

# QP signs 3 deals worth QR9bn with major international firms



Qatar Petroleum (QP) signed three agreements worth QR9bn (\$2.47bn) with leading international companies on Monday as part of QP's 'Tawteen' initiative that aims to localise the energy sector's supply chain and expand the country's small and medium-sized enterprise (SME) base.

QP signed the agreements on the sidelines of Tawteen's launch ceremony, which was led by HE the Prime Minister and Interior Minister, Sheikh Abdullah bin Nasser bin Khalifa al-Thani at the Sheraton Grand Doha Resort & Convention Hotel.

Speaking at a press conference after the signing ceremony, HE the Minister of State for Energy Affairs, Saad Sherida al-Kaabi, who is also CEO of QP, said the agreements "will give an important momentum" to the programme's objectives, which aims to add QR15bn worth of in-country economic investment value to the local economy, "which reflects investor confidence in the Qatari economy."

QP and Baker Hughes, a GE company, signed a memorandum of

understanding (MoU) designed to help create new opportunities to expand its presence Qatar, and to enhance its operations through continued investment in future technologies and services. The MoU would also help strengthen Qatar's oil and gas supply chain and boost the skills of Qatari talent in the industry.

QP also signed an MoU with Schlumberger, which recently celebrated 70 years of presence in Qatar. The agreement will help increase Schlumberger's footprint, which plans to expand its current operations in Zikreet, to open a new integrated base facility in Ras Laffan by the end of 2019, and to establish a Centre of Efficiency in the Free Zone to be used as a regional maintenance centre.

On the sidelines of the launch ceremony, Nakilat and McDermott signed an agreement to form a joint-venture company, providing offshore and onshore fabrication services in Qatar.

The new company will help increase productivity levels at Nakilat's Erhama Bin Jaber Al Jalahma Shipyard and developing local construction capabilities to meet the increasing demand for the construction of offshore and onshore structures.

The project will provide a range of new services that will support the construction, maintenance, repair and refurbishment of offshore and onshore structures, and all types of vessels.

The launch of Tawteen was part of a dedicated two-day conference and exhibition held with a large participation of official bodies and entities, energy sector companies, and a wide spectrum of service providers and supporting industries.

The activities during the event, which concludes Tuesday, are designed to present a unique opportunity for private sector companies to know more about the initiative, and about the incentives it offers to guarantee effective participation in the energy sector's supply chain and to generate high-quality job opportunities.

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# German firms in talks with QP for sourcing future LNG supply



Germany is looking to source some of its liquefied natural gas (LNG) needs from Qatar as part of the Western European country's energy supply diversification plans, German ambassador Hans-Udo Muzel said.

"Germany is also actively looking at diversifying its energy supply and considering options to set up an LNG terminal. In this context, German companies are, of course, talking to Qatar Petroleum concerning the supply of LNG to Germany in the near future," Muzel said in a statement yesterday.

Germany's plans to diversify its energy supply sources was among the major topics discussed during the sixth session of the two-day 'Qatari-German Joint Economic Commission on Trade, Economic and Technical Cooperation', which concludes in Berlin today.

Muzel said HE the Minister of Commerce and Industry Ali bin Ahmed al-Kuwari led the Qatari delegation comprising high-ranking government and business representatives. He also co-chaired the session of the commission with Thomas Bareiss, Deputy Minister at the Federal Ministry for Economic Affairs and Energy.

Al-Kuwari also met his German counterpart, Peter Altmaier, the Minister for Economic Affairs and Energy, for a bilateral meeting and a dinner together with business representatives.

With both Qatar and Germany aspiring to further expand the strong economic ties linking the two countries, the talks focused on identifying investment opportunities and strengthening co-operation in the fields of energy and renewables, digital technologies, infrastructure, tourism, healthcare, sports and food-security, reflecting Qatari and German priority areas and fields of expertise, the statement pointed out.

The German Embassy in Qatar said the commission meeting attracted more than 120 German and Qatari companies. Also held was the second meeting of the Joint Task Force on Trade and Investment, which was established by the Qatari Businessmen Association and the Association of German Chambers for Commerce and Industry on the sidelines of the 'Qatar-Germany Business and Investment Forum' held last year in Berlin. The meeting provided strategic input for government consultations by a group of selected business representatives gathered in this format.

"Well-known German companies are involved in many strategic priority projects in Qatar like power generation and distribution, infrastructure and food security. Germany's hidden champions, usually SMEs, are also actively contributing to the implementation of Qatar's National Vision 2030 and the preparations for the FIFA World Cup hosted by Qatar in 2022.

