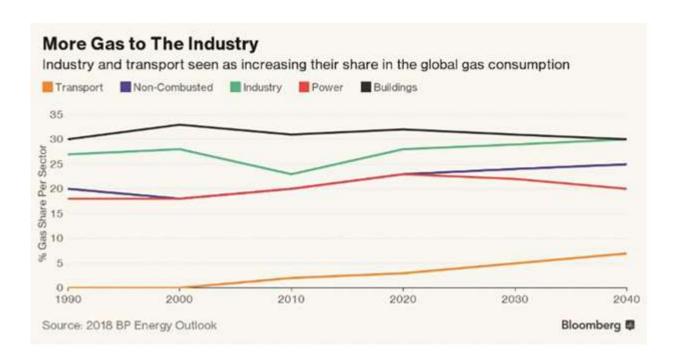
Natural gas tries to eke out a future in greener world



Bloomberg/Frankfurt

The natural gas industry is trying to up its green credentials as it bids to join electric cars and renewable power plants in a lower-emission future.

European energy companies spent years touting the role gas can play as a transition fuel to replace dirtier sources of roundthe-clock power. Now they are increasingly promoting gas as a cleaner alternative to oil products in transportation and investing in technology to produce less-polluting fuel.

"Natural gas will play a bigger role in a greener world," Guy Smith, head of gas trading at Swedish utility Vattenfall AB, said on Tuesday. "It will be the fuel of choice for an intermediary situation towards a greener economy, and after that, new technologies will come and drive the markets."

With governments and investors increasingly concerned about climate change, and meeting in Poland for UN climate talks, the natural gas industry has questioned its own survival. The fuel's share in primary energy supply is expected to rise to a quarter by 2040, though annual consumption growth is expected to slow to 1.6% from 2.3% over the 25 years to 2016, according to the International Energy Agency.

The fact that natural gas is less polluting than other fossil fuels, with emissions as much as 55% below those of coal, have made it an energy company darling. Companies from Scania AB to Royal Dutch Shell Plc are investing to increase the role of natural gas in the transportation sector.

"The view that gas is just a transition fuel is changing," said Eva Hennig, chairwoman of the distribution system operators committee at Brussels-based industry lobby group Eurogas.

Austria's OMV AG is assessing a liquefied natural gas corridor for trucks from Germany to Bulgaria, one of the main traffic routes for international heavy traffic in Europe, it said in an emailed statement. The company, which operates more than 2,000 filling stations in 10 countries, declined to provide more details on the investment.

"If you want to stay in the game, you have to play it and decarbonise," said Kaloyan Tsilev, EU affairs manager at Brussels-based lobby group Natural & Bio Gas Vehicle Association Europe. "Change the portfolio to accommodate the demand."

Shell expects the global market for LNG as a transport fuel to quadruple by 2030 as implementation of government policies that tax carbon emissions prompts demand for cleaner sources.

"Transport is an area where gas hasn't played a role historically, but it can," Steve Hill, executive vice-president at Shell Energy, said at a conference in Lisbon last month. "Cars will be electrified eventually, but heavy-duty transport, where you have to move heavy loads long distances is not very suitable for batteries and electricity, which can be a segment for LNG."

The challenge for natural gas to expand into transportation is the lack of political will and a better regulation framework, according to Manfred Leitner, an executive board member at OMV. Current European legislation focuses on vehicles emissions, which put electric cars in a better position than other technologies.

"There are incentives only for electric cars. They are defined as low emitters, but when you look at the whole chain you ask yourself where the electricity comes from?," Leitner said in a telephone interview. "The gas for mobility market would fly if there was political will. We see a better future with a mix of technologies."

Natural gas companies are also investing in technology to clean the fuel. Green gas should help Engie SA, Snam SpA, Gas Natural SDG SA and other electricity generators as well as operators of gas pipelines and storage facilities to ensure long-term demand for existing infrastructure, Elchin Mammadov, a Bloomberg Intelligence industry analyst, said in a recent report.

"The decarbonisation of gas is possible and is a very important part of the narrative of the climate talks" taking place this week in Poland, said Dr Ludwig Mohring, head of German oil, gas and geothermal energy lobby BVEG said at a conference in Berlin last month. "Natural gas will be the second element next to renewables."

