## Oil & Gas Bulletin

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# Turkish refining giant's net profit surges 235% in 3Q17

Anadolu Agency, 10.11.2017



TUPRAS increased its sales revenue to 39.3 billion Turkish Liras (\$10.1 billion) and its net profit to 3.3 billion Turkish liras (\$860 million) in the January-September period, it said in a statement.

"As a result of the increases of 13.6 percent in the average crude oil price, 18.6 percent in the average USD/TRY exchange rate and 10 percent in sales volume over the same period in 2016, 2017's third quarter net sales increased by 52 percent to 14.3 billion Turkish Liras (\$3.7 billion)," the press release read.

The net profit of Turkey's refinery giant, TUPRAS surged by 235 percent in the third quarter of 2017 compared with the same period last year, the refinery announced on Thursday. The crude oil price increased from \$49 per barrel at the beginning of the third quarter to \$57.20 per barrel at the end of the quarter due to OPEC and non-OPEC producers' compliance to the production-cut agreement, political instability in the Northern Iraq and decrease in global stocks. The refinery also announced it increased its operating profit to 1.356 billion Turkish Liras (\$351.2 million) over this period.

In the third quarter of 2017, refinery fires and strikes in Europe over July and August, as well as the hurricane season in the United States with a significant kick-off in the last week of August disrupted the supply of petroleum products. During this time, strong demand increased product margins. TUPRAS proclaimed that, as a result of the improving product margins in the third quarter of 2017, the average Mediterranean margin increased to \$6.50 per barrel. During the same period, TUPRAS' net margin reached \$8.95 per barrel given its higher complexity, the company announced.

During this period, the refinery produced 7.7 million tons for domestic sales and 1.2 million tons for international sales, totaling 8.9 million tons, the press release said. "TUPRAS continued its investments in line with its targets and made \$124.3 million in refinery related investments and \$73.5 million in marine investments during the first nine months of 2017. Our operational processes benefit from our investments exceeding \$6 billion over the last decade," according to the press release. TUPRAS is one of the biggest refining competitors in the Mediterranean region, and is Turkey's sole refiner.



# Kurdish Reg. Gov. pays \$46.53M for Tawke field oil ops.

Anadolu Agency, 10.11.2017



Tawke field partners in the Kurdish Regional Government (KRG) received \$46.53 million for August 2017 crude oil deliveries, Norway's DNO announced.

According to field partner DNO, the funds will be shared prorata by DNO and partner Genel Energy. DNO said that separately, a payment of \$4.27 million from the KRG has been received net to DNO, representing three percent of gross Tawke license revenues during September 2017, as per the recent receivables settlement agreement. DNO operates and has a 75 percent interest in the Tawke license.

# Iraq plans to raise Kirkuk oil to 1 mln barrels per day

Reuters, 13.11.2017



Oil Minister Jabar al-Luaibi said Iraq plans to increase production from oilfields in Kirkuk to one million barrels per day and has visited the Bai Hasan and Avana fields to order work be accelerated to restore operations soon. Exports from oilfields in Kirkuk have been on hold since Iraqi forces took back control of them from the Kurdish last month.

On Oct. 17, Iraqi forces took control of the Bai Hasan and Avana oilfields northwest of Kirkuk, after Kurdish Peshmerga fighters pulled out from the region, security sources said. Oil ministry requested that the Kurdish authorities allow Baghdad to use their pipeline to export Kirkuk crude.

However, received no response, Asim Jihad told Reuters. "Kurdish authorities are still not responding to requests made by the oil ministry to use the Kurdish pipeline to resume exports from Kirkuk," Jihad said. Iraq needs at least three months to repair an old pipeline which was shipping Kirkuk crude to Ceyhan port in Turkey. The main 600,000 bpd Kirkuk-Ceyhan pipeline had been offline since March 2014 following insurgent attacks.



Jihad said also the Kurdish natural resources ministry is not cooperating to return "necessary material" that was removed by Kurdish engineers before they fled the oilfields. Iraqi government forces captured the major Kurdish-held oil city of Kirkuk on Oct. 16 in retaliation for a Kurdish referendum on independence which was widely opposed by Turkey, Iran and Western powers. Meanwhile, oil was largely steady yesterday, trapped between a bullish push from tension in the Middle East and downward pressure from evidence of rising U.S. production, although record fund bets on a rally kept the price in sight of two-year highs. Traders said crude prices were generally well supported as output cuts led by the Organization of the Petroleum Exporting Countries and Russia have contributed to a significant reduction in excess supplies that have dogged markets since 2014.

# Abu Dhabi fund seeks energy stakes after spending \$5 billion

Bloomberg, 14.11.2017



Abu Dhabi's state fund is looking to expand its energy investments, with \$5 billion spent in the past few months in nations that can offer low costs such as the U.S., according to the head of Mubadala Investment Co.'s oil and chemicals projects.

"If you think about the low cost environment, the U.S. ranks very high because of the feedstock," Musabbeh Al Kaabi, the chief executive officer overseeing Mubadala's petroleum and petrochemicals, said Monday in an interview in Abu Dhabi. "The natural gas is relatively attractive and the expansion in the petchem in the U.S. is big."

The current oil price is good for oil and gas investment, Al Kaabi said earlier in an interview on Bloomberg TV from Abu Dhabi where hundreds of energy executives were meeting at a conference. Oil demand is "exceeding our expectation," he said. In recent months, Mubadala has spent \$1.7 billion on a chemicals joint venture in the U.S. with Borealis AG and Total SA, and an additional \$2.1 billion on chemicals in Louisiana. It's also expanding in Vietnam. Brent crude, a global benchmark, has climbed the past five consecutive weeks, and is trading close to the highest in two years. The January contract traded at \$63.43 a barrel at 2:49 p.m. in London on Monday.

Mubadala manages about \$125 billion in assets after the merger this year of two state investment companies with holdings from aerospace to energy to infrastructure. The government-owned investment vehicle is reviewing its portfolio as a step toward the possible sale of some businesses or holdings, people familiar with the matter said earlier this month. The company is now producing about 500,000 barrels of crude a day, with major projects in Southeast Asia and North America, Al Kaabi said. "We believe in the energy landscape in the U.S.," he said. Mubadala Petroleum is looking to expand operations in Thailand, U.A.E. Energy Minister Suhail Al Mazrouei said on Nov. 2. The company also owns an enhanced oil recovery project in Oman.



Abu Dhabi, capital of the United Arab Emirates, an OPEC state, holds about 6 percent of the world's proven oil reserves. Mubadala -- the world's 14th-largest fund, according to the Sovereign Wealth Fund Institute -- is part of Abu Dhabi's effort to turn oil revenue into profitable investments while also attracting technology and jobs. It completed a merger with Abu Dhabi's International Petroleum Investment Co. earlier this year. Al Kaabi is responsible for Mubadala's petroleum and petrochemicals businesses, including Mubadala Petroleum, owner of the Dolphin Gas pipeline. The pipeline is used to send natural gas from Qatar to the United Arab Emirates, which depends on imported gas to generate half its electricity. Qatar is the world's largest exporter of liquefied natural gas.

