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# DNV GL Oil & Gas: No doubt, Turkey can become energy hub

AA Energy Terminal, *12.09.2016*

**There is no doubt Turkey will become a significant energy hub for Europe in the future if the Turkish Stream project and plans for Turkey's first floating storage and regasification unit are realized, according to the business development manager for Norwegian energy consulting company DNV GL Oil and Gas.**

**Tobias Rosenbaum told that gas flow from any source towards Europe, including Siberian gas, could flow through the proposed Turkish Stream natural gas project and could contribute to Turkey's energy hub target. "Technically the Turkish Stream project is very mature and technically sound.**

Turkey has quite a large gas network run by BOTAS which is a very mature gas player and they will, with some modifications, be well able to manage gas flows through Turkey," Rosenbaum said. He stressed that Turkey's first floating storage and regasification unit (FSRU) in Turkey's third city of Izmir is a positive development from a risk perspective and also in allowing greater mobility of resources. A FSRU offers short term alternative supplies to diversify Turkey's energy resources and allows for flexibility in meeting the country's energy needs.

"One can better diversify resources using an FSRU to regasify the LNG which is beginning to flow around the world into the markets," he said. "Another benefit is that Turkey would have more options for its large offshore sector in the Black Sea which hasn't yet been exploited, so there's potential for even more diversification. Of course the financial case for such investments would need to be assessed or the investment could be part of a larger master plan," he added.

Rosenbaum said that with regasification capacity, Turkey would also improve its position in the international gas market. "Due to its geographic location, Turkey has the potential to import gas both from Russia as well as from the Caspian Sea. Additionally, there are reservoirs in the Turkish sector of the Black sea," he said, and noted that this would easily satisfy the energy security of Turkey as a consumer market.

"Along with the use of renewables, Turkey can take an excellent position as an energy hub and take advantage of attractive prices which will foster the Turkish economy´s ongoing development," he emphasized.

The construction of the FSRU, which has a maximum gasification capacity of 5 billion 14 million cubic meters, is ongoing in Izmir. A subsidiary of Turkey's Kolin Holding, Etki Port Management and Natural Gas Imports, is undertaking the construction of the facility which will have 142 million cubic meters of storage capacity. There are 18 FSRUs in 11 countries worldwide including the United States, Brazil and Italy.

Storage capacity in FSRUs range from 100 million cubic meters to one billion cubic meters while the costs of the units can be in the range of $500 million to $1 billion in parallel with the capacity volume.

DNV GL provides classification, technical assurance, software and independent expert advisory services to the maritime, oil and gas and energy industries. The company is active in more than 100 countries with more than 350 offices.

# Greece vows to support Turkish stream

AA Energy Terminal, *11.09.2016*

**Greek Energy Minister Panos Skourletis said Sunday that his country would start working immediately on Turkish Stream if The European Union (EU) gives the green light. The minister spoke to AA on the sidelines of Thessaloniki International Fair, where he met his Russian counterpart, Alexander Novak.**

**"If European Commission grants permissions, we will run for it," the minister told AA. The Turkish Stream pipeline project, which was announced by Russian President Vladimir Putin in December 2014 during his visit to Ankara, plans to carry Russian gas via the Black Sea and Turkey to South Eastern Europe.**

"We are very interested in this project," he said, for the two-line project, which will carry 30 billion cubic meters (bcm) natural gas annually. Some half of this total volume is planned for Turkish domestic market.

Gazprom said it received initial permission for the construction of the Turkish Stream natural gas pipeline from Turkish authorities through diplomatic channels, in a statement earlier this week. Skourletis said that the 15 bcm natural gas can be delivered to further Europe, through Turkey-Greece-Italy Inter-connector (ITGI). Russian, Greek and Italian companies had signed a memorandum of understanding for the construction of it in last February.

# Gazprom receives license from Turkey to build under water of Turkish Stream

Daily Sabah, *14.09.2016*

**Gazprom has received its first license from Turkey regarding the construction of the Turkish Stream, in particular for the section of the project that will pass through the sea.**

**According to the remarks made by the Russian company, it was indicated that through the help of diplomatic channels, the first required license for the construction of the under water of the Turkish Stream project was received from the relevant Turkish government bodies. According to the announcement, Gazprom CEO said for the realization of the energy project, collaboration with Turkish counterparts has been going smoothly and efficiently.**

While the permission concerns merely the construction part, according to some resources from the Russian ministry of energy, the other necessary permissions for the realization of the project will be issued in the upcoming weeks.

Moreover, earlier in September, speaking to reporters in Vladivostok, Russia, Miller said they expect the necessary permissions from Turkey for the implementation of the Turkish Stream project in the near future.

“All the permissions issued earlier for the construction of the South Stream will be used by Gazprom for the Turkish Stream,” Miller said. “We are interested in investments related to facilities for conversion of natural gas in Turkey, especially the natural gas consumption sector in western regions.”

Also, in an interview with Bloomberg news agency earlier this month, Russian President Vladimir Putin said that the Turkish Stream gas pipeline project will finish sooner or later. According to a post on the Kremlin’s website, Putin said that they will ultimately at least put into practice the first segment, which is on transferability and the increment of supply to the Turkish domestic market.

The Energy and Natural Resources Ministry announced earlier this month that Turkey and Russia have agreed to obtain the necessary permits for the realization of the Turkish Stream project. The ministry’s statement revealed, “Both parties expressed mutual determination to take steps to guarantee Turkey’s rights arising from the contract within the framework of the arbitration process, and resolve the question that led to this process.”

During one-on-one and inter-delegation meetings in Istanbul, the Russian and Turkish delegations addressed the issues of the Turkish Stream project, regional cooperation on energy and the arbitration process that Turkey initiated as part of its rights arising from the contract that it signed with Russia.

Meanwhile, in the aftermath of the jet crisis last year between Turkey and Russia, the meeting between Russian President Vladimir Putin and President Recep Tayyip Erdoğan on Aug. 9 is regarded as the onset of a new era in terms of relations between the two countries, further fostering economic cooperation.

In this respect, more concrete steps started being taken regarding the Akkuyu Nuclear Power Plant project - the first of three nuclear power plants Turkey currently plans to build in the southern province of Mersin along with the Russian state-owned nuclear energy company Rosatom, aside from Turkish Stream.

The Turkish Stream project is designed to transfer Russian natural gas to Europe via the Black Sea and Turkey. Under Russian state-owned energy giant Gazprom's plans, the Turkish Stream pipeline will be split into four lines with a total capacity of 63 billion cubic meters a year.

In December 2014, Russia scrapped the South Stream pipeline project that would have transported natural gas to Europe via Bulgaria and brought forward the proposed four-line and 63 billion-cubic-meter project that will bypass Ukraine and stretch to the Turkish-Greek border through the Black Sea.

# Major drilling initiative to discover Turkey's resources

Daily Sabah, *11.09.2016*

**Energy Minister Berat Albayrak gave the order to start drilling down to 1 million meters in order to unearth Turkey's underground reserves. Along with the ordered drillings, the amount of lignite reserves will go up to 20 million tons.**

**Energy and Natural Resources Minister Berat Albayrak took action in order to unearth the full potential of Turkey's underground resources. Recalling that they previously jump-started projects to map Turkey's geophysical and geochemical structures, Albayrak gave an order to the MTA to drill down to 1 million meters in 2017, setting a new record for MTA.**

The drilling works which will be carried out countrywide will unearth all the underground resources of Turkey, and the new ores waiting to be discovered will be brought into the country's economy. MTA conducted drillings down to 330,000 meters in 2015.

