind, solar and geothermal resources and boost industrial use of hydrogen. For its part, Cnooc said it will increase its proportion of natural gas production to 30% by 2025, and expand its offshore wind power business in coming years.

U.S. Oil Companies Lag Far Behind Greener Europe Rivals



Europe's largest oil and gas companies are leaving U.S. rivals further and further behind in the race to cut their reliance on fossil-fuel sales.

Total SE, Galp Energia SGPS SA, Equinor ASA, Royal Dutch Shell Plc and Eni SpA are leading the pack, while Exxon Mobil Corp. and Chevron Corp. are among the laggards, according to newly released climate-transition scores from BloombergNEF and Bloomberg Intelligence.

A big reason for this state of affairs is that Europeans are investing far more in renewable energy, battery storage, electric-vehicle charging points, carbon-capture technology and other decarbonization efforts, said Jonas Rooze, head of sustainability research at BNEF. For example, five European companies account for 51% of all renewable energy assets held by the world's 39 largest oil and gas producers. However, it's worth noting that this is all relative—these companies still devote most of their capital expenditures on climate-changing fossil fuels, he said.

Between 1988 and 2015, 25 corporate and state-owned entities,

including Exxon Mobil, Shell, BP Plc and Chevron, as well as China's coal producers and Saudi Aramco, were responsible for about half of global industrial greenhouse-gas emissions, according to a 2017 report from CDP Worldwide. The energy transition presents huge challenges for Big Oil, since the clean energy pivot is emerging as many of the companies face pressure to boost shareholder returns. The S&P 500 Energy Index has dropped 15%—including reinvested dividends—since the start of last year.

“Ultimately, our view is only seven of the 39 companies are likely to reduce their Scope 1 and 2 emissions enough to meet the International Energy Agency's Sustainable Development Scenario,” said Eric Kane, head of environmental, social and governance research, Americas, at Bloomberg Intelligence. Scope 1 and Scope 2 refer to emissions produced by the companies themselves and by the power they consume. “Further, a third of companies in the peer are yet to set comprehensive greenhouse-gas reduction strategies.”

Bloomberg's climate transition scores are forward-looking and designed to help investors answer one key question: How prepared is the company for a net-zero world relative to its peers? The scoring system is zero to 10, with 10 being the best.

The research relies on about 40 data points that are combined into one overall score. To get there, BNEF and BI analyze both current and future carbon performance, as well as business-model risks, using the same scoring system. The most heavily weighted issues are whether a company is developing low-carbon operations with proven revenue models and whether it's expanding in high-carbon activities. And then, how do the companies' 2030 emissions forecasts compare with the IEA's Sustainable Development Scenario, which is aligned with maintaining warming well-below 2 degrees Celsius.

Companies like ConocoPhillips, Occidental Petroleum Corp. and

Santos Ltd. that focus on extracting oil and gas are “more sensitive to transition risks,” like declining demand for oil, than are refiners, Rooze said. Other companies such as PTT Pcl, ENEOS Holdings Inc., SK Innovation Co. and Saudi Aramco are penalized for failing to disclose key information about their operations, such as spending for exploration and production or the amount of crude oil they process, a key metric for gauging the scale of their refining business.

When looking company by company, Exxon Mobil’s focus on fossil fuels and limited clean-energy activity hinders its overall score, even though it’s a leader in carbon capture, utilization and storage technologies to remove carbon dioxide from the atmosphere.

In Europe, BP is ramping up investments in clean energy at the expense of oil and gas. Shell has pivoted to power while still investing heavily in gas, which it sees as a so-called bridge fuel to a more renewable future. The Bloomberg scores place BP and Total ahead of Shell because of their stronger emissions-reduction targets.

Sinopec ranks ahead of PetroChina Co. and Indian Oil Corp. in the Asia-Pacific region, mainly because of its focus on transition strategies, including renewables, EV charging and CCUS and stronger emissions target.

“While quite a few major oil and gas firms have set ambitious new emissions targets recently, meaningful action to develop new low-carbon business models remains limited,” Rooze said. “These are all huge companies, but most are just dabbling.”