"Qatar is also high on the agenda of German travellers: German tourism companies take visitors to Doha with their fleet of cruise ships to enjoy the unique cultural heritage of the country, MIA's outstanding art collections and the many other

attractions Qatar has to offer to its visitors,” Muzel stressed.

The ambassador added: “Germany is partnering with Qatar in health and research. The University of Heidelberg, for example, is a strategic partner for Hamad Medical Corporation in cancer research and will support the establishment of a specialised clinic to provide treatment of rare diseases in Doha.”

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## **Brent may average \$50-\$70 until 2024: Bank of America Merrill Lynch**



Brent prices may average between \$50 and \$70 a barrel until

2024, Bank of America Merrill Lynch has said in a report.

“As prices become more anchored around \$60, we believe volatility implied in oil options could trend lower in the medium term. But in contrast to last year, we see growing downside risks to our price outlook on rising US shale supply and slowing consumption growth,” Bank of America Merrill Lynch noted.

Its projections assume Opec+ is prepared to lose share in the global oil market. More broadly, it expects oil as a share of the global energy pie will drop too as the petroleum consumption mix rotates away from gasoline and ends into distillates and natural gas liquids (NGLs).

While medium-term trends pose some challenges, Bank of America Merrill Lynch still sees a balanced oil supply/ demand outlook this year. Brent should average \$70 in 2019, helped by “voluntary and involuntary declines” in Opec supply. It projects a 2.5mn bpd drop in Opec supply from fourth quarter (Q4, 2018) into Q4, 2019 and then assumes stable output for the group through 2024.

As global oil demand growth slows from 1.2mn bpd in 2019 to 600,000 bpd in 2024, Bank of America Merrill Lynch sees non-US, non-Opec contributions averaging 190,000 bpd per year.

Shale should fill the balancing gap as US producers rush to deliver the marginal barrel. Total average US crude oil and liquids supply is projected to grow from 15.5mn bpd in 2018 to 21.9mn bpd in 2024.

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## Wall Street calls for better

# returns; shale gets thrifty



Bloomberg/New York

Investors urged shale drillers to spend less and boost returns. They seem to be listening.

Producers from Anadarko Petroleum Corp to Occidental Petroleum Corp are trimming capital budgets after a slip in oil prices in the fourth quarter. Marathon Oil Corp is pledging more than \$750mn of cash flow over the next two years – even if crude stays at \$50 a barrel. And Chevron Corp is ramping up its share buyback programme to \$4bn this year.

“Every other company is now actively resisting increased spending, and actively promoting their cash return metrics,” Paul Sankey, an analyst at Mizuho Securities USA LLC, said in a note to clients on Thursday.

That effort may already be showing early signs of success. Fourth-quarter earnings from energy companies in the S&P 500 reported in the past couple of weeks have so far come in at 18% higher than analysts’ estimates on average, according to data compiled by Bloomberg. That’s more than double the average seen in any other sector.

Much of the US oil and gas sector has yet to report, but the

companies that have – including Exxon Mobil Corp and Chevron – suggest an industry focused perhaps more than ever on cash flow over production growth after several years of poor performance.

“We’re seeing the early signs of capital discipline returning to the industry,” Evercore ISI analyst James West said.

Despite the collapse of oil prices in the fourth quarter, Big Oil was a standout success. All five of the world’s largest publicly traded oil companies beat analyst expectations, with Royal Dutch Shell Plc leading the pack with a cash flow figure triple what it was a year earlier. Though production slipped, the focus is now growing cash flow, Shell chief financial officer Jessica Uhl said.

Maybe, oil majors have the shale revolution to thank for that shift, according to Chevron chief executive officer Mike Wirth. Cheap oil from US shale basins meant producers needed to streamline – or they’d fall behind. Shale “has forced us to get smarter about how we do everything else,” Wirth said in an interview.

Among the independent drillers, almost everyone is cutting projected capital spending, bowing to Wall Street pressure as companies seek to show investors they can live within their means. Fail to do so, and their stock price will feel the pain. Pioneer Natural Resources Co saw its shares dip more than 5% on concerns its spending cut wasn’t big enough to guarantee it wouldn’t outspend cash flow.

Still, it may take more than a handful of spending cuts to assuage years of investor frustration with the industry. The S&P 500 Energy Index is up 13% this year, less than the 20% rise in oil prices. It’s doing better than the broader S&P 500, though, which is up 9.5% for the year.