The priority in MTA's drilling goals is to find yet-to-be-discovered resources in Turkey's coal reserves. With the new drilling moves kick started in 2006, 7 billion tons of coal reserves have been found over the past ten years, ranging from 1,250 to 2,500 calories in calorific values.

The latest discoveries constitute nearly half of Turkey's 15 billion tons of lignite reserves in total. With this current move, the said reserve is expected to exceed 20 billion tons. The supply amount of the materials taking an important place in import from the indigenous resources will be also increased with the new drillings. Turkey reserves millions of dollars for the import of many important materials such as iron, copper, gold and aluminum. TL 15 billion and TL 10 billion was spent on mining import in 2014 and 2015, respectively.

In addition to materials with substantial amount of import potential, the government's new move also aims to search and produce the advanced technology raw materials and bring them into economy. Especially the raw materials needed for the nuclear power plants will be obtained from indigenous resources.

# European gas, from one sea to another

Natural Gas Europe, *15.09.2016*

**The decline in production in the North Sea finds an offset in the rising production potential from the eastern Mediterranean.**

**In a previous piece published on Natural Gas Europe in June, the author Raffaele Perfetto discussed potential drivers shaping the European gas scenario in the near future and here he focuses on one in particular: the Mediterranean Gas Hub (MGH) and how it can fit with European energy needs. The last energy scenario presented by the European Commission contained interesting points worthy of further examination.**

The scenario is based on assumptions about: population growth, technology breakthroughs, oil prices, and macroeconomic developments. As with all forecasts, outcomes must be reviewed with criticism. The energy mix from 2015-2050 foresees solid fuels decline by 11%, oil by 4%, nuclear by 3% but renewables to grow by 18%.

Gas is practically steady, accounting for a quarter, for the next 35 years. Turning our attention now to how much gas the EU produces and consumes and finally the net imports, according to forecasts demand should stabilise around 420bn m³/year by 2015. Domestic production will decrease steadily, tumbling from around 130bn m³/yr to 60bn m³/yr.

The decrease in production is ongoing: another interesting report, the quarterly update on the gas market3"that was released by the EU Market Observatory for Energy, shows a fair drop in gas production over the last two years. The EU gas production is expected to be halved in 35 years. The abovementioned quarterly report, shares also the data about last year gas supplies: Russia with 40%, Norway 37%, Algeria 7%, Libya 2% and LNG with13% (5 points up from 2015). Will the same quotas remain in future?

The Financial Times' energy editor Andrew Ward in a piece last September quoted the Israeli energy minister introducing the idea that the MGH could support the replacement of declining North Sea production.

For the EU, the development of the Med Energy Hub (not only gas) seems to be important. Indeed in the Ten Year Network Development Plan point number 8 contemplates the usefulness of a further linking of the energy network between Italy and north Africa. Regarding the MGH a lot of discussion is revolving around this topic.

A recent analysis published by Atlantic Council (AC) clearly presented all the main stakeholders and challenges in their path. The resource base is big; but further explorations could bring more. Assuming a 70% recovery factor for the reserves and a life of 30 years, we could get a gas production of around 25bn $m^3$/year (from Israel & Cyprus) and 20bn $m^3$/year from Egypt.

We need to ask now how much of this gas could be available for exports, in other words what is left after subtracting the domestic demand. Data from BP shows clear trends. Growing population is a major factor: Turkey and Algeria have the steepest trends. Algeria could easily stop exporting in the next 12 years, if there are no changes.

The short-fall between gas supply and demand in the area ranges from between 10bn $m^3$/yr and 20bn $m^3$/year. The upper end of the range assumes nothing from Libya. Indeed the country is not connected to the eastern Med (no pipes, no LNG) and struggling with political turmoil. But the new discoveries can rebalance the area and even more, generate a surplus.

Egypt could export the gas but like the others, has to deal with its growing internal demand. Before 2011 demand rose about 10bn $m^3$/year in 3 years. Recently, Saleh Heba, correspondent at Financial Times in Cairo, mentioned the increased need for investing in desalination processes to preserve the per capita fresh water parameter. This parameter indeed, is threatened by urbanization plans, which aim to reclaim acreage from desert.

Israel thanks to the new discoveries, is already in the position to export but unclear is the way the Israeli (plus Cypriot) gas will take to reach the EU: Turkey or Egypt? Israel is already connected to Egypt through the Arab Gas Pipeline (AGP), used before to get gas from Cairo but now, as reported last July by a local newspaper the Daily News Egypt, the arbitration between East Mediterranean Gas Company (owner of the pipe), and the Egyptian and Israeli authorities, could put an end to the AGP solution.

Going back at how to get connected with EU, the same paper above8 mentions that during a press conference in June, the Israeli prime minister said his country, could supply both Turkey and Egypt. The three big discoveries in Egypt, Cyprus and Israel are within a 100-km radius. Then you have to add the 150-km pipe to get onshore. Cyprus and Israel could therefore have access to another alternative to Europe. The Egyptian LNG facilities (Damietta and Idku) are a valid way to Europe.

This last hypothesis is getting some traction. In August, Yaacov Benmeleh, reporting for Bloomberg, wrote about advanced talks regarding "a non-binding agreement" among the operating companies of Tamar field and Union Fenosa Gas, that owns 80% of LNG Damietta's facilities.

The agreement would cover gas deliveries from Tamar field to Damietta's LNG facilities. What goes up must come down… and vice versa. In the last three years the European market has not been so attractive. Quarterly data3 released by EC show for the wholesalegas price at around $5/mn Btu. High stocks, low demand, energy efficiency and oil-indexed contracts are reported as main causes of what has been the lowest price since 2009.

However, Israeli gas could allow Egypt to boost its exports, diverting to EU the Israeli gas, and using its own to cope with internal consumption (or vice versa). So, the Egyptian LNG facilities, with a capacity of around 17bn $m^3$/yr, could be revived. If the LNG capacity is fully used, every $/mn Btu of price movement results in a gain or loss of about $600mn.

As we argued at the beginning of this paper, the EU can easily absorb the gas surplus and even more in the next years. The gas is available and to conclude, as a proverb says, it takes two for tango: we need gas but, we need price as well. For instance Cedigaz, the international gas research organisation, foresees a price of $7/mn Btu in 2020

# GE, Siemens to bid for Israel's gas power stations

Globes, *16.09.2016*

**The decision to close down the Israel Electric Corporation coal-fired power station in Hadera has created international interest in the market for building power stations in Israel, General Electric (GE) Israel CEO Nissim Zvili told "Globes."**

**The plans to build new power stations were the focus of last week's visits to Israel by senior executives in GE and Siemens. The coal-fired units in Hadera have a 1,400 megawatt capacity, 1,200 additional megawatts are needed to supply the projected increase in demand by 2020, meaning that the potential market in Israel for natural gas-powered electricity is 2,600-3,000 megawatts.**

"We plan to compete for this market, Zvili promises. He accompanied GE Renewable Energy president and CEO Jerome Pecresse on the latter's visit to Israel. Pecresse said, "Israel is an important market for renewable energy, with a highly developed capital market in both equity and debt that can finance you energy sector with local resources.