- Exxon-Mobil hedge fund activist reveals the multimillion-dollar price-tag of its boardroom battle.
- Sovereign rating cuts are coming to those countries that ignore climate change.
- U.S. weighs creation of a global benchmark for Wall Street’s impact on global warming.

- CEO pay tied to ESG is setting Canadian banks apart from the crowd.
- There's some big American money joining the rush for carbon permits, as more bet that pollution prices will soar.

أسعار البنزين.. الهدوء ما قبل العاصفة



:"كتبت جويل الفغالي في "نداء الوطن

تستمر أسعار المحروقات في لبنان بالارتفاع بشكل متواصل. حيث سجلت منذ أوائل سنة 2021 حتى اليوم ارتفاعاً بنسبة 40 في المئة لصفحة البنزين الواحدة. ومن المتوقع أن تستمر الأسعار بالارتفاع مع انهيار العملة الوطنية، والتداول بالدولار في السوق الثانوية على أعتاب 10 آلاف ليرة.

سجل سعر صفحة البنزين بشقيها 95 و 98 أوكتان زيادة بقيمة 1000 ليرة، وارتفع المازوت 900 ليرة والغاز 400 ليرة، وأصبحت الأسعار على الشكل الآتي: بنزين 95 أوكتان: 32200 ليرة، بنزين 98 أوكتان: 33200 ليرة، المازوت: 22300 ليرة، والغاز: 24800 ليرة. وكتبرير

لهذا الإرتفاع، أوضحت وزارة الطاقة والمياه - المديرية العامة للنفط في بيان، الآلية المعتمدة أسبوعياً لتحديد أسعار مبيع المحروقات، ومنها البنزين والديزل أويل. وفي التفصيل فان جدول تركيب الأسعار يتكوّن من: المعدل الأسبوعي للأسعار العالمية؛ وهو عنصر متغير، ويشكل أكثر platts للمشتقات النفطية وفق نشرات من 70% من ثمن البضاعة. من ثم تضاف عناصر تشكل كلفة البضاعة من بلد المنشأ إلى الأراضي اللبنانية من نقل بحري، تأمين، مصاريف مصرفية، ربح وغيرها. وهذه العناصر منها ثابتة، ومنها تحتسب على أساس نسب مئوية ترتبط بحركة الأسعار العالمية للمشتقات النفطية من بعدها تأتي عناصر ثابتة تحتسب بالليرة ومنها الرسوم. platts والضرائب وهذه العناصر ثابتة ومحددة بالليرة اللبنانية. فيما يدعم مصرف لبنان ولا يزال حتى تاريخه شراء المشتقات النفطية بنسبة 90 في المئة، فتحتسب هذه النسبة على أساس سعر الصرف الرسمي، في حين يتم إحتساب نسبة الـ 10 في المئة المتبقية على أساس سعر صرف الدولار في السوق السوداء.

إتجاه النفط عالمياً

الإرتفاعات الأسبوعية الذي شهدتها أسعار المشتقات النفطية في الآونة الأخيرة، "في طريقها إلى التراجع مرحلياً، بالتزامن مع الإنخفاض المحتمل في سعر برميل النفط عالمياً"، بحسب الخبير النفطي الدولي رودى بارودي. "فمنذ أن بدأت عملية التلقيح ضد فيروس كورونا على المستوى العالمي، بدأت أسعار النفط بالإرتفاع. وهذا يعود لإعادة فتح الأسواق العالمية ومعاودة النشاط الإقتصادي. إلا انه في المقابل شهدت سوق الطيران تراجعاً ملحوظاً. حيث انخفض عدد الرحلات الجوية من حوالى 140 ألف رحلة في شهري آذار ونيسان من العام 2020، إلى حدود 30 ألف رحلة حالياً. وإذا استمر وضع سوق الطيران في الفترة القصيرة المقبلة على ما هو عليه اليوم، واستمر التراجع في الطلب على النفط، من القطاعات التي تعتمد على الطاقة بكثافة، فان سعر برميل النفط عالمياً سيعود وينخفض مرحلياً إلى ما بين 55 و62 دولاراً". وهذا ما سيؤدي، برأى بارودي، "إلى تخفيف الضغط في السوق المحلي من أحد أهم عنصرين يشكلان الأسعار، أي أسعار النفط عالمياً، وسعر صرف الدولار. ومن وجهة نظر بارودي فان "هذه الانخفاضات العالمية في حال حدوثها ستكون موقته. حيث من المنتظر ان تعاود "أسعار النفط ارتفاعها مع استعادة الاقتصادات تدريجياً لعافيتها