## Greece's Energean weighs IPO to fund Israel gas plan – sources

Reuters, 14.11.2017



Greek energy firm Energean, Greece's sole oil producer, is considering listing on the London stock exchange to raise cash for a \$1.5 billion development of gas fields off Israel's coast, sources familiar with the matter told Reuters.

Energean said it was in the process of developing Israel's Karish and Tanin offshore fields and was "engaged in a range of contracting and financing discussions to achieve this." "We are currently examining all options of funding the project's requirements," a company spokesman said in an email, without saying if this included a public listing.

Four sources, including three banking sources, told Reuters that investment banks Morgan Stanley (MS.N) and Citi (C.N) were advising the firm on the initial public offering (IPO) process. The banks did not immediately respond to requests for comment. If management opted for an IPO, the listing would take place next year although it was unclear how much cash Energean would seek to raise, the sources said.

Energean, a private exploration and production firm operating in the eastern Mediterranean, and private equity fund Kerogen Capital bought the Karish and Tanin licenses from Israel's Delek Group (DLEKG.TA) in December 2016 for an upfront cost of \$40 million and \$108.5 million in contingent payments. Led by Chief Executive Mathios Rigas, Energean expects to make a final investment decision on developing the fields, estimated to hold 2.4 trillion cubic feet of gas, by the end of 2017. The development is expected to cost \$1.3 billion to \$1.5 billion, according to the company website.



Energean said in May it had signed contracts to supply up to 23 billion cubic meters of natural gas to private Israeli power stations from the fields. London energy listings have been sporadic and small in the past three years as a dip in oil prices dried up investor interest. But 2017 has seen eight such listings on London's junior market so far, compared to five in the whole of 2016, when oil prices reached a 12-year low of around \$26 a barrel. Benchmark Brent crude LCOc1 was trading above \$62 a barrel on Monday.

# Birth of another LNG giant shows majors' edge over traders

Bloomberg, 13.11.2017



Total SA's billion-dollar deal to buy liquefied natural gas assets from Engie SA shows how much size matters in the industry.

After Royal Dutch Shell Plc's takeover of BG Group Plc last year, it is said that the latest accord is evidence that the biggest energy companies with access to large volumes of diverse supplies will continue to dominate, even as commodity traders from Glencore Plc to Trafigura Group Pte are expanding. Trade in the \$90 billion market for the superchilled gas is poised to double by 2040.

It is underpinned by surging demand from Pakistan to China to generate power instead of burning dirtier coal. The biggest advantage integrated energy companies have is that they own the chain from gas fields to cooling terminals and giant ships crisscrossing the oceans. "Because of their scale, scope and flexibility" such players are "best positioned to serve emerging market buyers with complex needs," Frank Harris, vice president for LNG consulting at Wood Mackenzie in Edinburgh, said by email.

Since the Shell-BG deal, prices for fuel to Japan, the biggest consumer, fell to the lowest level since 2005. Rates have more than halved since a 2012 peak as a glut may linger until at least early next decade. Engie is exiting LNG to reduce its exposure to commodity price swings, focus on downstream gas operations, energy-efficiency services and renewables. "Shell took BG at a time when market prices were very high," Philippe Sauquet, head of Total's gas, renewables and power business, said in an interview on Thursday in Paris. "We're seizing the opportunity to grow at a time when prices are low. This is the right timing for us."



While Japan, South Korea and China will remain the biggest buyers, suppliers are targeting new markets in Asia and the Middle East. Combined demand from emerging nations will surge to as much as 61 million tons a year by 2030 from about 3.2 million tons last year, or about 12 percent of the global market, according to Bloomberg New Energy Finance. "All eyes are on emerging players right now, all traders are looking at new markets that can be opened," said Jean-Christian Heintz, who was in the LNG trading industry for nine years before founding Wideangle LNG, an industry consultant in Lugano, Switzerland. "The big advantage Total has is its upstream oil and gas position."

The capital intensive nature of LNG also means international and national oil companies will dominate because they probably have an easier job financing multi-billion dollar projects than trading houses, said Claudio Steuer, director of SyEnergy Ltd., a Poole, England-based energy consultant. With Engie's assets and its own growth strategy, Total will double output, quadruple trading volumes and control as much as 10 percent of the market by 2020. That will give the company more credibility, Sauquet said.

Total will inherit some of Engie's U.S. LNG supplies, which have flexibility such as where they can be delivered, BNEF's analyst Maggie Kuang said in a note on Monday. And with more than 70 percent of the volumes uncontracted, selling that in an oversupplied market may be a challenge. The French company will have a bigger impact on the expanding spot market, where cargoes are traded at short-term contracts rather than locked in decades-long deals, Kuang said.

LNG trading began more than five decades ago, as Engie's predecessor Gaz de France SA pioneered deals to bring the fuel across the Mediterranean from Algeria. Since then, it's become much more complex and is no longer just about moving cargoes from A to B. Traders are constantly rerouting and swapping shipments from one continent to another. And that's where the commodities houses come in. Gunvor Group Ltd. will expand with a deal to buy all supply from a project off Equatorial Guinea. Trafigura plans to build a second import terminal in Pakistan. Glencore said last month it has "appetite for investments" after entering the market four years ago.



### **EU pressures Russia to abandon Nord Stream II: Russia**

Anadolu Agency, 14.11.2017



With the European Union's newly proposed regulations on gas pipelines in its territory, the union is putting pressure on Russia to abandon the Nord Stream II natural gas pipeline project, according to Russian Prime Minister Dmitry Medvedev.

Regardless, Medvedev affirmed that Russia's approach to the implementation of the project remains unchanged, according to Russian news agency Interfax. "This is not a political tool. It is a regular commercial project aimed at ensuring European energy security," Medvedev asserted.

The European Commission proposed new regulations on Nov. 8 that stipulate that all major gas pipelines in EU territory have to comply with all member countries' rules on transparency and accessibility, in conformity with the EU's third energy package. "This will ensure that all major pipelines entering the EU territory comply with EU rules, are operated under the same degree of transparency, are accessible to other operators and are operated efficiently," the commission said.

The Nord Stream II is a 1,200 kilometer-long pipeline project, which aims to double the existing capacity of the Nord Stream pipeline, which is currently 55 billion cubic meters per year. The project faces resistance from some European countries such as Poland.



# Shell sells out of Woodside Petroleum for \$2.7 billion

Reuters, 13.11.2017



Shell, which has been slowly divesting its Woodside holding, initially said its Shell Energy Holdings Australia Limited (SEHAL) unit had struck a deal with two investment banks to sell 71.6 million Woodside shares for A\$31.10 (\$23.79) apiece.