The companies that actually drill and pump for those producers haven’t been left behind in the broader energy rally. Halliburton Co and Schlumberger Ltd, the world’s biggest oilfield service companies, are riding strong international growth that’s softening the impact of a weakening US market. Schlumberger, which was one of the worst performing stocks in

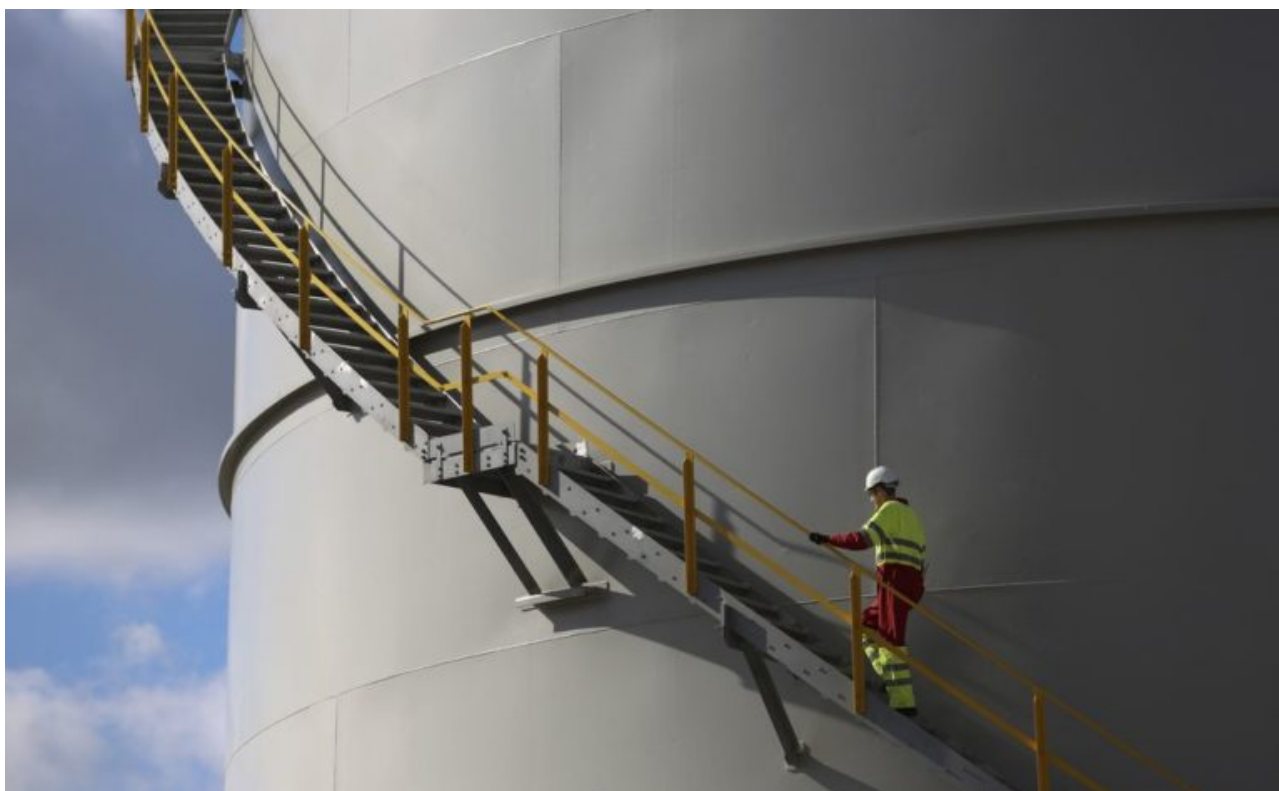


the entire S&P 500 last year, won plaudits for its capital austerity while keeping its dividend intact.

The rig count has also exceeded expectations in the first quarter so far, with overall activity looking like it's on pace to surprise on the upside in the first half, according to Wells Fargo analysts Jud Bailey and Coleman Sullivan. But with drilling budgets down in 2019, question marks remain over the second half of the year.

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## **EU Starts Natural Gas Price War Trump and Putin Will Love**



The stage has been set for a European natural gas price war that will help boost demand and enable both Russia and the U.S. to increase sales to the region.

The battle won't brutalize earnings too much because gas

supply is just so profitable in Europe, where prices are more than double the prevailing level in the U.S. And those costs probably won't drop too far because higher carbon allowances and other climate measures are finally making the fuel's traditional competitor, coal, less attractive.