I met your capital market people before, when the private power stations were being built; they are smart people who know their work. The environment here is very suitable for entrepreneurship in this field." There are still no pumped-storage hydroelectric power stations in Israel, but the first one, located in Ma'ale Gilboa, is already in the advanced construction stages. Construction of the $2.2 billion plant is slated for completion in 2017. A pumped-storage hydroelectric power station utilizes differences in height to produce electricity.

An “ordinary” gas turbine placed in a huge internal space hewed into rock raises water from a lower storage pool to an upper one. In order to produce electricity, the upper pool is emptied, and the falling water drives a second hydroelectric turbine.

In this way, a pumped-storage hydroelectric power station can absorb surplus electricity from the grid and use it to raise the water to the upper storage pool on the one hand, and supply electricity at peak times by emptying the upper storage pool and driving a hydroelectric turbine on the other.

Pumped storage is the main tool available to managers of a closed electrical grid (who cannot transfer surplus power to other grids) for dealing with the challenges of producing electricity from renewable energy sources.

The main problem with such energy is its instability, because the sun and wind are energy sources not subject to human control. For this reason, an electricity system with a high proportion of wind or solar facilities is exposed to a sudden surplus or shortage of electricity.

“In order to keep the grid balanced, especially in view of the fact that Israel ‘s electricity sector is closed, the more renewable energy is developed, the more pumped-storage hydroelectric power plants you’ll need,” Pecresse explained. “I’m talking about four-five stations - the three being planned and one or two more.”

Siemens has also expressed interest in the project. Siemens Power and Gas CEO Willi Meixner said, “We are mainly looking at investing in building the power station to produce electricity from natural gas and supplying sysrems for the gas industry.

In our current visit to Israel we were impressed with how the small private electricity producers like at Alon Tabor and Ramat Gabriel are progressing. The recent declaration by your energy minister about the halting of coal use and the development of the gas fields in Israel’s economic waters is very interesting for us.” He added, “We are interested in investing in building a natural gas power station and from what I heard power stations will be built to supply 3-6 Gigawatt.”

# Engineered algae: Israeli solution for world's oil addiction

Haaretz, *12.09.2016*

**You could be growing your own car fuel in some scummy green tank in your living room one day, with or without engineered fluorescent fish inside. No, you wouldn't be gassing the car or powering the house with fish pee, but with hydrogen produced by engineered algae.**

**Hydrogen is widely touted as the fuel of the future and now Tel Aviv University scientists have made two crucial discoveries. One is how algae produce it. The other is how to make them produce more of it, so hydrogen can be mass-produced, cheaply, and used not only in public transportation but industry.**

"For the last 12,000 years we have been using agriculture to make food, but when it comes to energy, we are still hunter gatherers. Agriculture for energy is the next revolution," research leader Assistant Prof. Iftach Yacoby, head of the renewable energy laboratory at Tel Aviv University, tells Haaretz. "There are other ways to produce hydrogen, but this is the greenest, and is the only agricultural one."

In two separate papers published in the international science press, the TAU team describes the discovery that algae produce hydrogen from photosynthesis, not in a microburst at dawn, as assumed until now, but all the time. Secondly and crucially, they have engineered a way to boost production nearly fivefold by genetic engineering.

In case that all sounds rather like a thriller starring a shaven-headed tattooed ex-con clad in inexplicably-sourced leather and armed with a vial of glowing green goo, think of this. The wheat we know and love isn't the plant we began to cultivate 12,000 years ago. We changed it to enhance desirable traits. Doing the same to microalgae is next. If hydrogen-by-alga can be developed industrially, modern civilization could finally start getting over its addiction to oil, with all the geopolitical relief that would entail.

Photosynthesis is a biochemical process by which competent plants, algae and bacteria convert light energy into chemical energy. Generally speaking, photoautotrophs start from carbon dioxide (CO2) and water (H20) that they first split into the composite atoms, carbon, oxygen and protons, using sunlight energy, then "cook" to make glucose sugar (C6H12O6).

When making sugar by photosynthesis, plants output some oxygen, chiefly during the day. The scientists worked with single-celled green algae and first of all discovered that in contrast to popular wisdom, algae produce hydrogen during the photosynthetic process all day, not in a brief burp at sunrise. How could they be so wrong so long? A) "Because the amounts of hydrogen the algae produce at other times were miniscule," Yacoby explains.

“Highly sensitive machinery was necessary to discern it.” B) Also, the scientists had known that oxygen is deadly to a key stage in the algal hydrogen production process, which led them to a wrong assumption.

Oxygen stifles the relevant enzymes, called hydrogenases. They stop working, irreversibly, and scientists had assumed that the enzyme was simply not active in air-grown algae cells. Actually, they discovered, the enzyme remains frisky and active inside oxygen-free zones inside the chloroplast (which is the organelle that contains the chlorophyll, the molecule central to photosynthesis). And thus the little alga continues to make hydrogen all day long.

The next question was how to beef up production for industrial purposes. We clearly don’t need to engineer totally new hydrogenases that aren’t oxygen-sensitive, Yacoby explains to Haaretz. What humanity needs is to get the algae to overproduce the enzyme and, as he explains, to reengineer it to have more power.

Currently most of the energy goes to sugar production, he explains. That is what the plant wants. We however would like most of the energy to be transferred to hydrogen production. Why go through the trouble of engineering single-celled plants? Man knows how to produce hydrogen, doesn’t he?

He does, but not cleanly, Yacoby explains. “In the United States, 99% of the hydrogen produced is from natural gas.” Cracking natural gas for hydrogen is not a green process, is toxic as hell and is energetically inefficient. Producing hydrogen through electrolysis requires electricity – which is not always available from green sources.”

Biofuels are hardly the great white hope either. For one thing, when they’re burned (i.e., used,) we get carbon emissions. With hydrogen, the only emission is water vapor. “Making ammonia for fertilizer so we can grow more corn so we can make more ethanol to fuel cars that pollute – this is not the most efficient practice one can perceive,” Yacoby remarks. “Hydrogen is the only blue energy – no carbon emission from the exhaust.”

He also points out that a hydrogen-powered car, and they exist commercially nowadays thanks to Toyota and now other car manufacturers, can run more than 500 kilometers on five kilos of hydrogen.

What about cost? Bioengineered algae sound expensive. The scientists have done the math and, says Yacoby, the production costs should be less than $4 per kilo of hydrogen, which, mileage-wise, is roughly equivalent to 10 liters of gasoline. National Renewable Energy Lab in Colorado thinks hydrogen can be made using the algae method for around $3 per kilo.

# Israel, Palestinian Authority agree to a gas pipeline to Gaza

Bloomberg, *14.09.2016*

**Israel and the Palestinian Authority (PA) have concluded a deal to lay a gas pipeline from Israel to Gaza Strip, according to Globes, a business daily. There is still no formal announcement of the agreement.**

**According to sources within the PA Israel has agreed to the deal. The two sides will ask the contributing countries, who support the Palestinian authority, to finance the pipeline. Last week during a visit to The Netherlands, Israel's prime minister Benjamin Netanyahu thanked his host, the prime minister Mark Rutte, for assisting in gas negotiations with the Palestinians.**

It was "… the first step is to improve the supply of energy, of water to Gaza, including laying a pipeline," Netanyahu said. "We have made a decision in our cabinet to do it and I appreciate your help in realising this project."