Several hours later, the Anglo-Dutch company said in another statement that "following strong demand from institutional investors," SEHAL upsized its sale to 111.8 million shares worth a total of \$2.7 billion before tax proceeds. That represented 13.28 percent of Woodside shares and the entirety of SEHAL's shareholding in the company, it said. Shell shares were up 0.8 percent at 1525 GMT.

The announcements came after the close of trade on the Australian bourse, where Woodside ended 1 percent lower at A\$32.24 a share. With the Woodside deal, Shell has so far sold or agreed to sell nearly \$25 billion as part of a three-year, \$30 billion asset sales program launched following the acquisition of BG Group in 2015. "Proceeds from the sale will contribute to reducing our net debt," Shell Chief Financial Officer Jessica Uhl said in the initial statement. Analysts at investment bank Tudor, Pickering, Holt & Co said that Shell's \$30 billion target "is easily within reach and we see the potential for this to be increased at the Management Day" on Nov. 28.

A sell down of Shell's 98 million shares in Canadian Natural Resources, worth around \$2.8 billion "is only a matter of time," TPH said in a note. Equity capital markets teams from a number of international banks had been asked earlier on Monday to submit bids and lock in cornerstone investors, a banking source requesting anonymity told Reuters. Even before Shell set out to sell assets, it was distancing itself from Woodside. In November 2010, it sold 10 percent of the issued capital of Woodside, taking its stake to 24.27 percent. This was further diluted to 23.08 percent after Shell decided not to participate in Woodside's dividend re-investment program.

In June 2014, Shell sold another 9.5 percent of Woodside's issued shares, dropping its interest to 13.28 percent after again opting out of the dividend reinvestment scheme. Australia blocked a takeover bid by Shell for Woodside in 2001 on national interest grounds. Shell will remain joint venture partner in two liquefied natural gas projects in Australia, according to Woodside. "Woodside will maintain a close working relationship with Shell - as a joint venture partner and customer of Shell technology - and we recognize that Shell will always be part of our history," Woodside Chief Executive Peter Coleman said in a statement.



### Total 'would have to review Iran gas deal if new sanctions arose'

Reuters, 14.11.2017



French oil and gas major Total would have to review its Iran gas project if the United States decided to impose unilateral sanctions on Tehran, given the company's assets in the U.S. market. Last month, U.S. President Donald Trump refused to formally certify that Iran was complying with the nuclear deal, defying both allies and adversaries.

He warned that he might ultimately terminate the agreement. The U.S. Congress now has about a month to decide whether to reinstate sanctions. "Either we can do the deal legally if there is a legal framework"

Patrick Pouyanne said in remarks made to CNNMoney Emerging Markets late on Nov. 13. "If we cannot do that for legal reasons, because of change of regime of sanctions, then we have to revisit it." Pouyanne's office confirmed the interview had taken place. "If there is a sanctions regime [on Iran], we have to look at it carefully," Pouyanne said. "We work in the U.S., we have assets in the U.S., we just acquired more assets in the U.S," he added.

Total became the first Western oil major to sign an agreement with Iran to develop phase 11 of Iran's South Pars - the world's largest gas field. It also increased its U.S. presence on Nov. 8 when it announced a deal to buy the liquefied natural gas (LNG) assets of energy group Engie, including its stake in the Cameron LNG project in Louisiana. Iran has repeatedly said the Total/South Pars transaction demonstrated the success of the nuclear deal, hoping that other major western and Asian firms would sign agreements with Iran. However, given the fear of possible U.S. sanctions, western firms and major international banks have still shied away from the country. Pouyanne said that until the U.S. made its decision, it would push ahead with the South Pars deal, repeating that the company hoped for first contracts by January.



### **OPEC decreases oil output in October**

Anadolu Agency, 13.11.2017



OPEC's crude oil production decreased by 151 thousand barrels per day (b/d) to 32.59 million b/d in October, according to the organization's report.

Output in non-OPEC countries increased to 64.12 million barrels per day (mb/d), up by 680 thousand b/d from September levels. With the increase in non-OPEC output, global oil supply rose by 530 thousand b/d to average 96.71 mb/d in October. "The share of OPEC crude oil in total global production fell slightly by 0.3 percentage points to total 33.7 percent compared with 34 percent in the previous month."

According to the organization, crude oil output increased the most in Angola, Libya and Saudi Arabia while production showed declines in Iraq, Nigeria and Venezuela. Angola raised its production level by 69.8 thousand b/d, while output in Libya increased by 42.3 thousand b/d. Production struggled in Iraq and dropped by 131 thousand b/d to 4.48 thousand barrels per day.

World oil demand growth is expected to rise by 1.53 mb/d in 2017 after an upward adjustment of 74 thousand b/d to account for the better-than-expected performance of China in the third quarter this year. In 2018, world oil demand is forecast to reach 1.51 mb/d, around 130 thousand b/d higher than in the previous assessment.

### Don't count on an OPEC deal extension

Oil & Price, 13.11.2017



A year ago this week, markets reeled from the surprise election of U.S. president Donald Trump, and eagerly awaited OPEC's November meeting as the last hope for an oil price rally.

This year, all eyes are on the Middle East, the Saudi political purge, and the heating-up of tensions between the kingdom and Iran. Meanwhile, OPEC once again prepares for its November 30 meeting in Vienna, where most expect it will announce another extension of its oil production cut agreement.



Bloomberg Gadfly's Liam Denning's recent account of the OPEC deal a year into the cuts suggests the current situation is similar to this time last year, with one notable exception. Last year, Denning says, investors and traders were highly skeptical of OPEC's ability to really change prices by controlling production. Cheating was the leitmotif of this skepticism. This year, he notes, expectations are so bullish that net long bets on crude oil are now higher than they were right after the initial agreement was announced. In the 12 months between November 2016 and November 2017, several things that used to be just suspicions or suggestions became evident: that OPEC is no longer the master of oil markets, capable of swinging prices higher or lower whenever it fancied; that U.S. shale is here to stay and grow; and that, were it not for demand growth and the latest developments in the Middle East, Brent would never have returned to \$60 a barrel solely as a result of OPEC's production cut efforts.

This conclusion may be painful for the cartel, but there's plenty of evidence to support it. Despite the numerous 'compliance is great' remarks in recent months by senior OPEC officials, production is down, demand is up, nobody is cheating, and global inventories are falling; it took the Saudi purge in Riyadh and the threat of war for prices to really snap back. They are now at levels last seen two years ago.

This price jump is now beginning to worry some analysts. It's a simple truth that the higher the price of Brent, the more irresistible the temptation for OPEC members to cheat on their production quotas. What's more, there's a slim chance that the cartel will decide that the effect that tensions in the Middle East are having on oil prices will be sufficient to keep prices high without a deal extension. After all, the conflict between Saudi Arabia and Iran potentially threatens some 14 million bpd of crude, which is the combined production of the two archenemies. That's 40 percent of OPEC's total production.