U.S. Oil Surge Makes Bank of Russia Skeptical on OPEC+ Success



Russia's central bank is not convinced that OPEC and its allies' supply cuts can revive the oil market as it's being countered by surging U.S. production.

The Bank of Russia cut its crude price outlook for next year to \$55 a barrel from \$63 on higher supply risks, mainly related to "fast output increase" in America, according to Governor Elvira Nabiullina. Just a week ago the country's Energy Minister Alexander Novak brokered a deal that led to the so-called OPEC+ group agreeing to cut production by 1.2 million barrels a day in an effort to boost prices.

Crude remains stuck in a bear market, trading around \$60 a barrel in London, despite the larger-than-expected output reduction. While most, including the International Energy Agency, expect the curbs to reduce global stockpiles in the first half of 2019, resultant higher prices could help American drillers boost production. Legendary oil trader Andy Hall said the U.S. shale boom has made it far harder to predict global supplies.

OPEC kept 2019 forecasts for global oil supply and demand

mostly unchanged in its most recent monthly report this week. However, it said production from outside the group, powered by U.S. shale drillers, is poised to expand 2.16 million barrels a day next year, faster than the 1.29 million a day increase in demand, the report showed.

U.S. oil production is expected to top 12 million barrels a day next year, up from 10.88 million in 2018, according to the Energy Information Administration.

Though the Bank of Russia is traditionally cautious in its outlook, it cited crude market risks as a key factor in raising the benchmark interest rate for the second time this year on Friday. Besides shale output exceeding "expectations of many," softening global demand is also a concern, Nabiullina said.

"We see risks of oil-price reduction related to demand and supply factors," she said. "We see how outlooks for global economic growth are gradually being revised down."

Saudi Oil Premium Drops to 15-Year Low as Fuel Profits Crash



Saudi Arabia's crude pricing in the world's biggest oil market is reflecting tumbling profits from making cleaner fuels in Asia.

State-run Saudi Aramco slashed the premium of its Extra Light grade to its Heavy crude to the lowest since 2003, data compiled by Bloomberg show. When lighter varieties of oil are refined, they typically yield more of relatively clean products such as gasoline and petrochemical ingredient naphtha. The market for such fuels has been mired in a glut over the past two months.

While the world's biggest oil exporter cut pricing on all its grades for January sales to Asia in a bid to take back market share lost to the likes of Russia and the U.S., the significant reduction in the premium for its lighter varieties shows the kingdom is probably taking into account the shrinking margins in the region for cleaner fuels as well as focusing on tackling competition from other sellers.

Fereidun FesharakiPhotographer: Charles Pertwee/Bloomberg "Gasoline and naphtha are dying and margins still haven't

reached their worst," Fereidun Fesharaki, chairman of industry consultant FGE, said in an interview in Singapore. "In Asia, Saudi prices are based on purely product yields and the competition they see from the outside."

Oil refiners in Asia are fetching better returns by producing dirty fuel oil than from cleaner naphtha for the first time in more than a year, data compiled by Bloomberg show. Concern over falling petrochemical consumption is said to be dragging down prices of the so-called light distillate, while stockpiles swell in the regional trading hub in Singapore.

The gasoline refining margin in Asia was at a discount of 14 cents a barrel to Brent crude on Tuesday, according to PVM Oil Associates data. It had dropped to 66 cents on Nov. 28, the biggest discount since 2011.

In China — one of the key markets where Saudi Arabia is seeking to reassert its crude dominance — refineries are doubling down on processing to boost diesel output aimed at heating millions of homes this winter, and therefore contributing to an increase in supplies of other products such as gasoline and naphtha. The nation has also raised its total fuel-export quotas by 12 percent for 2018 in a move that would allow more seaborne sales.

The premium of Saudi Arab Light crude, which yields more light as well as middle-distillate fuels such as diesel, over Arab Heavy for January sales to Asia also shrank to the smallest since November 2009, data compiled by Bloomberg show.

Meanwhile, with global crude prices stuck in a bear market, OPEC — in which Saudi Arabia is the largest producer — and its allies including Russia will decide this week on output curbs that may reduce export flows starting as early as January. Still, Saudi and Russian officials are said to differ on how to share the burden of any cuts. At the same time, the U.S. is pumping record amounts and shipping more to Asia.