Despite the agreements with the PA it is not clear if the project will go ahead since Gaza is controlled by Hamas, a rival faction to the PA which controls the West Bank. Also the financial foundations of the PA and Hamas in Gaza are shaky.

This week the Israeli government concluded a deal with the PA to pay off a NIS 2bn ($500mn) electricity debt to Israel Electric Corp. About quarter or the debt will be erased, half of it will be spread into long-term repayment and the rest paid when the deal is closed. So the profitability of this project is not bullet proof and the motivation to realise it is more political than financial.

The project itself and the investment involved, shouldn't be problems, however. The distance from the gas entrance point to the Israeli shore from Tamar gas field to the Israel-Gaza border is just a few dozen kilometres.

# Iran’s plan to lure big oil

Bloomberg, *14.09.2016*

**Far away from the bloody Syrian conflict and continuing rancor of the Iran nuclear deal, policymakers in Tehran are debating the future of the country’s energy resources. They know Iran needs increased foreign investment to revive its economy after years of international sanctions and isolation.**

**President Rouhani and oil minister, Zangeneh, have come up with a master plan to reverse decades of indifference from Western majors. But the question for them is whether pressure from Tehran’s hardliners and potential blowback from the U.S. government will make investing in Iran’s oil fields too risky a bet for foreigners to undertake.**

Rouhani’s government has set an ambitious target: boosting Iran’s oil production by 20 percent by 2021 -- from 3.8 million barrels a day to 5 million. To accomplish this, Tehran is looking for $200 billion in foreign investment over the same period. It’s an eye-popping amount, especially in the current climate of flat oil prices and surplus production. It will require Iran to offer commercial terms to international oil companies that are far more favorable than what it has done in the past.

The key to the Rouhani plan is a new contracting model, officially the Iran Petroleum Contract, which was approved at a cabinet meeting in August and appears to have the support of Supreme Leader Ayatollah Ali Khamenei.

In this new legal regime, Iran will do away with the old “buy-back” contracts that have defined the relationship between the National Iranian Oil Company and international oil companies for decades. Those contracts were maligned by the majors because they do not have the features of the production-sharing model they favor -- particularly when it comes to booking crude reserves, the process by which oil companies hold title to a percentage of hydrocarbons they produce. Buy-back contracts treat foreign firms more or less as subcontractors. Their terms are much shorter than those of production sharing agreements; usually between 7 to 10 years as opposed 20 to 25 years.

Buy-backs typically give little authority to foreign firms on how to manage reservoir development and oil field production once it begins, and places those decisions squarely in the hands of Iran’s state owned company.

The new contract will address these issues. For instance, it will allow foreign companies to establish joint-venture partnerships with Iranian companies in which they will manage production and reservoir development.

More specifically, it will allow lengthier contract periods (up to 25 years and perhaps longer in certain instances) and permit the global oil companies to have significant input in budget and work programs of projects.

Foreign firms will also have full cost recovery --which means they will have the ability to recover their investments in exploring, discovering and developing a given field, if they are commercially viable. They will also have incentives for coming in under budget for a given project.

In theory, this new contractual paradigm brings an equitable distribution of risk and reward between international firms and their Iranian partners. Perhaps more importantly for Iranians, much-needed foreign and technical expertise could start coming back into the country after three decades of isolation.

Control over Iran's oil wealth has been a hotly contested issue among its people for the last 100 years. They remember when the British government, through its ownership of Anglo-Persian Oil Company, effectively controlled its production. Zangeneh, the oil minister, has had to pledge to hardliners that Iran's sovereignty over its energy resources has been preserved by the new contract, and yet provide enough incentive to foreign companies to assure them that they would be treated as partners and not as contractors with no skin in the game.

Despite this balancing act and careful planning by Rouhani's government, many questions remain unanswered. First, what will happen if sanctions on Iran's nuclear program snap back as a result of Iranian noncompliance with the nuclear deal? Second, Iran is about to enter into an election cycle; if Rouhani is not re-elected, will his successor continue on the path of energy-sector reform?

But perhaps the biggest issue is that, despite nuclear-related sanctions being lifted on Iran, prime European banks such as BNP Paribas, Deutsche Bank and UBS have been skittish about financing projects for fear of falling afoul of remaining secondary U.S. sanctions on Iran's economy and banking sector. Will these injunctions have a similar chilling effect on energy majors such as Shell, BP and Total? Will the risks associated with investing and working in Iran be worth the reward?

Certainly, Iran thinks the allure holding 10 percent of the world's proven oil reserves, as well 15 percent of the world's gas reserves, will be too much for energy majors to pass up. But it's unlikely that that European conglomerates will go in with full force unless they get guarantees from the Washington that there will be no repercussions on their U.S. operations.

Perhaps the question for the next presidential administration will be whether a flourishing Iranian oil sector will be more likely to lead to economic and political reform, or if it will it lead to further clashes between reformers who favor more engagement with the West and hardliners who don't.

# Saudi Arabia overtakes US as largest oil producer

Oilprice, *13.09.2016*

**Saudi Arabia has overtaken the U.S. as the world's biggest oil producer for the first time since 2014, according to the Oil Market Report by the International Energy Agency (IEA).**

**Saudi Arabia has added around 400,000 barrels per day of low-cost production since May of this year. At the same time the U.S. – which had been the world's top producer of crude and other liquid hydrocarbons since April 2014 – has shut down some 460,000 bpd of high-cost output since May 2016, Bloomberg quoted the report as saying. According to the IEA, global growth in crude oil demand will slow down faster than previously expected.**

The agency now sees growth at 1.3 million bpd for 2016, which represents a downward revision by 100,000 bpd from its previous estimate. The revision was prompted by a faster-than-expected waning in demand growth over the third quarter of the year.

Last month, OPEC crude production reached record levels of 33.47 million bpd, thanks to Middle Eastern producers, the IEA said. Kuwait and the UAE both reached the highest output levels on record, Saudi Arabia was close to record-highs, and Iran continued to increase production, reaching the highest level since the sanctions were imposed.

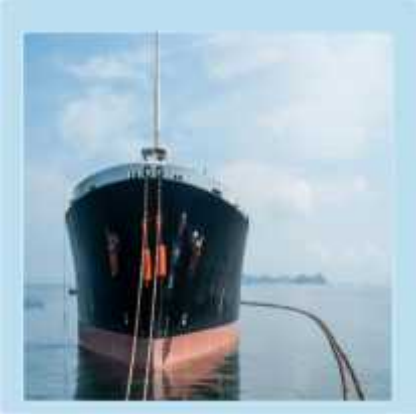
At the same time, however, the IEA noted that global production growth is slowing down, with the U.S. alone accounting for half of this slowdown as independent E&Ps have cut investments in new output in an immediately palpable way. The agency said non-OPEC supply is expected to return to growth in 2017.

OPEC itself also expects non-OPEC supply to increase next year and on Monday it revised up its forecast for non-OPEC oil supply by 350,000 bpd and now expects producers outside the cartel to supply 56.52 million bpd to the market in 2017, in a signal that the global glut will persist.