دولار لبنان يبقى المعيار

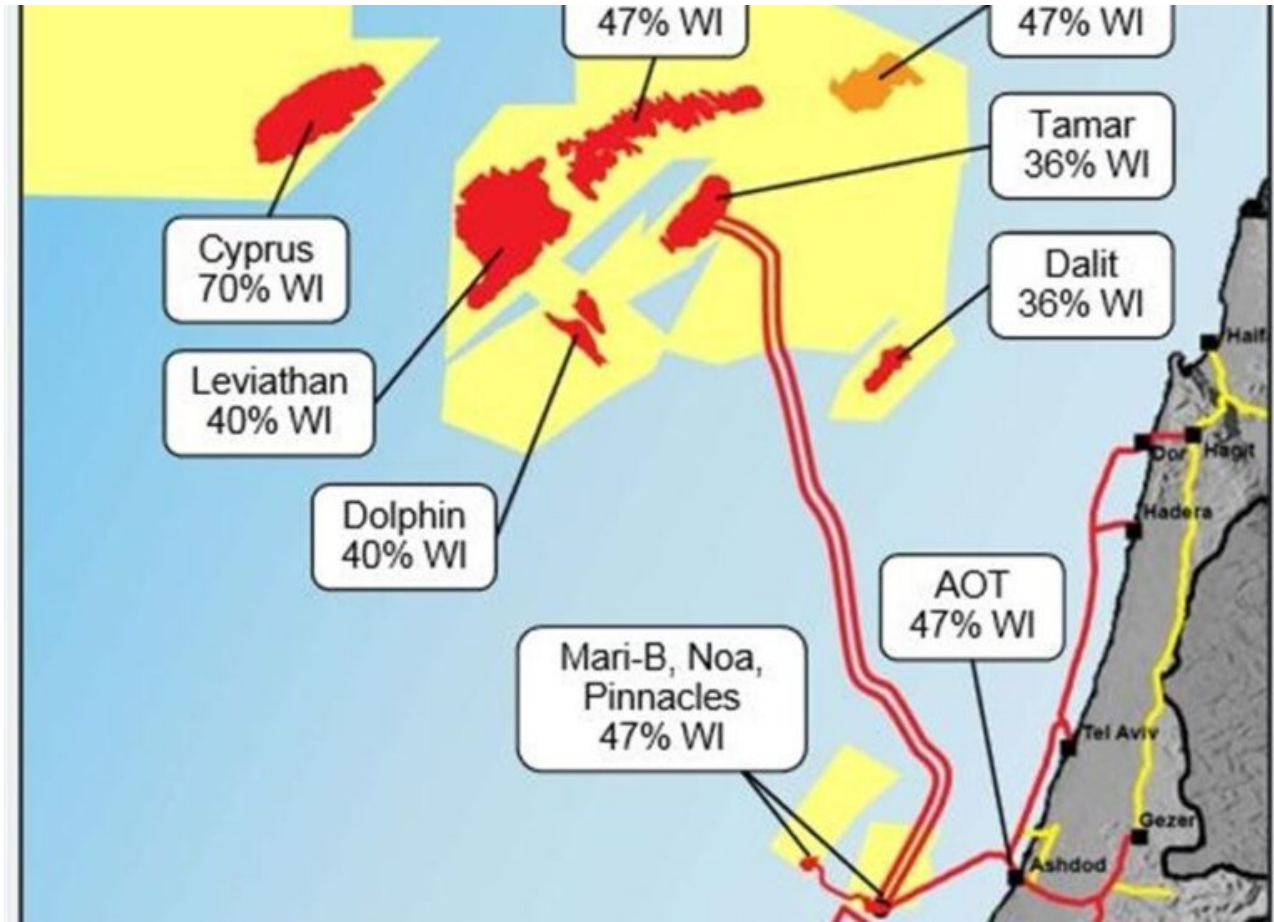
لكن في حال استمر انهيار الليرة مقابل الدولار، فإن قيمة الـ10 في المئة التي على المستوردين تأمينها بالعملة الصعبة سترتفع. الأمر الذي سيؤثر سلباً على الأسعار، ويحرم المواطنين من تراجع أسعار النفط عالمياً. هذا طبعاً، من دون أي حديث عن رفع الدعم أو حتى ترشيده. في ما يتعلق بإرتفاع سعر الدولار في السوق السوداء وتأثيره على أسعار المحروقات، فإن دعم مصرف لبنان الذي لا يزال حتى اللحظة يؤمن دولار استيراد المحروقات بنسبة 90 في المئة سيكون قاصراً عن لجم الاسعار. إذ إن الإرتفاع الحتمي للأسعار عالمياً، وانهيار العملة الوطنية محلياً، واستمرار الغموض وعدم الوضوح في ما خص سياسة الدعم عوامل ثلاثة سترفع، بحسب بارودي، "سعر صرف الدولار مقابل الليرة، وتؤدي إلى مزيد من ارتفاع الاسعار في المشتقات النفطية ومختلف السلع والخدمات". ومن هنا لا يستبعد أن يصل سعر صفحة البنزين إلى 50 ألف ليرة أو أكثر، لأن عملية تسعير المحروقات تستند إلى عدة عوامل ومنها سعر النفط العالمي، وطمع وإحتكار المستوردين، وشبهات الفساد في وزارة الطاقة، التي من الصعب حلها في المدى المنظور.