After last week successfully diluting planned European Union gas-market legislation to include loopholes for a controversial pipeline from Russia, Germany this week promised to build at least two terminals that open its market to seaborne imports, including from the U.S. The direct competition between the world's biggest gas producers should help stymie prices to some extent, even as Europe needs to boost imports to meet ambitious climate goals.

"If you factor in the need for Russia to utilize the pipeline and how it will compete with U.S. LNG and other pipeline exporters such as Norway, then it could set the stage for a price war in Europe in the not-so-distant future," said Nick Campbell, a director at industry consultant Inspired Energy Plc in England.

Gas prices in Europe are still prevailing at high levels even after falling since September. The cost is usually even higher in Asia, although oversupply there has crimped the premium that region usually offers to draw in cargoes of the fuel in its liquid form.

Representatives of EU governments and the European Parliament on Tuesday approved a revision to gas-market legislation to spur competition. While it included loopholes for the Nord Stream 2 pipeline to bring the fuel directly from Russia, bypassing Ukraine's transport network, it was designed to play suppliers against each other.

The plan will "remove some of the risk" contained in prices because of the prospect of interruptions of supplies via Ukraine, with which Russia is in a territorial dispute,

Campbell said.

Russia and the U.S. are vying to supply Europe with cleaner-burning fuel as governments from Berlin to Madrid grapple with coal phaseouts. Vladimir Putin is seeking to buttress one of his nation's biggest sources of foreign cash while Donald Trump wants to win the U.S. a bigger share of a consumption boom.

Nord Stream 2, a planned 1,200-kilometer (746-mile) undersea pipeline, has sparked controversy. Eastern European countries wary of Russia gained U.S. support in opposing the project, whose chief political champion in Europe has been German Chancellor Angela Merkel. The region's biggest economy is simultaneously seeking to phase out nuclear power, leaving a further gap for gas to fill.

The critics of Nord Stream 2 also picked up backing from the European Commission, the EU's executive arm, which said the bloc needs to become less dependent on Russian gas and which proposed the revised pipeline legislation in late 2017.

## **Ending Ambiguity**

The measures are meant to end ambiguity over gas-import infrastructure by making them explicitly cover all pipelines to and from the EU. While the draft law builds on EU rules that prevent gas providers from controlling the transmission business and that require third-party access to pipelines, the French-German compromise being included in the final version of the new legislation creates loopholes for Nord Stream 2.

The French-German plan denies the regulatory authority in Denmark a decisive say over the project and puts that power primarily in the hands of German regulators, who could then seek and gain an exemption from the EU market-opening requirements as long as it didn't hurt competition or supply.

Dutch gas prices for next winter are 24 percent above forward levels of a year ago, despite losing a fifth of their value since September on mainly benign temperatures and below-capacity demand. That suggests there's room for a further move down.

There's a glut of LNG after multibillion-dollar investments in global production and Europe has already been receiving record amounts of super-chilled fuel. That should help damp prices and make it easier for Germany and the rest of Europe to source gas to meet environmental pledges.

Still, the drop might be limited by that rally in EU carbon allowance prices, which increases demand for gas. A trade deal between China and the U.S. could further stoke interest in gas as China seeks to deal with coal pollution, Inspired's Campbell said.

## **Stiffer Competition**

"With Nord Stream 2 and two LNG import terminals, Germany can easily exit from coal and nuclear power while pleasing both Trump and Putin," said Laurent Segalen, a partner at Megawatt-X in London, who advises on financing wind and solar projects. "Putin will have to price its gas to stay competitive below U.S. LNG."

Europe's gas suppliers should brace for stiffer competition between LNG and pipeline shippers, as domestic production wanes, BP Plc said Thursday in its 2019 outlook report.

"Europe's existing infrastructure means it has the capacity to increase substantially its imports of either LNG or pipeline gas," the oil company said. A more globally integrated gas market may "ease" concerns about Russia, it said.

Indeed, any pain for Russia might be fleeting, according to analysis published Thursday by Macquarie Group Ltd. analyst David Hewitt.

The biggest supplier's market share in Europe will drop to about 30 percent this year from 33 percent in 2018. That reflects extra LNG supplies being produced around the world, he said. But its share will rebound to 32 percent by 2021 as the LNG market tightens.

Europe will act as the global gas market's "balancing point" to some extent, Hewitt said.

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## **Anti-OPEC Bill Sponsor Expects 'Positive Reception' From Trump**



The congressman behind a bill that would allow the U.S. to sue OPEC for manipulating oil prices expects President Donald

Trump to back the effort once it clears Congress.