Another possible outcome of November's OPEC meeting is the delay of the decision that everyone seems to expect. Earlier this month, Russia's Energy Minister Alexander Novak hinted that the decision may be announced later, depending on what the latest market data says about oil's fundamentals. This delay would harm prices, but in light of the overwhelming optimism that an extension will eventually be approved, the effect is unlikely to be a lasting one. Ultimately, an extension is the most likely outcome, as OPEC simply can't afford to end the production cut agreement. But with rising regional tensions and the possibility of a major military escalation, nothing should be ruled out.



# Nigeria: Tackling Nigeria-Specific risks in oil and gas industry

Allafrica, 14.11.2017



Operating risks peculiar to Nigeria's environment have continued to drive the costs of oil and gas projects in the country above the global benchmark.

Despite the efforts of the Minister of State for Petroleum Resources, Dr.Kachikwu and the oil and gas-producing companies to drive down the costs of projects in Nigeria, the industry operators have continued to be challenged by cost premium, which falls outside their direct sphere of influence. The cost premium, which is dictated by Nigeria-specific drivers represents costs above the global benchmark.

A study conducted by the Oil Producers Trade Section (OPTS) of the Lagos Chamber of Commerce and Industry (LCCI) identified these cost drivers to include insecurity, overregulation and bureaucracy; and absence of infrastructure. Indeed, insecurity, especially in the oil-producing Niger Delta region, posed the greatest threat to the survival of the oil and gas industry in Nigeria, inflating the costs of projects beyond global average. The Executive Director in charge of Projects at the Niger Delta Development Commission (NDDC), Mr. Adjogbe Samuel told THISDAY in a recent interview that apart from pipeline vandalism, insecurity had also killed industries in the Niger Delta.

"In those days when we graduated from the university, you would not say that you were looking for a job if you had not had the opportunity of coming to Trans-Amadi Industrial Layout in Port Harcourt because there were chains of industries along that layout. Let us go back to Warri in Delta State where I come from. Enere too was a popular area. From the beginning to the end of Enere road, there were chains of oil services companies. But today, those places are like desert. Nobody exists in those areas anymore," Samuel explained. Samuel said the Niger Delta was like a lawless area, stressing that the narratives have to be changed as the Niger Delta has gotten enough technical skills to survive.

"But perhaps, what is missing is the sub-skills - the skill to recognise that if you assault me, you can be prosecuted and jailed; the skill for us to recognise that if you go and burst a pipeline - it is not an agitation but economic sabotage. So, our own value system and attitude should change," he added. To the Oil Producers Trade Section (OPTS) of Lagos Chamber of Commerce and Industry (LCCI) insecurity in the Niger Delta has created a Nigeria-specific cost premium for the petroleum sector, with operating costs and projects costs significantly higher than in other countries by as much as 100 per cent. In a report titled "Nigeria Cost Premium and Drivers: Petroleum Sector," the oil and gas producers stated that they spend five times more on security than their global peers, with over \$500 million spent in 2016 on security services such as escort vessels, convoys and guards.



According to the operating companies, they also rely on costly transportation options for personnel and goods, such as helicopter transport and aviation as a result of the insecurity of Nigeria's waterways. The producing companies identified a cost premium of between 15 per cent and 65 per cent for operating costs, and 35 per cent and 100 per cent for costs of projects. OPTS also identified insecurity, overregulation and bureaucracy, as well as inadequate infrastructure as the major divers of costs in Nigeria. The report noted that security environment in the country has remained volatile, particularly in the Niger Delta, adding that security challenges result in cost premium for the oil and gas sector, affecting both operational and project costs.

"Operational costs are impacted by incessant militant attacks and sabotage, illegal bunkering, piracy, kidnapping and armed robbery. In June 2016, production dropped to its lowest level in 20 years following a series of attacks on petroleum producing assets, including the Forcados pipeline, Escravos 24-inch gas pipeline, and Qua Iboe export line," the report explained. The report further stated that when security incidents occur, unforeseen costs and losses are incurred. The oil and gas producers cited such unforeseen costs and losses to include; unplanned expenditure for emergency repairs arising from attacks and vandalism, as well as deferral of production and loss of income for the government and the operators as a result of disruption of operations.

On average, the report said about 400,000 barrels of oil equivalent per day was deferred in 2016 as a result of security challenges. The report also noted that preventive costs to safeguard lives and property in Nigeria are significant, adding that Nigeria's oil and gas operators spend five times more on security than their global peers. According to the report, over \$500 million was spent on security services in 2016, while huge amount was also spent on costly transportation options for personnel and goods, such as helicopter transport and aviation as a result of the insecurity of the waterways.

On the issue of overregulation and bureaucracy, the operators argued that Nigeria's regulatory environment is fragmented, with duplicated agencies, overlapping regulations and overregulation, culminating in excessive bureaucracy. The report stated that excessive bureaucracy results in increased costs for both the government and the operators. The operators identified the Department of Petroleum Resources (DPR), Ministry of Environment, National Oil Spill Detection and Response Agency (NOSDRA) and the National Environmental Standards and Regulations Enforcement Agency (NESREA) as overlapping agencies with jurisdiction over the same aspects of the oil and gas industry operations.

The report also cited multiplicity of tariffs, levies and fees as some of the costs drivers. According to the operators, the contracting cycle in Nigeria is about 36 months while it is only six or eight months in Angola, Saudi Arabia, Venezuela and Indonesia. The Chairman of Shell Companies in Nigeria and Managing Director of Shell Petroleum Development Company of Nigeria (SPDC), Mr. Osagie Okunbor, who is also Chairman of OPTS, said in a recent OPTS event in Lagos that the challenging fiscal regime, security and environmental circumstances had continued to hamper investments. "As complex and difficult as the Nigerian business environment may be described, there are opportunities for improvement and opportunities for growth. That is what we see in OPTS. Working with governments at all levels, we have the responsibility to get the right policies for our people and for the country," Okunbor added.



Chief Executive Officer of Waltersmith, Mr. Abdulrazaq Isa had argued that the country needed a competitive fiscal regime to attract investments, adding that the reform in the industry has protracted for too long, thus leading to dearth of investments for 10 years. According to him, the country needs to conclude the reform to stay competitive, adding that Nigeria still needs oil to get out of oil.

Isa charged the government to make the environment attractive as capital only goes to where it is welcome. While charging the federal government to incentivise the operators to make investments, Isa argued that "squeezing the golden goose for more eggs will lead to its dearth." Also speaking at the recent OPTS event in Lagos, the Vice President of Nigeria, Prof. Yemi Osinbajo identified security and environment, funding issues, high technical costs and obsolete legislations, as some of the major challenges and noted that the federal government is addressing these challenges.