الفقر ثم الفقر

الهمّ النفطي يأتي في الوقت الذي تتفاقم فيه معاناة اللبنانيين يوماً بعد آخر. فالمصير المجهول، وترقب المزيد من الإنهيار والتدهور في القادم من الايام، "يعززهما غياب حكومة تكون بخدمة الشعب"، يقول بارودي. "والبدء بتنفيذ السياسات الإصلاحية المطلوبة، فالمواطنون يقومون بواجباتهم كاملة، سواء بدفع الضرائب والرسوم أو الالتزام بالقوانين. لكن مع الاسف فإن الدولة لا تقوم بواجباتها تجاههم. فالموضوع لا يتوقف فقط عند البنزين والمياه والكهرباء، "فهناك شعب بأكمله يفتقر إلى الحصول على أدنى حقوقه

في المحصلة فإن لبنان الغارق في رمال الدولار المتحركة وفساد الطبقة السياسية لن يتأثر ايجاباً من تراجع أسعار النفط عالمياً في الفترة القادمة. حيث من المتوقع الا ينخفض سعر صفحة البنزين عن 30 ألف ليرة. وفي حال صدقت التوقعات بان يكون انخفاض سعر برميل النفط هو الهدوء الذي يسبق "عاصفة" الارتفاع بعد فتح الاسواق، فإن سعر جميع المشتقات النفطية سيقفز في السوق الداخلية إلى معدلات قياسية. ذلك بالطبع من دون أن يكون هناك أي رفع أو حتى ترشيد للدعم، حيث إن أي تخفيض في الدعم مع ارتفاع السعر العالمي للنفط، سينتج عنه سعر، لن يكون بمتناول 95 في المئة من الشعب اللبناني.

بالصور والوثائق... اعتداء إسرائيلي جديد على حقوقنا



في الوقت الذي لا تزال فيه مفاوضات الناقورة بشأن ترسيم الحدود البحرية بين لبنان وإسرائيل متوقفة، وفي الوقت الذي يتردد لبنان في اتخاذ قرار بتعديل حدود هذه المنطقة لصالحه، أقدمت إسرائيل على المزيد من الخطوات العملية التي تسمح لها بالإستيلاء على حقوق لبنان في ثروة النفط والغاز ولا سيما في المنطقة التي تدعي إسرائيل أن لها حقوقا فيها وهي تشكل امتدادا للبلوكات الجنوبية اللبنانية ولا سيما البلوكين ٨ و ٩.

technipFMC ففي رسالة مؤرخة في ٢٣ من الشهر الجاري أشارت شركة اليونانية بأعمال بناء energen الفرنسية إلى أنها مكلفة من شركة المنصة البحرية في حقل كاريش الإسرائيلي الملاصق الحقول