"Saudi is facing more competition now and the U.S. competition becomes much bigger next year," FGE's Fesharaki said.

Total denied Brazil off shore drilling licences in Amazon Reef



Total SA was denied per- mission to drill fi ve deep- water blocks in the Ama- zon Reef off Brazil's coast over biodiversity concerns. The Brazilian Environment Agency, known as Ibama, said on Friday that oil exploration in the area could threaten sea life in case of a spill. Plus, documents presented during the fi ve- year assessment failed to ensure an adequate emergency plan would be in place, the agency said. The denial comes three weeks before President-Elect Jair Bolsonaro — who has strongly criticised Ibama's environmental

licensing and promised more resource explo- ration in the Amazon — takes office on January 1. Total won the licences during Brazil's 11th oil round in 2013 in partnerships with BP Plc and state-controlled Petroleo Bra- sileiro SA.

The company will an- alyse documents sent by Ibama and decide on the next steps, ac- cording to an e-mailed response to questions. "Ibama did the right thing in denying Total its licence to drill," said Thiago Almeida, a climate and energy campaigner for Greenpeace Brazil. "More than 2mn Amazon Reef defend- ers from all around the world stood up against Total's reck- less plans to drill for oil near this unique and biologically signifi — cant area."

Huawei Arrest Keeps U.S.-China LNG Spat Alive, Developer Says



The arrest of a top Chinese technology executive means the tariff war that ensnared liquefied natural gas may not have reached a cease-fire, according to the developer of a U.S. project to export the fuel.

Liquefied Natural Gas Ltd. has been cautioned by prospective Chinese buyers of supply from the terminal it plans to build in Louisiana "that things are not resolved" on the trade front, Chief Executive Officer Greg Vesey said in an interview Friday. The potential purchasers' comments came after Canada said the U.S. is seeking to extradite Huawei Technologies Co. Chief Financial Officer Wanzhou Meng over potential violations of sanctions on Iran.

The snag comes just days after Chinese officials were said to have started preparing to resume imports of U.S. LNG and soybeans as President Donald Trump touted a breakthrough in talks between the two nations. Developers of multi-billion-dollar U.S. gas export terminals — projects typically underpinned by long-term supply contracts — have been courting China, which emerged this year as the world's biggest gas importer.

"The whole trade issue put a damper on things directly with

Chinese customers and the rest of the buyers are also sitting back," Vesey said. Still, the developer has had ongoing conversations with Chinese companies, he said.

Vesey aims to sign deals and make a final investment decision to proceed with the Magnolia LNG project in the first half of 2019. But as the trade dispute persists, the timing "is a little iffy," he said.

Where to American Fuel?

China is the U.S.'s third-biggest LNG market, but trade war stands to clip shipments

Sources: Bloomberg Vessel Tracking, IHS, Genscape, DOE

Shale will take Opec cut but no longer needs it



U.S. shale's response to OPEC's decision to cut supply and boost prices: We'll take it, but we don't need it.

In 2014, the U.S. oil industry's fate seemed to rest in the hands of OPEC ministers who were flooding the market with cheap oil in a push to obliterate them. Now, the cartel is in full retreat, agreeing to cut output to keep their own economies healthy even as U.S. production continues to surge.

The move came in a week in which oil fell to near \$50 a barrel, a price that four years ago would have panicked U.S. drillers. But since then, shale explorers have cut costs, boosted fracking efficiency and made wells longer and more productive. The result: Break evens for a 30 percent profit have been almost halved to just \$45 a barrel in the prolific Permian Basin.

"The shale industry can now thrive in a \$50 oil world," David Deckelbaum, a New York-based analyst at Cowen & Co., said by phone. The OPEC decision to support prices over \$50 in the U.S. "underwrites most of the industry."

U.S. oil producers are now generating 11.7 million barrels of oil a day, about a third more than in 2014, with almost half the number of rigs. And last week, the industry became a net exporter for the first time in 75 years.

To be sure, the breakevens companies often cite don't necessarily mean producers will be pumping big profits at \$50-a-barrel oil. They exclude corporate expenses and land acquisition costs, which can be substantial. Still, they remain strongly indicative of the "drill or no drill decision," said Ian Nieboer, an analyst at RS Energy Group who sees the U.S. pumping an extra 1 million barrels a day in 2019.