The projected non-OPEC supply next year would be an increase by 200,000 bpd over this year, OPEC said in its Monthly Oil Market Report, the last one before its members and non-cartel partners meet to discuss a potential output freeze in Algiers later this month.

# Crude glut belies risk from OPEC's dwindling output cushion

Bloomberg, *16.09.2016*



**As most of the world focuses on how unfettered oil production will weigh on prices, a few say a rebound as the market starts to reflect a growing risk of shortages.**

**OPEC's strategy of keeping its taps open is leaving a smaller cushion if there's an unexpected need for more oil. The group's spare capacity has dwindled to the least since 2008, U.S. government data show, while global spending cuts have diminished prospects for new output. Crude may jump more than 35 percent from current levels as the possibility of a supply squeeze begins to get priced in, according to Citigroup Inc. and trader Gunvor Group.**

The biggest energy crash in a generation prompted the industry to cut $1 trillion in spending. That's resulted in less new production and the slowing of current output as firms scrimp on technology that lengthens the life of fields. Citigroup sees prices rising to $65 next year, while Gunvor envisions an advance to as much as $70, levels last seen in 2014.

"The move from $50 to $60 to $70 a barrel could be a lot quicker than people think," David Fyfe, Gunvor's head of market research and analysis, said in an interview in Singapore. "Everyone in the supply universe apart from Saudi Arabia is, over the short term, producing as much as they can. There's no one apart from Saudi Arabia, which has between 1 and 2 million barrels a day of spare capacity."

Members of the Organization of Petroleum Exporting Countries had about 1.1 million barrels a day of spare production capacity last month, the U.S. Energy Department estimates, compared with more than 4 million in late 2010.

In 2011, after unrest in Libya cut output in that nation by about 1.5 million barrels a day, OPEC members tapped into spare capacity as oil prices shot up above $120 a barrel. Angola pumped more that summer, while Saudi Arabia increased its own production by 1.35 million barrels a day.

While producers try to extract what they can from underground, supplies stored on land are ample. Global petroleum stockpiles rose to 3.1 billion barrels in June, about 360 million above the average of the previous five years, according to the International Energy Agency.

A price spike would require demand growth to be strong enough to overwhelm daily supply and eat into those inventories. The IEA on Tuesday said it doesn't see that happening until at least 2018 as growth in consumption falters and output proves resilient. Still, while inventories are depressing prices as they remove the fear of scarcity, buyers probably shouldn't feel so secure, Seth Kleinman, global head of energy strategy for Citigroup, said in an interview in Singapore.

Stockpiles grew as OPEC reduced spare capacity and pumped at record levels. The increase in supply is effectively a transfer of oil stored in reservoirs below OPEC countries to crude stored in tanks above ground, according to Kleinman, who said that the combination of factors could push prices to $65 a barrel next year.

OPEC production rose to a record 33.7 million barrels a day in August as members followed a strategy of maximizing output to force higher-cost producers to cut supply. Both Saudi Arabia, the group's biggest member, and the United Arab Emirates pumped at record levels last month, while Iran and Iraq are adding output after declines caused by sanctions and violence, respectively.

Russia, the world's second-largest petroleum producer after the U.S., increased production to more than 11 million barrels a day, according to daily data published on the website of the Energy Ministry's CDU-TEK unit earlier this month. It's the first time that level has been reached in records dating back to 1991.

As OPEC pumps more, output outside the group slid to 56.1 million barrels a day in the second quarter, down from 58.3 million at the end of 2014, data from the Paris-based IEA show. Investment in the development of oil and gas resources from 2015 to 2020 will be 22 percent, or $740 billion, lower than anticipated before prices plunged in 2014, with the deepest cuts in the U.S., Wood Mackenzie said in a June report. A further $300 billion will be eliminated from exploration spending.

While U.S. shale production has declined slower than predicted after prices bottomed out, any output increases after prices begin to rise will also take longer than expected, according to Gunvor's Fyfe.

Brent crude, the benchmark for more than half the world's oil, traded at $45.90 a barrel on the London-based ICE Futures Europe exchange by 6:25 p.m. Singapore time. West Texas Intermediate, the U.S. marker, was at $43.27 in New York. Both were at more than $105 a barrel in mid-2014.

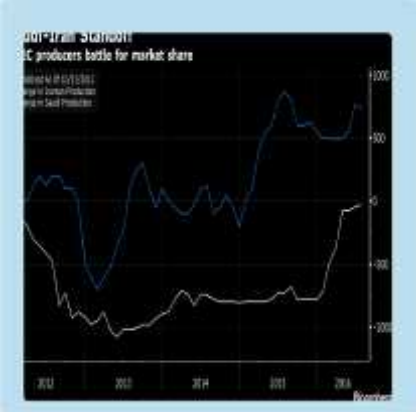
"The low oil price is doing the work of squeezing out that excess capacity in every link in the supply chain," Kleinman said. "The problem is that it's setting us up for a bullish oil market because we're just not sanctioning any oil projects from down here."

The spending cuts extend to strategies such as in-fill drilling and enhanced oil recovery techniques that can extend life and slow production declines in older fields. Questions also remain about whether the rush to produce as much oil as possible now might lead to steeper output decreases in the future, said Eirik Waerness, chief economist for Norway's Statoil SA.

"What is really uncertain is the slightly longer-term impact of all the cost-cutting that is going on now," Waerness said in an interview in Singapore. "We've done everything we can to increase efficiency, drill as efficiently as possible and increase our recovery rates, and you can't do that for ever."

# How big an impact will a rate hike have on oil prices?

Oilprice, *16.09.2016*




**Oil prices could be facing a significant jolt after Federal Chair Janet Yellen, in her annual speech at the Jackson Hole economic symposium in Wyoming, said that the case to increase interest rates had strengthened. The extent of the jolt that may be felt is far from certain however.**

**Due to the quotations of crude oil in U.S. dollars, there is often a bind between the fate of the greenback and the costs of oil per barrel, as the balance of oil trade and the effect on market psychology can be hugely influential. There are, however, other significant factors in the oil price equation, including high production rates and inventories.**

Spencer Welch, director of downstream energy consulting at IHS Markit explained that “a rate hike would strengthen the U.S. dollar, which would make oil more expensive globally, so this would tend to reduce oil demand slightly, but it takes a while for this effect to play out, and would therefore likely reduce oil market price.” “By how much? That depends on the size of the interest rate increase. It is likely to be less than $1/bbl in oil price impact, but that is not based on historical statistics.”

Different nations Welch believes, are effected by a rate rise in varying ways, depending if they are net exporters or importers of oil. Importers are more likely to be hurt by a rate rise as oil would become more expensive due to a rising dollar, net exporters of oil would benefit as a result of selling oil in dollars, with the dollar being stronger.

“I would say yes, rate rise impacts are smaller compared to other oil market impacts, such as declining U.S. oil production, high oil inventories, high oil production rates in other countries, including production in Saudi Arabia, Russia, Iraq, Iran, and in the North Sea.” Spencer Welch continued.

A recent paper by Morgan Stanley highlighted that the correlation between trade weighted U.S. dollars and oil was high until May this year, when large supply outages and then product market concerns subsequently brought oil back into focus, due to the increased market anxiety.