To address these Nigeria-specific risks, which have pushed cost of projects in the country above the global benchmark, the producing companies have recommended government-led initiatives, supported by the operators. The oil and gas producers noted that addressing the issues of insecurity, overregulation and bureaucracy, as well as inadequate infrastructure would improve business climate in the country and increase its global competitiveness. According to the operators, this will help attract the investment required to boost oil and gas production, and increase government's revenue.

To the NDDC director in charge of projects, the Niger Delta of his dream is a Niger Delta that is working like Lagos. "I challenge the governors of Niger Delta to make deliberate efforts and formulate laws and policies that will enhance peace in the region. That is the Niger Delta of my dream. The environment that we have has different business opportunities but because of the insecurity in the area, nobody is harnessing those opportunities, rather people are running away on daily basis. Here in Port Harcourt, some people are selling their houses and relocating. My friend has placed his own premises on sale for the past one year for N40 million but nobody has shown interest on the property," Samuel added.



# Ghana opens talks with Exxon on Deepwater drilling contract

Reuters, 13.11.2017



Ghana has opened talks with Exxon Mobil Corp to allow the U.S. oil firm to undertake deepwater exploration off its coast, a deputy energy minister said on Monday.

"The negotiations are ongoing according to our current laws ... so far so good," Mohamed Amin told in Africa oil conference. Adam said the government had opted for direct negotiation with Exxon Mobil without open competitive tendering due to the peculiar nature of the field, and because Ghana has yet to pass regulations to back open competitive tendering. A new petroleum law requires that oil contracts should be awarded through open and competitive tender.

It also allows direct negotiation when necessary and justifiable. Exxon Mobil signed a Memorandum of Understanding with Ghana in 2015 to assess its Deepwater Cape Three Point (DCTP) region, 150 km (100 miles) off the coast with water depth ranging between 2,000 and 4,000 metres (6,500 and 13,000 feet). The government said two firms had separately opted not to seek to explore the field because of its depth and high risk levels.

Adam said the government considered the ExxonMobil bid important, given the firm's experience and capability in deepwater operations. "Ultra-deepwater exploration is beyond the reach of current technology and we believe operators with strong research and development capability such as ExxonMobil are needed to unlock the potentials," Adam said. The DCTP interest is the second attempt by Exxon Mobil to acquire oil assets in Ghana after the government blocked its 2009 bid to take over Kosmos' stake in the flagship Jubilee field. Ghana, which also produces cocoa and gold, expects to ramp up oil production to around 250,000 barrels per day by 2019 from four oil fields including Jubilee whose current combined average annual output is around 100,000 bpd.



## The surprise winners of the oil price rally

Oil & Price, 14.11.2017



Common sense would tell you that the biggest winners in a price rally of a commodity would be the biggest producers of the commodity that is rallying. This is certainly true for the latest oil price development, but some of the winners might surprise you, as listed by Nomura.

The asset manager and advisor said in a recent report that there were five clear-cut winners from the rally. The winners, in addition to Russia and Saudi Arabia, included Malaysia, Nigeria, and Colombia. These last three are not among the biggest producers and exporters of crude oil, but a set of factors including the state of each country's economy.

Malaysia, for instance, pumped almost 660,000 bpd in March this year, which is not a lot compared to what Russia has been pumping in the last few years, but it did help Malaysia maintain its position as a net oil exporter. Oil exports, according to Nomura, contribute 0.3 percent of GDP, again a tiny amount. Yet as a whole, the local oil industry contributes between 20 and 30 percent of GDP. What's more, Malaysia exports LNG, and that contributes 2.6 percent to GDP. Since LNG pries are tied to oil markets, any increase in the latter results in an increase in the former with a delay of a few months.

Colombia is a different case. The country suffered a severe blow from the 2014 oil price collapse, struggling with a budget deficit like so many other producers, and was less successful at handling it. The country has a lot of undeveloped reserves, and higher oil prices could make it possible to start developing them and reverse a consistent decline in oil production over the last two years. This would be nothing out of the ordinary for any oil producer, but Colombia has the additional problem of falling oil reserves and no new discoveries since 1992. When prices are low, explorers tend to make very selective investments, but now that Brent is close to US\$65 a barrel, Colombia has the chance to attract fresh investments in its oil reserves, whose recoverable portion was estimated at 1.673 billion barrels at the end of last year.

What about Nigeria? Nigeria was let off the quota hook that OPEC imposed on most of its other members last year in a bid to push up prices. Now that they are up, Nigeria will likely be joining the cuts, which most industry watchers expect will be extended until the end of 2018. Nigeria last month produced 1.738 million bpd of crude oil, which is close to its stated target for capping of 1.8 million bpd – an amount equal to the combined cut OPEC and its partners agreed to take off markets last year. Now, a lot of what Nigeria produces in the Niger Delta is shipped abroad.



The country is the second-largest oil exporter in Africa after Angola. But it is plagued by challenges, chief among them being very high production costs that the government, no matter how hard it has tried, has failed to reduce significantly. That's why Nigeria is a clear-cut winner of the last price rally, as are all higher-cost producers that have seen production growth stumble because of low prices. In the losers' corner, of course, are the importers, which have been having a blast since late 2014, but now might have to take it a bit easier until the latest heat-up in the Middle East blows over.

## Bullish oil and tight supply lift Asian spot LNG market

Reuters, 10.11.2017



Asian spot liquefied natural gas (LNG) prices rose this week on already tight supply and production outages in Australia and was further buoyed by climbing crude oil prices.

Spot prices for December delivery rose to \$9.45 per million British thermal units (mmBtu), 30 cents above last week's levels. Australia's North West Shelf export facility suffered a partial outage on Friday morning after several production units were taken offline, though at least one is in the process of restarting, sources said. One trade source said three of five production units, or trains, may have been affected.

However, immediate confirmation was not possible. The plant can produce 16.3 million tonnes of LNG a year but the duration of the shutdown remains uncertain, making it difficult to gauge its impact on prices. Egypt's latest 12-cargo LNG buy tender drew some relatively high oil-indexed bids for January and February. Spain's Gas Natural Fenosa (GNF) won five cargoes after submitting highly competitive bids relative to Trafigura, Vitol and Glencore - which also scored shipments, traders said.

GNF submitted a bid, expressed as a percentage of Brent, of around 13 percent for March shipments at a time when Brent was trading at \$59 a barrel, a trader said. Brent is currently trading at \$64.10 a barrel. Mexico's state-run power utility CFE also sought via tender cargoes at the end of November and the end of December, trade sources said. Russia's new Yamal LNG export plant is due to begin loading its first cargo in November, according to a presentation by shipping company Teekay.