“My sense is that the administration is waiting to determine whether we can actually get it through both houses of Congress before they spend any capital on it,” U.S. Representative Steve Chabot, an Ohio Republican, said in an interview on Friday. “I am cautiously optimistic we will be able to get it through both houses and get it to the president’s desk.”

The “No Oil Producing and Exporting Cartels Act” quickly cleared its first hurdle when it was approved by the House Judiciary Committee earlier this month, but a floor vote hasn’t been scheduled yet. The proposed law would subject the Organization of Petroleum Exporting Countries to possible antitrust action by the Justice Department through an amendment of the Sherman Antitrust Act of 1890, the law used more than a century ago to break up the oil empire of John Rockefeller.

Congressional support for the bill intensified last fall as crude prices neared a four-year high on the back of production limits set by OPEC, and Trump publicly blamed OPEC for high pump prices in the U.S. While the producer group hasn’t set prices since the 1980s, its members periodically agree to boost or cut their production to keep the oil market in balance.

A 2007 version of the so-called “NOPEC” bill passed the House and Senate by large margins, only to face a White House veto. Other attempts to approve the legislation have met similar fates. The difference this time is that Trump has consistently bashed the oil cartel on Twitter for keeping prices artificially high.

“This year, we seem to have a sympathetic White House,” Chabot said. “I hope the president will listen to the right people and be with us.”

The Justice Department is still reviewing the legislation, and

the White House hasn't taken a stance on it. Both the Chamber of Commerce and the American Petroleum Institute oppose the bill, arguing that the role of the U.S. as the world's biggest oil and gas producer has increased its leverage against OPEC and provided protection against price volatility.

Prices have fallen from last year's but that hasn't shaken Chabot's resolve.

"These things are temporary and can change in the blink of an eye," he said. "Prices in general seem to go up very quickly whereas they go down very slowly."

Passage doesn't necessarily mean that any lawsuits are actually brought against the cartel, Chabot said. But the threat may be enough to "keep OPEC nations more in check so they're reasonable and not manipulating the world market."

Companion legislation targeting OPEC has also been introduced in the Senate.

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## **Asia's crude oil refiners are caught between Trump and OPEC: Russell**



LAUNCESTON, Australia (Reuters) – Asia’s oil refiners are increasingly finding themselves trapped between the rock of OPEC’s production cuts and the hard place of U.S. President Donald Trump’s sanctions against Iran and Venezuela.

While the region, which accounts for about half of the world’s refining capacity, is still able to source oil, it’s becoming harder to get hold of the grades of crude that many Asian refiners prefer.

This is because the output restrictions agreed by the Organization of the Petroleum Exporting Countries (OPEC) and its allies, which include Russia, have resulted in mainly heavy and medium sour crude grades being cut.

Add to this the sanctions imposed by the United States on Venezuela, which produces heavy sour crude, and on Iran, another producer of mainly heavy and medium sour grades, and Asia’s refiners are facing operational challenges.

Many of the region’s refineries are new and are optimized to process heavy and sour crudes.



They were designed this way to take advantage of the historical discount these grades were priced at relative to light, sweet crudes, such as global benchmarks Brent and West Texas Intermediate (WTI), and oil from West African producers such as Nigeria and Angola.

The recent developments in the crude oil market have all but eliminated the discount enjoyed by heavy crudes, and in some cases, physical cargoes of some heavy grades have traded at premiums to light crudes.

The Brent-Dubai exchange for swaps, which charts the premium of Brent over the Middle Eastern benchmark Dubai, narrowed to 36 cents per barrel on Tuesday, the weakest in almost nine years.

Looking at specific grades of crude shows that a grade such as Iraq's Basra Heavy has been increasing in price relative to a light crude such as Nigeria's Bonny Light.

Basra Heavy, as assessed by Argus Media, was at \$60.17 a barrel on Tuesday, while Bonny Light was at \$64.38.

This represents a premium of \$4.21 a barrel for the light crude, but this is down from a gap of \$6.18 as recently as early October last year, and \$7.26 at the start of 2018.

## **ASIA'S HEAVY DISTRESS**

The flows of crude oil to Asia also help illustrate the dilemma facing the region's refiners.

Asia imported about 669,000 barrels per day (bpd) of Venezuelan crude in January, according to vessel-tracking and port data compiled by Refinitiv, with eight of the 13 cargoes going to China, four to India and one to Malaysia.

Given the six- to eight-week sailing time between the Latin American country and destinations in Asia, it's likely that

the pinch of U.S. sanctions will only be felt in April, given that all February cargoes and most of March's are already en route.