الليمانية، وهو حقل لو عدل لبنان حدود منطقته البحرية ولو استمرت المفاوضات فإن مساحة كبيرة منه ستكون من حق لبنان، وبالتالي فإن هو محاولة لتكريس energen ما أقدمت عليه إسرائيل من خلال شركة أمر واقع يصعب على لبنان تخطيها في مرحلة لاحقة من المفاوضات غير المباشرة إذا لم يسارع لتعديل مرسوم حدود المنطقة الاقتصادية البحرية الخالصة.

وفي هذا الإطار قال الخبير في شؤون النفط والطاقة رودي بارودي اليونانية للنفط التي تعمل في energen إنه "بعدما أعلنت شركة حقل كاريش الواقع على الحدود الجنوبية، أنها لزمّت أعمال بناء الاوفشور بلافورم ومد الانابيب ومضخات استخراج النفط في الحقل الفرنسية، نحذر من التماذي في خرق technipFMC المذكور الى شركة المعاهدات الدولية من قبل الشركة اليونانية ما يعد تعدياً واضحاً على المناطق الحدودية البحرية المتنازع عليها بين لبنان وإسرائيل.

وطالب بارودي الدولة اللبنانية بارسال كتاب انذار بهذا الخصوص الى الشركة المعنية للتوقف عن خرق الموائيق الدولية والتوقف عن القيام بأعمال داخل المناطق المتنازع عليها على ان يكون هذا الكتاب بمثابة ربط نزاع مع الشركة للتقدم بشكوى امام المحاكم الدولية المختصة لمنعها من العمل في المنطقة المذكورة وتغريمها في حال عدم توقف الاعمال المخالفة لابطس القواعد القانونية الدولية.

Qatar, Iran to drive Middle East gas production to 1,150bcm by 2050: GECF



Driven by Qatar and Iran, the Middle East gas production is expected to rise to 1,150bcm by 2050, Gas Exporting Countries Forum said Wednesday.

The two main contributors to natural gas production in the region are Iran and Qatar, with 50% and 30% respectively of total growth, GECF said while launching its Global Gas Outlook 2050's fifth edition.

Europe, on the other hand, has been seeing declining gas production in the last ten years. This downward trend is expected to continue over the Outlook period with production falling from over 200bcm in 2019 to around 70bcm in 2050.

Cyprus is the only European country to see a growth in production by over 10 bcm over the forecast period, it said.

In Asia-Pacific, only China, Australia and India are expected to significantly expand production. China is expected to account for more than 85% of the growth of gas production in the region, particularly on account of its potential to produce gas from unconventional resources. Total Chinese gas production is expected to reach 370bcm by 2050, of which 72% will be unconventional gas.

Total Asia-Pacific production growth to 2050 is forecast to be 224bcm, of which only net growth of 20bcm is outside China. Australia is expected to grow production by 50bcm to reach almost 200bcm by 2050.

In North America, all three countries in the region (the US, Canada and Mexico) are expected to increase their production,

with much of the growth being driven by new LNG export projects and new pipeline infrastructure.

Total production is expected to grow by 560bcm to reach 1,670bcm by 2050. Gas production in Eurasia is expected to increase by almost 40%, amounting to just under 1,300bcm by 2050.

Russia and Turkmenistan will source more than 78% and 17% of this expansion, respectively.

The impact of Covid-19 in 2020 is estimated to have led to around a 7% reduction in global energy-related CO₂ emissions. This decline will be short-lived with a rebound in 2021 and 2022 as energy demand recovers.

In the reference case scenario (RCS), emissions grow moderately until 2030 before stabilising and plateauing at around 33.7GtCO₂ over the 2030-2050 period.

Natural gas will contribute the least to emissions by 2050 (32%), despite its higher role in the hydrocarbons mix (39%), while coal will still account for a high share (33%) although its contribution to the hydrocarbons mix is much lower (23%). Further penetration of natural gas will lead to a greater potential for carbon mitigation.