"The full pace and capability of the U.S. industry is not yet completely appreciated" by OPEC and its allies, Nieboer said in an interview. "Everybody is still catching up to how efficient this industry has become."

Oil producers in the U.S. are "breathing a sigh of relief" as a result of the OPEC agreement, said Saudi Arabia's oil minister Khalid Al-Falih said at a news conference in Vienna on Friday. Low oil prices are "not good for the U.S. economy,"Al-Falih said, adding that America now has "more at stake" alongside Saudi Arabia because U.S. oil output has increased.

In 2014, wells drilled in the Permian, home to a third of U.S. output and the world's fastest-growing major oil field, needed a price of \$86.10 a barrel to turn a 30 percent profit, according to Calgary-based RS Energy Group. Now that figure is \$45 a barrel, giving producers incentive to drill at current prices. The story is similar story for the Eagle Ford in south Texas and the Bakken in North Dakota.

OPEC and their allies, including Russia, met in Vienna on Thursday and Friday. The agreement they made was to remove 1.2 million barrels a day from the market, with OPEC itself

shouldering 800,000 barrels of the burden. Following the announcement, oil in New York jumped by as much as 5 percent to \$54.22 a barrel.

OPEC Cut Throws Wrench Into Record Oil Short-Selling Streak

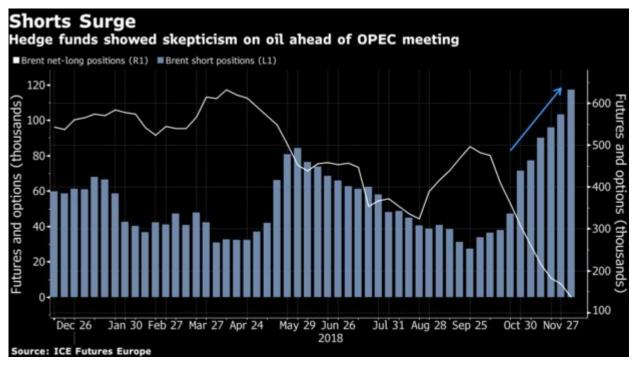


OPEC's surprise output reduction has wrong-footed short-sellers.

Hedge funds cut bets on rising Brent crude prices to the lowest in more than three years in the week through Tuesday as short positions increased for a 10th straight time, the longest streak on record. Then on Friday, OPEC and its allies

surprised the oil market with a bigger-than-expected cut, sending futures surging and leaving money managers pressed to unwind their bearish wagers.

"Now that we've seen this fundamental shift in the market, I would expect there to be good support down at these prices levels and lead those newly established shorts to start covering," said Ryan Fitzmaurice, an energy strategist at Rabobank.

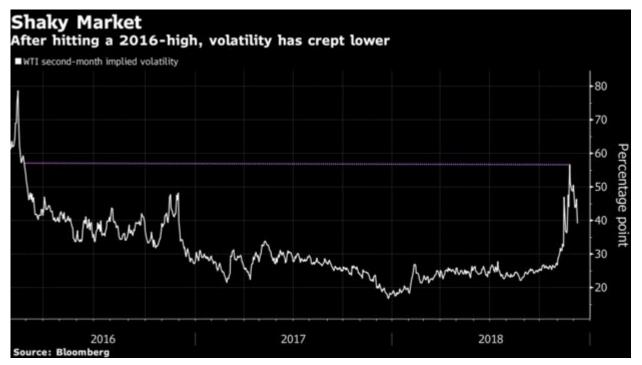


After much back-and-forth between producers in Vienna, OPEC and allies agreed to collectively cut production by 1.2 million barrels a day, with the cartel shouldering 800,000 barrels a day. Saudi Arabia had previously said a 1 million barrel-a-day cut was the likely scenario. The agreement will be reviewed in April.

Hedge funds' net-long position — the difference between bets on higher Brent prices and wagers on a drop — declined 19 percent to 136,466 contracts, ICE Futures Europe data show for the week ended Dec 4. That's the least bullish since August 2015. Longs slid 6.6 percent, while shorts jumped 14 percent to the highest since July 2017.