The investment bank also points out that in July, the oil and dollar price association was disrupted by fears of product overhang, although recently there are signs that the correlation is returning. If this relationship stays firm, then Morgan Stanley believes that this could help support oil prices in the near term. Overall the bank’s forex team sees the dollar weakening further, before resuming an upwards trajectory next year. The paper also points to how global market factors can have a huge impact on oil prices, outweighing the influence of a rising or falling dollar, as evidenced by the influence of the upcoming OPEC meeting taking place alongside the International Energy Forum in Algiers.

Any production deal to combat oversupply in the market must engage with Iran's conditional demands, that OPEC will have to agree to allow it to return to its pre-sanction production levels. Morgan Stanley also said that even if the meeting is a successful one, an OPEC freeze would likely be a short term positive but a medium term negative for oil prices.

Other factors such as the United States' burgeoning production of shale oil has also been mentioned as a game changer for the oil price and dollar relationship, as argued by Goldman Sachs' Jeffrey Currie in a study published in 2014.

He said that in 2008 the U.S. was importing on a net basis nearly 12 million barrels per day of oil and products. Today, owing largely to shale technology, that number is less than 5 million barrels per day, disturbing the oil price and dollar correlation.

According to the United States Energy Information Administration, the volume of shale oil production peaked at 4.5 million barrels of oil per day in early 2015, before falling to 4 million a day this year. It's uncertain by how big a margin shale oil production has transformed the oil price and dollar relationship, as the United States remains a net importer of oil.

# Calfrac weighs entering oil regions such as Saudi, Permian

Bloomberg, *14.09.2016*

**Calfrac Well Services Ltd., the Canadian oilfield services provider, is considering expansion opportunities into two of the world's largest producing regions, as the company faces heightened competition in existing markets.**

**Saudi Arabia and the U.S. Permian Basin are attractive to Calfrac for potential investment, Chief Executive Officer Fernando Aguilar said on Tuesday. The Calgary-based company wants to be in important markets where output is around 10 million barrels a day, he said by phone after a Bloomberg TV Canada interview with Pamela Ritchie. "Saudi is an idea, a project," Aguilar said.**

"We continue exploring those markets with potential for us to be present where we are not operating today, like the Permian, like Saudi Arabia." Calfrac provides services including hydraulic fracturing, also known as fracking, in parts of Canada, the U.S., Russia, Mexico and Argentina. Analysts have raised concerns about the company's elevated debt levels, as drilling activity remains muted and prices for services low in a North American market oversupplied with equipment more than two years into a crude market slump. "If there's a way to move equipment out of Canada, out of the U.S. and into a jurisdiction where it's going to work and generate earnings power, it's probably a great opportunity," Jason Tucker, an analyst at Paradigm Capital Inc. in Calgary, said in a phone interview. The Permian is "the place to be" with regards to U.S. oil industry activity, he said.

Calfrac would face competition from larger incumbents including Halliburton Co., Schlumberger Ltd. and Baker Hughes Inc. and it would be unwise to spend additional capital to build out a fleet, Tucker said. Canadian service companies have also struggled to grow their foothold in Texas against local competition, he said. For example, Strad Energy Services Ltd. stopped offering rental equipment there after setting up while Trican Well Service Ltd. recently pulled out of the U.S. entirely.

North American oilfield services activity won't increase materially until U.S. crude prices consistently trade higher than $50 a barrel, Kurt Hallead, an analyst at RBC Capital Markets in Austin, wrote last week in a research note, lowering his price target for Calfrac's stock. Calfrac has five buy, 10 hold and two sell recommendations from analysts, according to data compiled by Bloomberg.

West Texas Intermediate crude has risen about 70 percent since a February low and closed at $44.90 a barrel on Tuesday. Aguilar expects global oil market supply and demand to balance later this year, he said in the TV interview. "We are interested and exploring those possibilities as we continue moving forward with the options for the company," Aguilar said. "But, of course, that's going to take some time."

# Russia to stop exporting oil through foreign Baltic ports

Oilprice, *13.09.2016*

**Russia will stop exporting its oil through foreign ports sitting on the Baltic Sea by 2018, according to a new report by Reuters.**

**Nikolai Tokarev, head of the Russian pipeline monopoly Transneft, told President Vladimir Putin about the plan during a meeting. "Last year, around 9 million tonnes were shipped through the Baltic ports, while this year the figure was 5 million tonne," Tokarev told Putin, according to the meeting's official transcript on the Kremlin's website. "By 2018, we will reduce this flow to the Baltic ports to zero and will direct it to our ports instead, as we have surplus capacity."**

"Good," Putin replied. Crude supplies currently shipped through the Latvian cities of Riga and Ventspils will be redirected to Russian ports on the Baltic Sea with excess capacity, the oil executive said.

The suspension of Russian imports to Latvia, Estonia and Lithuania would hurt the former Soviet republics' transit revenues. Vitol, the world's largest oil trader, currently operates out of Ventspils. The three European Union-member countries have been dependent on Russian oil since gaining independence from the Soviet Union in 1991. This summer, the European Commission announced a plan to develop the Baltic states' Soviet-era energy infrastructure, which keeps them tied to Russia.

In July, the European Commission agreed to invest 263 million euros in trans-European energy infrastructure projects - the biggest share of which will be destined to the Baltic Sea region to help the expansion of the gas infrastructure.

Russia and the EU have been at odds with one in another in recent months regarding several geopolitical issues, especially the Syrian Civil War and the annexation of Crimea. Lately, the EU's member states have been in search of new oil and gas trading partners to reduce Russia's political leverage.

# Bros: European gas industry 'poor advocates'

Natural Gas Europe, *12.09.2016*

**European gas demand will struggle to grow as the industry that produces and markets the cleanest fossil fuel has missed too many opportunities, according to independent consultant Thierry Bros. As it is, he said, there is a risk that gas demand in Europe will be zero, following the 'business as usual' trajectory. "Until recently we were always hearing about growing gas demand. Not any more," he said.**

**But producers will struggle to find new pockets of demand, as they are used to dealing with big volumes, above 1bn $m^3$/yr. "They are not used to this small scale," he said. This is bad news for the likes of Norway and Russia, he added.**

Speaking to NGW a few weeks before he becomes a senior research fellow of the Oxford Institute for Energy Studies on October 1, he said that the gas industry had been extremely poor in advocacy.

It needs to identify where the enemies are, and get rid of them, he said, referring chiefly to nuclear and coal. Burning coal for power generation is bad for health and routine in Poland while public money has been given to build LNG import terminals that are not fully used. "The European Commission should push Poland to move away from coal," he said.

This shift will be necessary however if the producers will continue to find buyers for their output. Moving downstream to capture more of the rent is a tactic many have not tried, but will need to as their previous ideas have not succeeded.

Transport is one area, although here he says the industry has not covered itself in glory. LNG terminals at big cities, such as Barcelona and Marseilles, could have been reserved for transport. Taxis and buses could be running on gas. The Volkswagen diesel engines scandal presented it with a golden opportunity to lobby for particulate-free gas in vehicles. "They should have been on television every day claiming it as evidence that oil is not as good as gas," he said.