The GECF has developed a Carbon Mitigation Scenario (CMS), assessing the future role of natural gas in reducing emissions. The CMS outlines the potential to mitigate emissions by 6.8GtCO₂ in 2050 with an increasing penetration of gas and renewables.

These two fuels are set to increase their shares to 14% and 30%, respectively, by 2050, from 10% and 28% in the RCS. Although natural gas will play a role in reducing long-term emissions, with larger dissemination of proven and well-established technologies, there is a need to consider further decarbonization potential, including through blue hydrogen and CCUS options.

30-year total investment in gas to reach \$10tn by 2050: GECF



Global natural gas production is forecast to grow by around 1,900bcm to reach more than 5,900bcm by 2050, Dohabased GECF said yesterday. Total investment in gas (including upstream and midstream activities) between 2020 and 2050 will reach a cumulative \$10tn, the Gas Exporting Countries Forum said, unveiling its 2020 edition of the 'Global Gas Outlook 2050' yesterday. The GECF said in Asia-Pacific, only China, Australia and India are expected to significantly expand production.

Total Asia-Pacific production growth to 2050 is forecast to be 224 bcm, it said. In North America, all three countries (the US, Canada and Mexico) are expected to increase their production. Total production is expected to grow by 560bcm to reach 1,670bcm by 2050. Gas production in Eurasia is expected to increase by almost 40%, amounting to just under 1,300bcm by 2050. According to the GECF, the Middle East gas production is

expected to rise to 1,150bcm by 2050.

Europe's downward trend is expected to continue with production falling from over 200bcm in 2019 to around 70bcm in 2050. Africa will grow from 250bcm (6.4% of global production) in 2019 to around 600bcm (just over 10% of global supply) by 2050. Natural gas production in Latin America is expected to increase by over 110bcm to reach 280bcm by 2050. The 'Global Gas Outlook 2050' revealed that energy transition is underway and natural gas together with renewables will gain in importance and will be the major contributors to incremental growth in global energy demand, together accounting for more than 90% of the additional 3,520mn tonnes oil equivalent (Mtoe) through to 2050.

The Forum said natural gas and renewables will make up 60% of the electricity supply, changing the global power generation mix by 2050. Natural gas, it said, will overtake coal in 2025 and become the largest global primary energy source by 2047, with oil plateauing around 2040 and then beginning its irreversible decline. According to the GECF, renewables' share in the global energy mix will rise from 2% in 2019 to 10% in 2050.

Natural gas demand will rise by 50%, reaching 5,920bcm in 2050, and will expand specifically across the Asia Pacific, North America and Middle Eastern markets, which together will provide more than 75% of additional gas volumes through to 2050. The Asia Pacific region, given its enormous potential, will become the largest gas consumer, doubling its consumption to 1,660bcm by 2050. The share of traded LNG will increase to approximately 48% of all traded gas in 2030 and 56% in 2050, respectively, the GECF said. LNG regasification from existing, under construction, potential, proposed, stalled and speculative projects is expected to be around 1,398mtpy.

It is projected that over the outlook period, 1,990bcm out of

around 5,920bcm global natural gas demand will be imported, including 1,105bcm from the GECF member countries. In his overview of the latest findings of the Outlook 2050, GECF secretary general Yury Sentyurin highlighted the vital role natural gas will play in the global energy mix by raising its share from currently 23% to 28% by 2050, thanks to its remarkable features of abundance, flexibility, affordability, and environmental efficiency. Sentyurin said, "The complexity of factors and the multiplicity of stakeholders within the energy sector results in myriad shifting strategies that are shaping the new architecture of the future."

Nevertheless, the mid- and longterm fundamental factors that favour natural gas remain unchanged. This plentiful, adaptable and, crucially, clean source of energy will expand across Asia Pacific, North American and Middle Eastern markets." The GECF Global Gas Outlook 2050 was launched at an online event attended by energy ministers and senior representatives from the Forum's member countries together with a bevy of dignitaries and gas industry stakeholders yesterday. Its detailed quantitative assessments account for national energy strategies, environmental and climate policies, and investments and business decisions. The forecast remains the flagship publication of the association of 19 member countries, which together represent 70% of the world's proven gas reserves, 44% of its marketed production, 52% of pipeline, and 51% of LNG exports in the world.