After OPEC's announcement, "people will start to be a little

more comfortable deploying net-length into the sector," said Chris Kettenmann, chief energy strategist at Macro Risk Advisors LLC. "OPEC has basically said, we've got you, we're going to take down production."



Ahead of OPEC's deal, observers were also focusing on how tense the market has been. Implied volatility for second-month West Texas Intermediate futures hit a 2016-high late last month before slowly creeping lower.

Volatility at these levels is "untenable for not only market participants, but industry participants needing to deploy capex into next year," said Kettenmann. "OPEC is doing what they should do, managing volatility to attract capital back to the sector."

But, some remain skeptical that the deal is enough to make a dramatic change in the oil market.

"A fair question the market has to ask now is, will this be enough?" said Rob Haworth, who helps oversee about \$151 billion at U.S. Bank Wealth Management in Seattle. Are there enough signs that this \$50-\$55 price range is low enough to limit the growth of U.S. shale production so 1.2 million barrels is enough, and will it be enough in the face of what

we see as a slowing global economic environment?"

The report from the U.S. Commodity Futures Trading Commission on WTI wagers was delayed until Monday, following a day of mourning earlier last week for former President George H.W. Bush.

QP signs exploration agreement marking its first entry into Mozambique



Qatar Petroleum has entered into an agreement with an ExxonMobil affiliate to acquire a 10% participating interest in three offshore exploration blocks in the Angoche and Zambezi basins in Mozambique.

The agreement is subject to customary regulatory approvals by the government of Mozambique, QP said Saturday. Following such approval, the various partners composing the consortium will be made up of affiliates of each of ExxonMobil (operator) with a 50% participating interest, Empresa Nacional de Hidrocarbonetos (ENH) with a 20% participating interest, Rosneft with a 20% participating interest, and Qatar Petroleum with a 10% participating interest.

HE the Minister of State for Energy Affairs, Saad Sherida Al-Kaabi, , also President & CEO of Qatar Petroleum, said, "We are pleased to sign this agreement, with our long-time partner ExxonMobil to participate in exploring these frontier offshore basins in the Republic of Mozambique. This is a milestone for Qatar Petroleum as it marks its first foray into Mozambique's promising offshore basins".

Al-Kaabi said, "We hope that the exploration efforts, which will commence soon, will be successful, and we look forward to collaborating with ExxonMobil, Rosneft and ENH on this opportunity. I would like to take this opportunity to thank the Mozambican authorities and our partners in these blocks for their support.

"This signature is very much in line with our growth strategy in Qatar Petroleum with a new country entry to prospective frontier basins with significant hydrocarbon resource potential," al-Kaabi added.

The offshore blocks are A5-B, which lies in the Angoche basin, and Z5-C and Z5-D, which lie in the Zambezi basin. Both basins are frontier and underexplored.

The two Zambezi blocks have a total area of about 10,200 square km with water depths ranging from about 200 to 2,000 meters, while the Angoche basin block has an area of about 6,450 square km with water depths ranging from about 1,800 to 2,500 meters.

"In line with its growth strategy, this opportunity provides Qatar Petroleum with a new country entry to prospective frontier basins with significant hydrocarbon resource

GCC Summit today as unjust blockade of Qatar continues



The 39th GCC Summit takes place today in Riyadh amid an ongoing blockade on Qatar imposed in June 2017 by Saudi Arabia, Bahrain, the United Arab Emirates and Egypt.

Without even giving the slightest hint, Saudi Arabia closed the Salwa border, Qatar's only land crossing, cutting off a vital link for food and medical supplies, on June 5 last year. The blockading countries, three of them Gulf Co-operation Council (GCC) members, cut of all diplomatic ties and banned Oatari citizens from their territories.

The ban affected Qatari students pursuing their studies in the siege countries and Qatari citizens and residents who have invested huge sums in real estate and business ventures in the blockading countries. As their own nationals were asked to

return to their home countries, thousands of Gulf family members were stranded or separated in one stroke of unjust, political one-upmanship.

The crisis did not even spare animals — thousands of camels that used to graze in the vast Saudi deserts — were rushed across the border. Many of the animals perished in the ensuing stampede and as a result of lack of feed or water.