But Asia is facing the loss of almost 700,000 bpd of heavy crude from Venezuela by April, coincidentally the same month that Trump's waivers on Iranian crude exports are due to expire.

The U.S. administration reimposed sanctions against the Islamic Republic's oil exports in November in a bid to ramp up pressure against Tehran's nuclear program, but extended waivers to eight major buyers of Iranian crude, most of them in Asia.

Refinitiv data show that buyers have taken advantage of the waivers, with Iran's exports rising to a three-month high of 950,000 bpd in January, of which 700,000 bpd headed east.

In theory, these exports should drop to zero when the waivers expire in early May, barring a further extension by the Trump administration, or less likely, some kind of agreement between the United States and Iran.

In the lead up to the November granting of waivers by the United States, oil prices had jumped to a four-year high as the market anticipated the loss of Iranian barrels.

However, the granting of the waivers contributed to a sharp reversal in crude prices, with Brent dropping to a 14-month low by late November.

In turn, this spurred OPEC and its allies to impose new output restrictions at a meeting in early December, with these cuts to take effect from January.

Given that much of the heavy lifting of the output restrictions will fall on OPEC's top producer Saudi Arabia, and fellow Middle East producers Kuwait and the United Arab

Emirates, it's likely that the barrels lost will be heavy, or medium-heavy crudes.

With the actual loss of Venezuelan and some Middle Eastern crude, and the potential loss of Iranian barrels, the dilemma for Asian refiners becomes more acute.

Do they bid ever-increasing amounts for what heavy oil remains in the market, do they lower run rates, or do they try and switch to using more light crude?

None of these options are appealing, and all of them are likely to result in higher costs for refined products, particularly the middle distillates such as diesel and jet fuel that are produced in greater quantities from heavy crudes.

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**EU moves ahead with Russia  
gas pipeline despite US  
opposition**



AFP/Strasbourg, France

The European Union pushed ahead yesterday with an agreement that will allow Russia to continue to build a new gas pipeline to Europe, despite US warnings it posed a security risk.

The EU's revised gas directive aims to establish common gas market rules for pipelines entering the bloc from a third country, with all the focus on Russia's Nord Stream 2 project which will pipe gas to Germany.

In November 2017, the European Commission proposed amending the existing legislation in what was seen as a bid to put curbs on Nord Stream 2 launched by the Russian giant Gazprom.

Negotiators for the European Parliament and EU countries struck a provisional political agreement on Tuesday night on the rules that recognise Germany's lead role in the pipeline while putting it under EU oversight.

The Nord Stream 2 pipeline will double the capacity to ship gas from Russia to Germany via the waters of Finland, Sweden and Denmark.

But the pipeline has faced opposition from many countries in eastern and central Europe, the United States and particularly Ukraine because it risks increasing Europe's dependence on Russian natural gas.

Combined with the planned TurkStream pipeline across the Black Sea, Nord Stream 2 would mean Russia could bypass Ukraine in providing gas to Europe, robbing Moscow's new foe of transit fees and a major strategic asset. The new regulations require all pipelines on European land and sea to meet with EU law, with exceptions only accorded under the strict supervision of Brussels.

Member states will have oversight of the project, but in light of concerns from eastern member countries, the European Commission, the 28-nation EU's executive arm, will have the final say. The commission will also have the power to authorise a member state to open negotiations with a non-EU country in future deals.

"The new rules ensure that EU law will be applied to pipelines bringing gas to Europe and that everyone interested in selling gas to Europe must respect European energy law," EU energy commissioner Miguel Arias Canete said yesterday. US Secretary of State Mike Pompeo said on Tuesday that the United States would do everything in its power to stop the gas pipeline to Europe as he joined Poland in warning of risks.

Pompeo said the pipeline from Russia, which began construction last year, "funnels money" to Russia in a way that ultimately hurts Europe.

The pipeline project got a new lease on life last week after France, which had demanded EU oversight, struck a compromise with Germany.

Rebecca Harms, who heads the Greens in the European Parliament, said: "With this accord, all the problems with Russia's gas policy and all the problems on the gas market in eastern Europe are not settled."

But Harms said: "But we have made a lot of progress.

We have ensured that Gazprom will have to play by European rules from now on."