Saudis, Russia Differ Again

on Oil Strategy Before OPEC+ Meeting

Saudi Arabia and Russia are once again heading into an OPEC+ meeting on opposite sides of a crucial debate about the oil market.

Riyadh is publicly urging fellow members to be “extremely cautious,” despite prices rebounding to a one-year high. In private, the kingdom has signaled it would prefer that the group broadly holds output steady, delegates said. Moscow, on the other hand, is indicating that it still wants to proceed with a supply increase.

The positions mirror those taken at recent meetings, but this time the Saudis have a new bargaining chip – 1 million barrels a day of voluntary cuts. The kingdom pledged to make these extra curbs only in February and March, but some see signs that could change as the negotiations get underway.

“The key question for me is how they return the Saudi barrels,” said Bill Farren-Price, a director at research firm Enverus and veteran observer of the cartel. The kingdom could potentially use them as “leverage for getting a deal,” he said.

Bargaining Chip

Ten months after slashing crude production when Covid-19 crushed global demand, the Organization of Petroleum Exporting Countries and its allies are still withholding 7 million barrels a day from the market, about 7% of global supply.

It's been a sacrifice, with members such as Iraq and Nigeria struggling economically as exports dropped. But it has yielded results, reviving prices to above \$65 a barrel in London and shoring up producers' battered revenues.

By most estimates, the cuts have meant oil demand exceeded production this year by a wide margin. The supply gap grew even wider last week as freezing weather in Texas caused a slump in U.S. output.

When OPEC+ gathers on March 4, it will discuss whether to provide more crude to the market in April. There will be two crucial decisions.

First, the group as a whole must choose whether to restore as much as 500,000 barrels a day, the next step in a gradual revival of production that was agreed on in December, but paused at the January meeting.

Second, Saudi Arabia must determine the fate of the extra 1 million barrels a day of extra voluntary cuts it is making this month and next to help clear surplus inventories even more quickly.

The kingdom initially announced this reduction would be reversed in April, but their latest thinking is fluid and the next move hasn't been finalized, delegates said. Offering to maintain some part of this voluntary cut in April could give Riyadh a useful bargaining chip if it's seeking to limit the group's overall output increase.

"Some easing in production restraint is likely at the March meeting," said Bob McNally, president of consultant Rapidan Energy Group and a former White House official. "The real bargaining has yet to start and no decision has been pre-baked."

Looming Debate

Having differed over the pace of supply increases at the last two ministerial meetings, public comments from Riyadh and Moscow indicate that another debate looms.

Russian Deputy Prime Minister Alexander Novak said on Feb. 14

that “the market is balanced.” While he hasn’t publicly expressed a policy preference for the March 4 discussions, Novak argued at the last two OPEC+ meetings for production increases.

Novak’s Saudi counterpart also appears to be sticking to a familiar position.

Acknowledging his stance might be unpopular, Saudi Energy Minister Prince Abdulaziz bin Salman warned his fellow producers against complacency. The group must recall the “scars” of last year’s crisis and be “extremely cautious” in its next move, he said.

“The football match is still being played, and it’s too early to declare any victory against the virus,” the prince said. “The referee is yet to blow the final whistle.”

Saudi Gift

Both arguments have merit.

This year’s 20% rally in crude prices has been sharp enough for major consumers such as India to complain about the squeeze, and for Wall Street banks and trading houses to predict further gains.

Global inventories are falling “very fast” and are set to diminish sharply later this year, according to the International Energy Agency. Demand for petroleum products that cater to societies working and consuming at home is booming.

After freezing storms in Texas shuttered as much as 40% of U.S. crude production in the past week, the clamor for barrels from refiners in some regions has grown stronger. There’s also the risk for OPEC+ that, once the weather-related disruption in the shale heartlands abates, high prices would provoke a new flood of supply.

But at the same time, inventories remain significantly above average levels and the IEA forecasts they could pile up again next quarter. The supply disruption from the U.S. freeze won't last long enough to cause a shortage, according to OPEC+ delegates, who asked not to be identified because the information isn't public.

Even after the rally, prices are still below the levels most OPEC members need to cover government spending, giving Riyadh extra leverage.