Or in the UK, gas could displace nuclear, being cheaper, more efficient and quicker to build. But Centrica, owner of some nuclear assets, never made the case for gas in the power sector. Outside Europe however, notably in the US and Africa, the prospects for gas demand growth were much brighter. Bros, who spent the last ten years in senior positions at French bank Societe Generale, told NGW he will combine his role at the OIES with independent consultancy work.

He is is a visiting professor at SciencesPo Paris and a senior expert at the Energy Delta Institute in the Netherlands. Howard Rogers, Director of the OIES Natural Gas Programme, said Bros would add to the research strength of the OIES Gas Programme and enhance its ability to communicate research findings to an international audience.

# EC, Central European energy firms strengthen ties

Natural Gas Europe, *12.09.2016*

**European Commission vice-president Maros Sefcovic, the commissioner for climate action and energy Miguel Arias Canete and the energy ministers from 12 EU and Energy Community countries and contracting parties in Central and Southeastern Europe Gas Connectivity (CESEC) met in Budapest last week.**

**At a meeting September 9, the Bulgaria–Romania–Hungary–Austria (BRUA) Connecting Europe Facility grant agreement of €179mn ($201mn) was signed, as were statements by governments and transmission system operators (TSOs) from Greece, Bulgaria, Romania and Hungary on cooperation on gas projects along the so-called "Vertical Corridor".**

And TSOs from Ukraine, Romania, Bulgaria and Greece signed memoranda of understanding on reverse flows on the Trans-Balkan pipeline which runs from Ukraine to Turkey carrying Russian gas. Ministers also welcomed the imminent completion of the new interconnector between Bulgaria and Romania and the project to reinforce the Bulgarian network preparing it for further interconnections with neighbouring countries.

Looking ahead, the relevant ministers committed to the rapid completion of four further priority projects: the LNG terminal in Croatia and connecting infrastructure towards Hungary, the Greece–Bulgaria interconnector and the Bulgaria–Serbia interconnector.

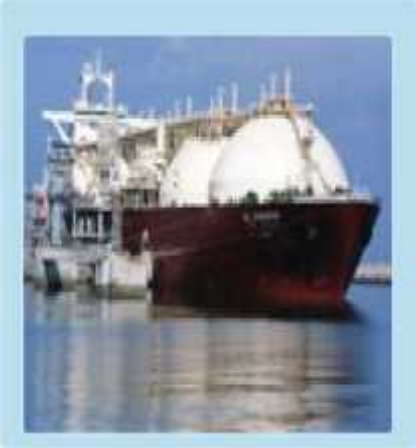
Sefcovic said the meeting was a "milestone in regional cooperation and in advancing our plans for Energy Union. In working together, we can achieve heightened energy security and diversification in a region which has already experienced severe vulnerability to its gas supplies." Canete said: "I'm glad that our cooperation in the region has produced tangible results: Bulgaria now has access to LNG and Ukraine will soon have it too.

But we want to go further including beyond cooperation in the gas sector. This is why we are also extending our cooperation to renewable energy and energy efficiency to help also boost energy security by lowering dependence on external energy suppliers." The meeting also saw the adoption of an Action Plan on regulatory issues to smooth out the operation of existing and planned infrastructure in the region and to improve market functioning.

Moreover, Minsters also decided to move the CESEC's cooperation into new areas aiming to create a regional electricity market as well as boosting renewable energy and energy efficiency in the region. The meeting was convened following the substantial progress achieved in one year of reinforced regional cooperation.

# Greek DESFA to use gas capacity platform from October

ICIS, *15.09.2016*



**Shippers active on the Greek natural gas market should be able to book import capacity on the Bulgarian border through the RBP platform from the start of next month. The move comes as the country implements the EU's capacity allocation mechanism (CAM) network code.**

**A source at grid operator DESFA confirmed on Thursday the company was aiming to offer unbundled entry capacity at the Sidirokastro point through the auctioning portal from 1 October, or shortly after. The EU had a target date of 1 October 2015 for the introduction of CAM, although a number of states have had exemptions in place to get the mechanism included with their own grid codes.**

CAM necessitates the use of a pan-European auction platform at common borders. RBP is one of three platforms which operate across the continent, and has a key presence in southern and eastern Europe. The DESFA source said Greece should be aligned with CAM in the next month, in all areas with the exception of within-day nominations.

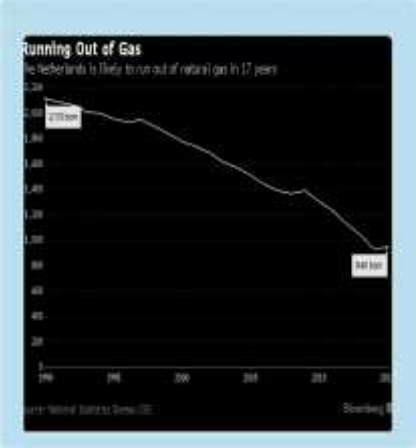
Bulgarian grid operator Bulgartransgaz has already signed up to RBP, although has yet to run any auctions through it. It has said it will offer unbundled exit capacity at Sidirokastro through the portal.

The DESFA source indicated it may be able to offer more entry capacity at the point than its Bulgarian peer is able to offer exit capacity, as expiring shipper contracts over the point were of varying amounts. Shippers should be able to make use of all the capacity, through the booking of interruptible capacity, however. Greece only has two border crossings on its gas network. Besides Sidirokastro, there is also the Kipi point with Turkey. As a non-EU state, however, CAM does not cover this border. There is also no new capacity to offer to the market at this location.

The Greek operator is hosting a stakeholder workshop later this month to showcase use of the RBP. A new daily capacity booking and allocation system is also being introduced at the same time, for domestic gas shipping.

# Europe's biggest natural gas producer is running out of fuel

Bloomberg, *16.09.2016*




**The European Union's biggest natural gas producer is running out of reserves. The Netherlands, also the region's largest trading hub for the fuel, has used up almost 80 percent of its natural gas reserves, Dutch statistics office CBS said.**

**Production fell 38 percent over the previous two years and is set to fall further as the government limits extraction because of earthquakes in Groningen, the province that houses the EU's largest gas deposit, it said. The nation of about 17 million people is struggling to contain tremors linked to gas production by a joint venture of Exxon Mobil Corp. and Royal Dutch Shell Plc that has damaged thousands of homes.**

The government budget has been hit by the caps on extraction and declining wholesale prices, with gas accounting for just 3 percent of state income in 2015, down from 9 percent two years earlier, the CBS said. Groningen's decline also has broader implications for the European gas market, which will be more reliant on outside countries to meet its energy needs. European and Eurasian countries consumed 1 trillion cubic meters of gas in 2015, according to the BP Statistical Review.

"In the last 10 years Europe managed to keep its imports flat with lower consumption," Thierry Bros, a visiting professor at Sciences Po in Paris who has studied energy for more than 20 years, said by e-mail. "Now much lower Dutch production cannot be mitigated by much lower consumption -- most of the drop has occurred already. That means we will need higher imports from Russia or liquefied natural gas."

The Netherlands produced 3.85 trillion cubic meters (136 trillion cubic feet) of gas since the discovery of the Groningen deposit in 1959, more than total global production last year, and has 940 billion cubic meters of reserves, CBS said. Output fell to 52 billion cubic meters last year, the lowest level since the early 1970s, from 84 billion in 2013.