# Japan's JERA imports first LNG cargo shipped from Chevron's Wheatstone site

Reuters, 13.11.2017



Japan's JERA Co, the fuel-buying joint venture of Tokyo Electric Power and Chubu Electric Power, said it received the first liquefied natural gas (LNG) cargo shipped from Chevron's Wheatstone project in Australia.

The tanker "Asia Venture," carrying about 70,000 tonnes of LNG, arrived on Sunday at Tokyo Electric Power's Futtsu LNG terminal in Chiba prefecture on Tokyo Bay, said a spokesman for JERA, the world's biggest LNG buyer. Chevron said last month that the Wheatstone LNG project, which started production in early October, shipped its first cargo to JERA.

JERA has contracts to buy 5.2 million tonnes per year of LNG from the Wheatstone project. Wheatstone has two units, which at full capacity will supply 8.9 million metric tonnes of LNG a year to customers in Asia. After the second train starts up in 2018, JERA will receive around six LNG cargoes per month from the project, a company official said.

# Natural gas demand to see huge growth this year

China Daily, 14.11.2017



China's natural gas consumption will increase this year on the back of continued policy backing from Beijing, as part of a broader clean-energy drive to replace coal with natural gas and other efforts to reduce chronic air pollution.

The liquefied natural gas market in the country has witnessed a rapid growth so far this year, with the January-September period seeing a total consumption of 167.6 billion cubic meters, a 16.6 percent year-on-year growth, higher than last year's 7 percent, according to CNPC Research Institute of Economics and Technology.



The quiet period between summer and winter months has also seen a pick up in the Chinese natural gas market, while the peak season witnessed a more drastic growth, said Duan Zhaofang, chief engineer of the natural gas market research department of the institute. Platts Analytics forecasts that China will surpass South Korea to become the world's second largest LNG importer next year. While South Korean LNG demand is expected to remain under 40 million metric tons in 2018, Chinese LNG imports will continue to grow, reaching nearly 50 million tons in 2018, it said.

According to Marc Howson, director of LNG Market Development from S&P Global Platts, Chinese LNG imports are up nearly 50 percent year-on-year to-date in 2017, driven by the government's efforts for cleaner burning fuel. This has been facilitated by growing contracted LNG supplies into China, particularly from both western and eastern Australia as well as the US Gulf Coast, he said.

Li Li, an energy research director at ICIS China, said China has set a high target for the proportion of natural gas in the country's energy mix by 2020. China needs to speed up natural gas supply from home and abroad to meet the demand. According to the National Development and Reform Commission, China's natural gas supplies will exceed 360 billion cu m by 2020, and will account for 10 percent of China's energy production by then compared with the current 7 percent.

Output of natural gas rose from 50 billion cu m in 2005 to 135 billion cu m in 2016. While currently some 39 percent of natural gas consumed in China is imported from abroad, Chinese oil giants are also stepping up imports from overseas to ensure energy supply and security. Qu Guangxue, a spokesman for China National Petroleum Corp, the country's largest oil and gas supplier and producer, said the company will step up natural gas imports and further negotiate with other Central Asian nations for additional stocks. The China-Central Asia natural gas pipeline will transport 200 billion cu m of natural gas by November, equivalent to the total annual natural gas consumption of China or 11 years' of natural gas supply for Beijing.

Meanwhile, China is also stepping up building terminals and infrastructure to help meet the upsurge in demand, with its oil and gas pipeline network expected to reach 240,000 kilometers by 2025 from the current 112,000 kilometers. This means that the country will need to build an additional 128,000 kilometers of pipeline in the next few years, according to the National Development and Reform Commission.



# U.S. to dominate oil markets after biggest boom in world history

Reuters, 14.11.2017



The U.S. will be a dominant force in global oil and gas markets for many years to come as the shale boom becomes the biggest supply surge in history, the International Energy Agency (IEA) predicted.

By 2025, the growth in American oil production will equal that achieved by Saudi Arabia at the height of its expansion, and increases in natural gas will surpass those of the former Soviet Union, the agency said in its annual World Energy Outlook. The boom will turn the U.S., still among the biggest oil importers, into a net exporter of fossil fuels. IEA Executive Director Fatih Birol said Tuesday in an interview.

"The United States will be the undisputed leader of global oil and gas markets for decades to come," "There's big growth coming from shale oil, and as such there'll be a big difference between the U.S. and other producers." The agency raised estimates for the amount of shale oil that can be technically recovered by about 30 percent to 105 billion barrels. Forecasts for shale-oil output in 2025 were bolstered by 34 percent to 9 million barrels a day. The U.S. industry "has emerged from its trial-by-fire as a leaner and hungrier version of its former self, remarkably resilient and reacting to any sign of higher prices caused by OPEC's return to active market management," the IEA said.

While oil prices have recovered to a two-year high above \$60 a barrel, they're still about half the level traded earlier this decade, as the global market struggles to absorb the scale of the U.S. bonanza. It's taken the Organization of Petroleum Exporting Countries and Russia almost 11 months of production cuts to clear up some of the oversupply. Reflecting the expected flood of supply, the agency cut its forecasts for oil prices to \$83 a barrel for 2025 from \$101 previously, and to \$111 for 2040 from \$125 before. Lower prices are helping to support oil demand, and the IEA raised its projections for global consumption through to 2035, despite the growing popularity of electric vehicles. The world will use just over 100 million barrels of oil a day by 2025.

That will benefit the U.S. as it turns from imports to exports. The country will "see a reduction of these huge import needs," Birol said at a press conference in London. That "will bring a lot of dollars to U.S. business." Nevertheless, U.S. shale output is expected to decline from the middle of the next decade, and with investment cuts taking their toll on other new supplies, the world will become increasingly reliant once again on OPEC, according to the report. The cartel, led by Middle East producers, will see its share of the market grow to 46 percent in 2040 from 43 percent now.



As shale has outperformed expectations so far, the IEA added a scenario in which the industry beats current projections. If shale resources turn out to be double current estimates, and the use of electric vehicles erodes demand more than anticipated, prices could stay in a "lower-for-longer" range of \$50 to \$70 a barrel through to 2040. "There could be further surprises ahead," the IEA said.

## Don't back U.S. shale to keep oil prices down

Oil & Price, 14.11.2017



WTI is back in the upper-\$50s per barrel, and OPEC is on the verge of extending its production limits well into next year. The fear for OPEC, and other oil bulls, is that this risks sparking another wave of U.S. shale supply, sending oil prices right back down to where they came from. But what if U.S. shale fails to keep up with soaring demand?

That's the conclusion from Morgan Stanley—a prediction that flies in the face of conventional wisdom. When OPEC signed its deal a year ago to limit production, oil prices moved up into the \$50s per barrel, and over the next 12 months, the U.S. brought about 1 million barrels per day (mb/d) back online.