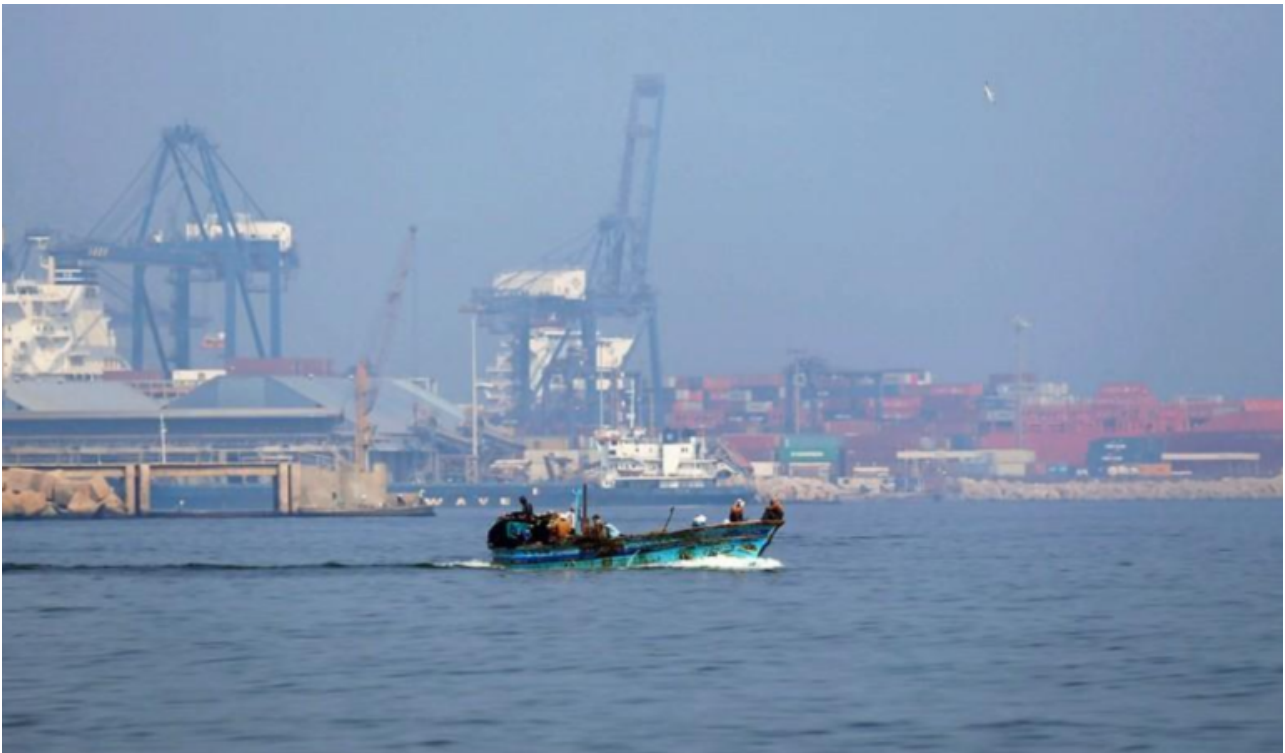
Her French colleague Michele Rivasi nevertheless worried the exemptions introduced by the member states "may reduce the impact of the legislation."

The legislation must still be formally adopted by the European

Parliament and the member countries.

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## **Egypt plugs hub status as Shell, Eni, Exxon win energy concessions**



CAIRO (Reuters) – Royal Dutch Shell, Eni, BP and Exxon Mobil were among the winners in one of Egypt's largest ever oil and gas exploration tenders on Tuesday, as the country looks to sustain an investment upswing spurred by major discoveries.

The awards marked Exxon Mobil's entry into gas exploration in Egypt, while Shell was handed the most concessions, three for oil and two for gas, at an annual petroleum show that Egypt has used to promote itself as a hub for gas production and trading in the Eastern Mediterranean.

Egypt expects investments of at least \$750 million to \$800 million in the first stage of exploration in the total of 12 concessions announced, Petroleum Minister Tarek El Molla said.

The Egyptian Natural Gas Holding Corporation's bid round, which was the largest in its history, included border areas in the Mediterranean Sea as well as land areas in the Nile Delta.

Five gas exploration concessions were awarded – in which 20 wells will be drilled – to Shell, Exxon, Petronas, BP, DEA and Eni, the head of Egypt's state gas board said.

Egyptian General Petroleum Corporation's (EGPC) tender meanwhile included areas in the Western Desert, the Nile Valley, the Gulf of Suez and the Eastern Desert.

Neptune Energy, Merlon, Shell, Eni and state-controlled EGPC were awarded seven oil exploration concessions in total in which 39 wells will be drilled, Egypt's petroleum ministry said.