"The elephant in the room is Saudi Arabia's gift of 1 million barrels a day in extra cuts," said Bjornar Tonhuagen, an analyst at consultants Rystad Energy AS. "If the gift is snatched back, prices cannot do else but decline."

Restarting Texas's Frozen Energy Heartland Will Be a Climate Mess



Like a cold-blooded animal—a lizard or a snake—the petrochemical hub that is the state of Texas went dormant during the deep freeze. Eventually, it'll wake up again, and when it does the damage will be worse than if it never went to sleep.

Filings submitted in recent days to the Texas Commission on Environmental Quality, or TCEQ, already show significant emissions related to stopping and restarting fossil fuel infrastructure. It's an indication of what's to come in a state that's home to a quarter of U.S. natural gas production as well as half the oil production.

An Exxon Mobil Corp. ethylene plant in Baytown, one of the world's biggest, reported the release of nearly a ton of the carcinogen benzene and 34 tons of carbon monoxide, which contributes to air pollution. Shutting off Valero Energy Corp.'s Port Arthur Refinery resulted in the release of more than 2 tons of sulfur dioxide, another pollutant. Events at two facilities belonging to Pioneer Natural Resources Co. led to the escape of more than 12 tons of natural gas; methane, main component of natural gas, has many times the

global warming potential of carbon dioxide.

"This is an environmental disaster on top of a public safety and human health disaster," said Luke Metzger, executive director of Environment Texas, an advocacy group.

Refineries must flare off or otherwise release trapped pockets of gas when starting up or shutting down. While weather-based shutdowns are often unavoidable and done in the interest of safety, they can result in emissions that go far above allowable levels. "These events are not exempt from pollution laws," Metzger said. "It's likely the events at these facilities could have been avoided."

Exxon spokesman Todd Spitler emphasized that the shutdowns were due to the freezing weather and curtailment of natural gas supplies. "Any units that remain in operation are dedicated to exporting electricity back into the grid," he said. Representatives from Valero didn't respond to a request for comment; a spokesperson for Pioneer declined to comment.

This is the second time in less than six months the Texas oil industry has dealt with mass shutdowns due to extreme weather. The 12 hours after Hurricane Laura hit Port Arthur in August saw the release of more than 2,000 tons of emissions.

"I expect the oil industry is going to have numerous problems restarting, similar to what they encounter after a hurricane, such as damaged cooling towers and other equipment," said Andy Lipow, president of Lipow Oil Associates in Houston. "The industry also has to be wary of water freezing and cracking pipes, which could release hydrocarbons into the atmosphere and cause an explosion and fires."

As of Monday, at least seven Texas refineries were attempting to restart; all of them sustained some weather-related damage, and some still lacked sufficient power to begin the process. More challenges will likely emerge in the coming days, and it may take a few weeks for operations to return to normal.

The heightened risk of explosions are a grim reminder of what followed the onslaught of Hurricane Harvey in 2017. Floods at an Arkema SA chemical plant about 25 miles east of Houston knocked the refrigeration system offline, which imperiled the facility's store of heat-sensitive organic peroxides. People living within 1.5 miles of the facility evacuated a day before trailers holding the chemicals "spontaneously combusted," according to a Chemical Safety Board investigation. Arkema did not respond to questions.

The full scope of pollution from restarting petrochemical facilities following the freeze won't be clear until next month. Companies must file final reports within two weeks, and TCEQ evaluates the disclosures against its rules governing emissions.

TCEQ is responsible for both the state's air and water, the latter of which is also a concern for leadership. "We'll examine what worked, what didn't work so well, and what we can do to make things better next time—or, better yet, prevent it from happening again," said Toby Baker, the agency's executive director.

Environmentalists fault the state's political leadership and oversight agencies with extending the industry too much leeway, potentially endangering people and property as a result. They're also concerned that this week's failures won't be properly investigated to document their causes.

The state regulatory agencies' approach "means we aren't going to find out because they're aren't going to look," said Sharon Wilson, Texas organizer for Earthworks, an environmental nonprofit. "We have no reason to believe that they're going to try to find the pollution fallout from this extreme weather."

– *With assistance by Kevin Crowley*