The blockading countries even closed their airspace for Qatari aircraft in their efforts to heap further trouble on their neighbour who they called a brother until the previous day.

Not being satisfied with these unjust measures, the blockading countries, launched a vicious anti-Qatar media campaign that employed an army of social media 'influencers' who spread fake news about Qatar in an effort to sully its fair name.

They used hate speech to spread hatred among the people of the GCC member states and did not hesitate even to use religious platforms against Qatar.

In one of the most ignominious and unprecedented acts of victimisation, Riyadh politicised Umrah and Haj, depriving Qatari nationals from performing one of the main obligations of Islam. On the other hand Haj visas were used as a political tool to intimidate poor countries in Africa to declare their loyalty to Saudi Arabia.

When nothing worked and Qatar continued to grow from strength to strength, the card of tribal affiliations was played to divide the people of the region but that too to no avail.

All the while, the campaign against Qatar went unabated, both at the regional and international levels. 'Protestors' and 'panelists' were paid to participate in anti-Qatar events organised by hired firms abroad.

In the face of such serious provocations, Qatar has continued to keep decorum and maintained that the crisis has to be solved through talks.

His Highness the Amir Sheikh Tamim bin Hamad al-Thani recently said he regrets the continuation of the conflict with other Arab states, but added that the "crises will pass".

Addressing Qatar's Shura (Advisory) Council last month, the

Amir said the country would continue to develop its oil and gas industries as it is keen to preserve its status as the world's top liquefied natural gas exporter.

"History teaches us that crises pass, but if they are handled badly then this may leave traces which last for a long time," the Amir said.

"It is very regrettable that the continuation of the Gulf crisis exposed the failure of the Gulf Co-operation Council ... which has weakened its ability to face challenges and threats and marginalised its role in the region," he added.

Experts say it remains unclear how today's summit will affect the ongoing dispute, as the "largely-symbolic" body has for years abandoned its functional role of building closer ties between member states.

With the GCC unable to resolve the crisis, analysts say the organisation itself has proven to be futile, both politically and to an extent, economically.

This year's meeting also comes amid pressure from the West, as the United States — a GCC ally — and Europe say the council is vital for keeping the region secure.

While the agenda of this year's summit has not been made public, experts predict that the Gulf crisis will not be a top priority.

This year's summit also comes amid the diplomatic crisis over Saudi journalist Jamal Khashoggi's assassination, which has put Riyadh in the dock.

Since the crisis began, Qatar has secured new strategic alliances, most notably with Turkey.

The GCC, a political and economic alliance of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE, was established in 1981 to foster socioeconomic, security, and cultural co-operation.

Kristian Ulrichsen: Leaving OPEC Reinforces Qatar's Autonomy



Kristian Ulrichsen, a Baker Institute fellow and author of "The Gulf States in International Political Economy," published an op-ed in The New York Times this week on the logic behind Qatar's decision to leave the Organization of Petroleum Exporting Countries, commonly known as OPEC.

According to Ulrichsen, OPEC has become mired in geopolitical disputes like the Saudi-Iranian rivalry, to the detriment of its member states and its central mission to stabilize international petrochemical markets.

Qatar has persisted in its mission to serve as a secure natural gas exporter. Qatar provides more than half of India's natural gas imports, as well as 14-15% of China's, Japan's, and the UK's, according to the MIT Observatory of Economic Complexity. Following the illegal blockade, Qatar signed long-term natural gas agreements with China, Japan, and the UK. Qatar even still provides natural gas to the United Arab

Emirates through the Dolphin Pipeline, despite the blockade.

Qatar remains committed to the central mission of mission of OPEC — maintaining a stable international market for petrochemical products. Its decision to increase natural gas exports was in response to a projected increase in international demand, according to then-CEO of Qatar Petroleum, Saad Sherida Al Kaabi. Qatar Petroleum is investing \$20 billion in U.S. oil and gas fields, most notably the Golden Pass LNG terminal in Texas, even though the U.S.'s LNG exports will inevitably compete against Qatar's primary source of revenue in the global market.

Qatar's departure from OPEC is a business decision, allowing Qatar the autonomy to develop its natural gas resources — its foremost economic strength — independent of other members' geopolitcal agendas.