## **BOOSTING INVESTMENT**

Eni's discovery of the giant Zohr field in 2015, the largest in the Mediterranean and estimated to hold about 30 trillion cubic feet of gas, has raised interest in exploration in Egypt.

The country has reached maritime demarcation agreements with several countries in the region in its push over recent years toward increased oil and gas exploration.

Executives at the forum, which was attended by the CEOs of companies including BP and Shell, said Egypt's advantages as a hub include well-developed infrastructure, established industry expertise, strong local demand, and the country's strategic location between Europe and Asia, allowing it to send gas west or east depending on markets.

They are also encouraged by Europe's desire to diversify gas supplies and find alternative suppliers to Russia, and to reduce carbon emissions.

Egypt hopes to tap long underutilized liquefaction plants, where gas is turned into LNG, to export supplies across the Mediterranean along with that of its neighbors, including Israel, which said it would pipe gas to Egypt later this year.

"I think we're starting to see much more robustness for this concept," said Gasser Hanter, Shell's country chairman, in reference to the concept of Egypt as an emerging hub.

"You're seeing the intergovernmental agreements being sorted out, you're seeing the deregulation of the gas market, a lot of confidence in the economy, in Egypt, that is boosting the investment in the upstream."

However, executives also said longer-term challenges include geopolitical tensions in the Eastern Mediterranean, the need to further develop infrastructure, and competition from other suppliers including Russia and the United States.

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## **Ocean's Monopoly: How Nations Use Science to Conquer the Sea**





What if a country didn't end at the coastline but would simply continue under water? A territory the size of a continent would come up – a territory uncontrolled and open for seizure. But who owns the sea bed, is it territory still to be claimed?

The fact that the world's oceans cover three-quarters of the earth's surface once meant very little to governments around the world. This changed when water exploration teamed with demand for specific resources and the need for power.

The first scientific study of the ocean floor was undertaken by German survey vessel Meteor, which saw it conduct research on the Atlantic Ocean between 1925 and 1927. The information uncovered about the ocean bed changed how nations viewed their once complacent takes on the importance of the ocean – politically and otherwise.

In 1945, spurred on by a demand for oil that could not be met by land resources, US President Harry Truman pioneered the idea of owning oceans by promoting the theory of extended continental shelf of submerged landmass – claiming a continent did not end at the shoreline but ownership by a nation extended into the ocean. Prior to this, countries could only

lay claim to the land extending 22 nautical miles (22km) from land's end.

Using the theory of 'continental drift' – the belief that the continents' movement in relation to each other did so across ocean beds – and the 'legitimate' nature of science as evidence to prove his point, Truman's idea was systemised under the Outer Continental Shelf Lands Act of 1953, starting a war of laws. How fair mother nature had been to landlocked nations was another issue to contend with.

"For instance, Russia has a wide [continental] shelf of more than 200 nautical miles, or over 400km. By contrast, South East Africa has a continental edge of only 20km. These features are the result of geological evolution. Some countries are lucky. Others are not," says geophysicist Wilfried Jokat.

Over 40 percent of the world's oceans have already been assigned to legal continental shelves, i.e. a land mass extended from the continent itself to the continental margin which is between the shoreline and the shelf break (where land slopes further into the water). Claims on expanded geological continental shelves make up another 10 percent of the ocean – a process riddled with loopholes, allowing countries. It is now projected that around 57 percent of the oceans will eventually be under the control of coastal states.

As new discoveries of oil and gas continue to further nations' desires to claim their own piece of the ocean bed, geologists have been propelled into the role of decision-makers, proving – or nullifying – claims to these desired areas.

The objectivity of the scientists involved in these processes has also come into question, with economic and strategic gains at stake.

"Science is decisive for expanding the continental shelf, because all the petitions are based on science. Geological

data, seismic data, scientific studies. Everything depends on this information,” says head of the French maritime law commission, Elie Jarmache.

“You can’t go to the Commission on the Limits of the Continental Shelf and say, ‘I am a member of the Security Council and want to expand my country’s continental shelf.’ That’s not how it works. Politics has no place here.”

As states attempt to extend their maritime zones as far as possible, many international conflicts have arisen. In the South China Sea, eight countries are fighting for oil reserves valued at \$100 billion.

“There is no part of the world that is safer than any other,” says Robert van de Poll, a maritime law expert. “In other words, with 53 percent of all maritime boundaries within the Exclusive Economic Zone unresolved, we are seeing conflicts rising to volatile levels driven predominantly by resource development for the offshore.”