Groningen gas production was capped at 27 billion cubic meters in the gas year that started Oct. 1, 2015. Parliament on Thursday approved a government proposal to lower the cap to 24 billion cubic meters a year for five years. The vote had previously been expected on Sept. 27. State income from gas fell to 5.3 billion euros ($6 billion) in 2015, down from 15.4 billion euros in 2013, the CBS said.

Month-ahead gas on the Dutch Title Transfer Facility, Europe's biggest hub for the fuel, has lost 13 percent this year after a 31 percent drop in 2015, according to broker data compiled by Bloomberg. "The production ceiling put in place for Groningen has had a definite impact on gas production during the last years," CBS said. "Considering the Groningen field accounts for almost three-quarters of the remaining reserves, Dutch natural gas production will likely fall further, despite a small increase in production from the remaining fields, most of which are in the North Sea."

Still, unless Groningen production is completely stopped, there is no reason to panic, according to Jonathan Stern, chairman and senior research fellow at Natural Gas Research Programme at Oxford Institute for Energy Studies.

"Yes, the Netherlands will be a smaller exporter than previously and yes this has happened faster than we expected over the past few years due to the earth tremor situation," Stern said by e-mail. "But we knew this would be happening, and what matters now is that the decline in Dutch exports should be managed in a predictable manner if at all possible."

# US weekly crude oil inventories fall slightly

AA Energy Terminal, *16.09.2016*

**Weekly crude oil inventories in the U.S. fell slightly, by 0.6 million barrels, or 0.1 percent, to reach 510.8 million barrels for the week ending September 9, according to the U.S.' Energy Information Administration (EIA) Wednesday.**

**While the market expectation was an increase of 3.8 million barrels in crude stocks, inventories decreased by 14.5 million barrels the previous week and marked the largest weekly decline since April 1985. "...The previous week's near record fall in stocks was primarily due to Hurricane Hermine, which prevented ships docking in the Gulf of Mexico," said Thomas Pugh, a commodities economist at London-based Capital Economics.**

"It has been reported that there are still some delays to ships offloading oil at US ports which has prevented the even larger rebound in imports that the market was expecting," he added. Weekly gasoline inventories, however, rose slightly, by 0.6 million barrels, or 0.2 percent, to reach 228.4 million barrels for the week ending September 9, the EIA announced.

Oil imports of the U.S. jumped by 993,000 barrels per day (bpd) to reach 8.06 million bpd, while oil production increased slightly by 35,000 bpd to 8.49 million bpd. "The U.S. inventories of crude oil fell last week as imports rebounded by less than expected after the previous week's hurricane-related disruptions," Pugh noted.

“The U.S. stocks of crude oil are likely to bounce back over the next few weeks as imports remain high,” he concluded. After the decline in crude oil stocks against market expectations, oil prices posted gains but later returned to their previous levels.

# Announcements & Reports

### ► *MOMR September 2016*

**Source** : OPEC
**Weblink** : http://www.opec.org/opec_web/en/publications/338.htm

### ► *Iragi Kurdistan Oil and Gas Outlook*

**Source** : Atlantic Council
**Weblink** : http://www.atlanticcouncil.org/images/publications/Iraqi_Kurdistan_Oil_and_Gas_Outlook_web_0915.pdf

### ► *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

### ► *Operational Excellence in Oil and Gas Europe*

**Date** : 19 – 21 September 2016
**Place** : London, UK
**Website** : http://www.opexinoilandgasemea.com/

### ► *Iran International Petroleum Congress (IIPC)*

**Date** : 19 – 21 September 2016
**Place** : Tehran, Iran
**Website** : www.iranpetroleumcongress.com/

### ► *2016 Deloitte Oil & Gas Conference*

**Date** : 21 September 2016
**Place** : Houston, USA
**Website** : www2.deloitte.com/us/en/pages/energy-and-resources/events/oil-and-gas-conference.html

## ► *Global Oil & Gas - Black Sea and Mediterranean*

**Date** : 22 – 23 September 2016
**Place** : Athens, Greece
**Website** : www.iene.eu

## ► *Global Oil & Gas South East Europe & Mediterranean Conference*

**Date** : 28 – 29 September 2016
**Place** : Athens, Greece
**Website** : www.oilgas-events.com/Global-Oil-Gas-Black-Sea-Mediterranean-Conference/

## ► *Kazakhstan International Oil & Gas Conference (KIOGE) 2016*

**Date** : 05 October 2016
**Place** : Almaty, Kazakhstan
**Website** : www.kioge.kz/en/conference/about-conference+

## ► *23rd World Energy Congress*

**Date** : 09 - 13 October 2016
**Place** : Istanbul, Turkey
**Website** : http://wec2016istanbul.org.tr/

## ► *International Conference on Oil Reserves & Production*

**Date** : 17 - 18 October 2016
**Place** : London, UK
**Website** : www.waset.org/conference/2016/10/london/ICORP

## ► *15th ERRA Energy Investment & Regulation Conference*

**Date** : 17 - 18 October 2016
**Place** : Budapest, Hungary
**Website** : http://erranet.org/InvestmentConferences/2016

## ► *The 8th Saudi Arabia International Oil & Gas Exhibition (SAOGE)*

**Date** : 17 - 19 October 2016
**Place** : Dammam, Saudi Arabia
**Website** : www.saoge.org

## ► *21st IENE National Conference "Energy and Development 2016"*

**Date** : 24 - 25 October 2016
**Place** : Athens, Greece
**Website** : www.iene.eu

## ► *SPE Russian Petroleum Technology Conference & Exhibition*

**Date** : 24 - 26 October 2016
**Place** : Moscow, Russia
**Website** : www.spe.org/events/rpc/2016/

## ► *Asia Pacific Oil & Gas Conference & Exhibition (APOGCE)*

**Date** : 25 - 27 October 2016
**Place** : Perth, Australia
**Website** : www.spe.org/events/apogce/2016/

## ► *International Conference & Expo on Oil & Gas*

**Date** : 27 - 28 October 2016
**Place** : Rome, Italy
**Website** : www.oil-gas.conferenceseries.com/

## ► *4th Iran Europe Oil & Gas Summit*

**Date** : 01 – 03 November 2016
**Place** : Berlin, Germany
**Website** : www.iransummit.com/

## ► *2nd International Conference & Expo on Oil & Gas*

**Date** : 02 – 03 November 2016
**Place** : Istanbul, Turkey
**Website** : www.oil-gas.omicsgroup.com/

## ► *European Autumn Gas Conference 2016*

**Date** : 15 – 17 November 2016
**Place** : Hague, Netherlands
**Website** : http://www.theeagc.com/

## ► *21st Annual Oil & Gas of Turkmenistan (OGT) Conference 2016*

**Date** : 16 – 17 November 2016
**Place** : Ashgabat, Turkmenistan
**Website** : http://www.ogt.theenergyexchange.co.uk/

## ► *Project Financing in Oil & Gas*

**Date** : 21 – 22 November 2016
**Place** : London, UK
**Website** : www.smi-online.co.uk/energy/uk/conference/Project-Financing-in-Oil-and-Gas

## ► *5th Greek Cyprus Energy Symposium*

**Date** : 29 - 30 November 2016
**Place** : Nicosia, Greek Cyprus
**Website** : www.iene.eu