With crude prices back at similar heights, shouldn't another dose of shale production be a sure thing? Morgan Stanley says that while U.S. shale drillers could add new production, they won't be able to keep up with market demand. The investment bank says that the shale sector will have to grow production from about 5.9 mb/d this year to over 7 mb/d in 2018 in order to ensure that the market doesn't plunge into a deficit, a level that the industry is unlikely to achieve. Shale drillers have proven that they can add that amount of supply in a short period of time in the past, but further gains will be much harder to achieve.

"Right when the world's reliance on shale is growing, its limits are starting to become apparent, and there seem to be two aspects to this: ability and willingness," Morgan Stanley analysts wrote last week. The shale sector has run into a range of obstacles in recent months. Higher drilling costs and a shortage of fracking crews have led to bottlenecks. Oilfield services companies are demanding higher prices from producers. Also, there have been operational problems—some shale wells are producing more gas than expected, a bad sign for wells assumed to produce heavier volumes of oil.



A range of other metrics point to sudden struggles for shale drillers. Improvements in drilling times have also stagnated over the past year, indicating a limit to the "efficiency gains" that can be achieved by drillers. Rig productivity, as measured in initial output from new wells per rig, have been falling since 2016. Meanwhile, perhaps the most important metric of all—profits—continues to disappoint. The latest roadblock for the shale industry comes from their restive shareholders, who are demanding a strategy overhaul after years of broken promises and red ink. Investors are pushing for spending cuts, changes to executive compensation and more cash returned in the form of share buybacks. The aim is to focus on profits, not production growth.

Shale's struggles come at a time when demand looks solid. The IEA sees demand growing at a 1.6 mb/d annual pace in 2017, a fairly robust figure. If the baseline assumption that U.S. shale will come roaring back immediately after OPEC extends its cuts is not based in reality, then OPEC might actually have a lot more room to boost prices. Keeping 1.2 mb/d (plus nearly 0.6 mb/d from non-OPEC countries) offline for another year could push the market into a deficit situation, leading to accelerated inventory drawdowns and higher prices.

Still, OPEC isn't taking the hiccups in the shale sector for granted. The cartel just boosted its assumption for production growth coming from the U.S., acknowledging that the Middle East will face stiff competition for market share for years to come. But Morgan Stanley says U.S. shale has used up a lot of its firepower already. Boosting shale output to 7 mb/d by next year would require shale drillers adding something like 8 to 10 new oil rigs each month. The rig count has fallen steadily since June, and would need to climb substantially to continue to raise production.

## US crude oil inventories, production increase: EIA

Anadolu Agency, 10.11.2017



The U.S.' crude oil inventories and production increased for the week ending Nov. 3, the country's Energy Information Administration (EIA) data showed on Wednesday.

Commercial crude oil stocks rose by 2.2 million barrels, or 0.5 percent, to 457.1 million barrels, the EIA said. This was the second increase in commercial crude inventories in the past seven weeks. "The increase in crude stocks was driven by a jump in U.S. production," Thomas Pugh, a commodities economist at London-based Capital Economics, said in a note. "Indeed, output has recovered from the effects of storm Nate and is now at its highest weekly level on record," added.



The U.S.' crude oil production increased by 67,000 barrels per day (bpd) to 9.62 million bpd for the week ending Nov. 3, the EIA said. This was the third consecutive weekly increase of crude oil production in the U.S. The U.S.' gasoline inventories decreased by 3.3 million barrels, or 1.6 percent, to 209.5 million barrels for the week ending Nov. 3, according to the administration.

Crude imports fell by 194,000 bpd to 7.37 million bpd, while crude exports also declined by 1.26 million bpd to 869,000 bpd during that period. "A rebound in exports in the coming weeks as well as strong demand from refineries mean that crude stocks are likely to fall back, although production should continue to rise," Pugh explained.

## Why Canadian crude trades at such a steep discount

Oil & Price, 14.11.2017



Canada's oil industry faces multiple headwinds on top of an oil bust that has changed the global industry over the past few years.

Canadian producers are selling their oil at hefty discounts to WTI, not only because of the heavier sour variety they are pumping out of the oil sands, but also because of limited pipeline capacity that moves the oil out of landlocked Alberta—the heart of the Canadian oil industry. Currently there are three pipelines in the works that will take more Alberta oil either to the U.S. or to the Canadian Pacific coast:

Enbridge's Line 3 Replacement Program, Kinder Morgan's Trans Mountain expansion project, and TransCanada's Keystone XL pipeline. Last month, TransCanada scrapped a pipeline project to ship oil to the Canadian East Coast. In the best-case scenario for Canada's pipeline capacity—that is, if all three remaining pipelines clear all regulatory hurdles (which are many right now)—Canadian pipeline capacity will be in excess of 52,100 bpd in 2020, and more than 656,100 bpd in 2022, according to estimates by Bloomberg Gadfly columnist Liam Denning.

However, if only Line 3 is approved and built (the pipeline that, for now, stands the best chance of getting a go-ahead), Canada will still be 552,000 bpd short of pipeline takeaway capacity in 2022. If Keystone XL doesn't go ahead and Line 3 and Trans Mountain proceed, the excess pipeline capacity in 2022 will be just 50,000 bpd. But before 2020, Canada's oil production is expected to continue to increase, and pipeline constraints will become bigger, before any of the proposed pipelines—or one, or all—comes online and eases some of the takeaway constraints. Alberta oil is heavy and requires more energy to process it into gasoline or other refined oil products. That's why the Western Canadian Select (WCS)—representative of the price of oil from Canada's oil sands delivered at Hardisty, Alberta—trades at a \$10 or more discount to the WTI.



But the discount also reflects those pipeline constraints that have plagued Canadian producers for years. WCS also trades at a discount to the flagship Mexican crude grade of similar quality, Maya, because Canadian oil must travel further to reach the Gulf refineries than Mexico's oil, because Mexico's oil travels less distance. The WCS to Maya discount has been below \$10 for much of the past two years, but has recently deepened to \$13.20 as of November 10, according to Bloomberg estimates.

Futures prices imply the spread will surge to \$17 in the next two years, as Canadian oil production grows and additional pipeline capacity—if any—is stagnant until at least late 2019. According to IHS Markit, oil sands will remain a growth story, and nearly 500,000 bpd of new oil sands production will be added this year and next. "Over 2017-19 Canadian growth, led by the oil sands, will only be surpassed by the United States and its tight oil machine," IHS Markit's Kevin Birn said in June 2017. Total Canadian production was 3.85 million bpd in 2016, and is expected to rise to 5.1 million bpd in 2030, according to the Canadian Association of Petroleum Producers (CAPP), which says that by 2030 Canada will need more pipelines to transport an additional 1.3 million bpd.

In the shorter term, until 2020, with growing domestic production and no additional pipeline capacity, Canadian producers have been shipping more oil-by-rail since the end of 2016. This, Bloomberg's Denning notes, costs \$13-\$18 per barrel to get to the Gulf Coast, which leads to widening differentials in the futures and significantly lower margins for oil producers. All Canadian producers will be affected, but those that refine domestically are in a better position to offset at least part of the discounts at which they will sell their oil in the next couple of years, Denning argues. But it may be even more years, because none of the three proposed pipelines is a certainty yet.

Line 3 is undergoing a public hearing and public hearing comments in Minnesota, and the Minnesota Public Utilities Commission is expected to announce its Certificate of Need and Route Permit decision in April 2018. Although it's approved at the federal level, the Trans Mountain expansion project is pitting the new British Columbia government against the Alberta government, with BC now vowing to fight the project.

TransCanada said at its Q3 earnings call that it received contribution from 545,000 bpd of long-term, long-haul contracts during Keystone's open season. The fate of the pipeline, however, hinges on the Nebraska Public Service Commission (PSC), which will vote on the order on the Keystone XL Pipeline Application in a public hearing next Monday, November 20. So Alberta and Canada's oil producers hope that at least some additional pipeline capacity will be added in a few years, to offset part of the discount of their crude sales.



# Brent oil falls to \$61 per barrel level on Wednesday

Anadolu Agency, 15.10.2017



International benchmark Brent crude was recorded at \$61.52 per barrel at 10.22 GMT on Wednesday. American benchmark West Texas Intermediate (WTI) reached \$55.11 a barrel at 10.22 GMT.

IEA's report saw prices drop, with the announcement that global oil supply for October increased by 100 thousand barrels per day (b/d) totalling 97.5 million barrels per day (mb/d). This was due to higher flows from non-OPEC countries. Demand growth has been revised down by 0.1 million mb/d for both 2017 and 2018, the IEA report showed.

Adding that it now sees increases of 1.5 mb/d to 97.7 mb/d in 2017, and 1.3 mb/d to 98.9 mb/d in 2018. In the meantime, the American Petroleum Institute (API) reported Monday that inventory levels of U.S. crude dropped by 6.51 million barrels. The API reported on Tuesday that the crude inventory dropped by 9.2 million barrels in the week Nov. 7 to Nov. 14. Crude oil prices have been on the rise for the past two weeks with hopes that OPEC producers and Russia will extend their production cut agreement beyond March 2018.

Officials from Saudi Arabia and Russia signaled over the past weeks that they would support extending the deal. OPEC will hold its semi-annual meeting on Nov. 30 in Vienna where it is anticipated that a decision will be made on the extension.



# Global energy needs to expand 40% by 2040: IEA

Oil & Price, 14.11.2017



Global energy needs are predicted to rise more slowly than in the past but still expand by 30 percent between now and 2040, according to the International Energy Agency's (IEA) World Energy Outlook 2017.

The IEA's report showed that this amount is equivalent to adding another China and India to current global demand. The largest contribution to demand growth of almost 30 percent comes from India, whose share of global energy use rises to 11 percent by 2040, it said. Southeast Asia is another rising heavyweight in global energy, with demand growing at twice the pace of China.

Overall, developing countries in Asia account for two-thirds of global energy growth, with the rest coming mainly from the Middle East, Africa and Latin America. "Since 2000, coal-fired power generation capacity has grown by nearly 900 gigawatts (GW), but net additions from today to 2040 are only 400 GW and many of these are plants already under construction," the report showed. In India, the share of coal in the power mix drops from three-quarters in 2016 to less than half in 2040.

Oil demand continues to grow up to 2040, albeit at a steadily decreasing pace. Natural gas use rises by 45 percent to 2040; with more limited room to expand in the power sector, while industrial demand becomes the largest area for growth. The outlook for nuclear power has dimmed since last year's Outlook, the IEA noted, but China continues to lead a gradual rise in output, overtaking the U.S. by 2030 to become the largest producer of nuclear-based electricity. Renewables capture two-thirds of global investment in power plants to 2040, as they become, for many countries, the least-costly source of new generation.

China's choices will play a "huge role" in determining global trends, the IEA asserted, adding that it could spark a faster clean energy transition. The scale of China's clean energy deployment, technology exports and outward investment makes it a key determinant of momentum behind the low-carbon transition. The report noted that one-third of the world's new wind power and solar PV installed in China is based on a 2040 scenario. The report also said that China accounts for more than 40 percent of global investment in electric vehicles. By the mid-2020s, the U.S. is expected to become the world's largest liquefied natural gas exporter and a few years later a net exporter of oil – still a major importer of heavier crudes that suit the configuration of its refineries, but a larger exporter of light crude and refined products, the report said.



## **Announcements & Reports**

### US LNG vs Russian Pipeline Gas: Impact on Prices

Source : OIES

Weblink : https://www.oxfordenergy.org/publications/us-lng-vs-russian-pipeline-gas-impact-prices/

### Assessing Kuwaiti Energy Pricing Reforms

Source : OIES

Weblink : https://www.oxfordenergy.org/publications/assessing-kuwaiti-energy-pricing-reforms/

### Natural Gas Weekly Update

Source : EIA

Weblink : http://www.eia.gov/naturalgas/weekly/

#### This Week in Petroleum

Source : EIA

Weblink : http://www.eia.gov/petroleum/weekly/

### **Upcoming Events**

### 7th Iraq Oil & Gas Conference

**Date** : 28 – 30 November 2017

Place: Basrah, Iraq

Website : http://www.basraoilgas.com/Conference/

### International Conference on Energy Engineering & Oil Reserves

Date: 05 December 2017

Place : Hong Kong

Website : https://www.waset.org/conference/2017/12/hong-kong/ICEEOR/home

### Iraq Oil & Gas Show

Date : 05 December 2017

Place : Basrah, Iraq
Website : http://basraoilgas.com/



#### North Africa Oil & Gas Summit

Date : 25 January 2018

Place : Milan, Italy

Website : https://www.infield.com/exhibitions/north-africa-oil-gas-summit

### European Gas Conference 2018

Date : 29 January 2018
Place : Vienna, Austria

Website : https://www.europeangas-conference.com/

#### Cameroon Oil & Gas Summit 2018

Date : 02 February 2018Place : Yaounde, CameroonWebsite : https://www.cameroonsummit.com/

### Egypt Petroleum Show

Date : 12 February 2018
Place : Cairo, Egypt

Website : http://www.egyps.com/

### North Africa Petroleum Exhibition & Conference

Date : 03 March 2018 Place : Oran, Algeria

Website : www.napec-dz.com/NewDefault.aspx?lg=en

#### Kuwait Oil & Gas Summit

Date : 16 April 2018
Place : Kuwait City
Website : www.cwckuwait.com/

### International Conference on Petroleum & Petrochemical Economics

Date : 26 April 2018
Place : Istanbul, Turkey

Website : www.waset.org/conference/2018/04/istanbul/ICPPE