

LNG

PRODUCTION

AUSTRALIA:

Australian Santos' Gladstone LNG project set to startup in H2 2015

The Gladstone LNG project in the eastern Australian state of Queensland will start producing in the **second half of 2015**, executives at operator Santos said at an investor briefing Wednesday, November 26.

The \$18.5 billion project is now 90% complete and remains within budget, according to Santos, which has previously said the facility would produce first LNG in 2015.

The GLNG project comprises two production trains with a total capacity of 7.8 million mt/year.

Although some analysts had expected the plant to startup slightly earlier than the second half of next year, the later time frame is not expected to impact what is a well-supplied market, local participants said.

Between 2015 and 2017, additional LNG supplies totaling more than 1 million mt/year are expected to hit the market from projects in Australia and the US.

GLNG is a joint venture between Santos (30%), Malaysian state-owned Petronas (27.5%), France's Total (27.5%) and Korea Gas Corporation (15%).

Petronas and Kogas will take 7.2 million mt/year of the plant's LNG output under long-term contracts.

LNG production from the plant's first train is expected to ramp up over three to six months, Santos Vice President Queensland Trevor Brown said.

Train two is forecast to be ready for startup by the end of 2015, and will ramp up over two to three years, he added.

Santos is Australia's third-largest oil and gas producer, with both offshore and onshore assets.

The company is also a 13.5% partner in the ExxonMobil-led Papua New Guinea LNG project, which started up ahead of schedule in April 2014 and has delivered 44 cargoes so far.

Santos is expecting its production to grow from between 53 million and 55 million barrels of oil equivalent in 2014 to between 57 million and 64 million boe in 2015, driven by PNG LNG reaching plateau production and the startup of GLNG.

By 2020, Santos' output is expected to be 80 million-90 million boe.

Santos' production guidance for 2015 was "significantly below" the 66 million boe estimate by Bernstein Research analysts based in Hong Kong.

"Volume uncertainty comes from oversupply of ramp-up gas in the eastern Australia market, commissioning and startup of GLNG (H2 versus our estimates of H1) and reduced gas demand from industrial customers in West Australia as the mining boom slows," they said in a note.

Bernstein was also critical of Santos' plans to materially grow its Southeast Asian upstream business, where it has plans to drill four to five wells annually in Papua New Guinea, Indonesia, Vietnam and Bangladesh.

"At best, this smacks of a lack of capital discipline with a bias for growth over returns, at worst it suggests that the Australian growth opportunities are not as good as they seem," the analysts said.

GLNG is one of three coalseam gas-to-LNG projects currently under construction in the port city of Gladstone.

The plants will be fed with gas from Queensland's Surat and Bowen basins.

BG Group's 8.5 million mt/year Queensland Curtis LNG project is the most advanced and is expected to make its first shipment before the end of this year.

ConocoPhillips is meanwhile building the 9 million mt/year Australia Pacific LNG plant, slated for first output in mid-2015.

Consumption of gas in Australia's eastern states is set to rise more than three-fold from the current level of around 700 petajoules/year after the three new LNG export plants come online.

The startups will coincide with the roll-off of existing long-term supply contracts in Queensland's neighboring state, New South Wales, which currently imports 95% of its gas.

The confluence of events has left New South Wales facing the prospect of a big slice of the 160 Pj/year of gas it consumes at present being diverted to Gladstone.(November 26, 2014)

11/26/2014

CANADA:

Korea Gas looking to sell down part of stake in Canadian LNG project

Korea Gas Corp, one of the world's top liquefied natural gas buyers, is looking to sell down some of its stake in the up to **C\$40 billion (\$35.6 billion) LNG Canada** project, a spokeswoman for the project said.

"We are aware that KOGAS is investigating divesting some of its share interest in LNG Canada," Katharine Birtwistle said in an email to Reuters late on Thursday. "LNG Canada remains committed to working together to move the proposed project forward."

Korea Gas currently **owns a 15 percent stake in the project**, which is expected to cost between C\$25 billion and C\$40 billion to build to its full capacity, making it one of the costliest projects ever proposed in Canada.

Royal Dutch Shell is the operator of the project and owns 50 percent, while PetroChina Co Ltd holds 20 percent and Mitsubishi Corp owns the final 15 percent.

A spokesman for Korea Gas was not immediately available for comment.

The LNG Canada project, which would liquefy natural gas in Kitimat, British Columbia for export to Asian markets, is now undergoing an environmental review. After a final investment decision, construction is expected to take four to five years. (1 US dollar = 1.1234 Canadian dollar) (November 21, 2014)

11/24/2014

INDIA:

Mumbai Port Trust Plans LNG Terminal

Mumbai Port Trust is planning to develop an LNG terminal on the outskirts of the city to complement its liquid cargo handling business and earn additional revenue, according to Financial Express newspaper.

It plans to float a request for qualification (RFQ) to invite energy companies to build the terminal, which will come up near Uran, around 50 km from Mumbai.

"The planned LNG terminal with floating storage and re-gasification unit will be able to handle 5 million tonne (mt) of LNG every year," Ravi Parmar, chairman of Mumbai Port Trust, told Financial Express.

Mumbai Port Trust plans to connect the terminal to the national pipeline grid so that the natural gas can be transported all the way up to the state of Haryana, he added.

Parmar expects Mumbai Port Trust to complete the process of awarding the project by March 2015, after which it is estimated to take two years for construction.

At present, there are four LNG terminals that have been commissioned in India — at Dahej and Hazira in Gujarat, Kochi in Kerala, and Dabhol in Maharashtra — with a total capacity of 22 million tonne per annum (mtpa). The ministry's 2013-14 annual report states that the capacity of these four existing terminals is likely to be increased further to 32.5 mtpa by 2016-17. (November 16, 2014)

11/17/2014

TRANSPORT - DISTRIBUTION

CANADA:

Canadian aboriginal group signs deal to support LNG pipeline

A Canadian aboriginal community has signed a deal with British Columbia to allow a gas pipeline to be built in its territory, setting the stage for more pacts that could bolster liquefied natural gas (LNG) export projects in the coastal province.

The province on Thursday signed a C\$6 million (\$5.3 million) pipeline benefit agreement with the Nisga'a Nation and said it expects to complete similar deals with other aboriginal groups "in the near future."

The Nisga'a are just one of 23 aboriginal communities that dot the proposed pipeline route, which would connect Petronas' \$11 billion Pacific NorthWest LNG export terminal with gas fields in British Columbia's northeast.

The Malaysian state-owned energy company is expected to make a final investment decision on its LNG project before year end. The Prince Rupert Gas Transmission pipeline, which is being developed by TransCanada Corp, will only go ahead if Petronas' LNG project is approved.

More than a dozen LNG terminals have been proposed for the Pacific coast province as energy companies from around the world race to export cheap Canadian gas to international markets.

But uncertainties around taxation, the regulatory process and aboriginal consent have called into question whether any of the projects will ultimately be realized.

Under the benefit deal, British Columbia will pay the Nisga'a C\$1 million at signing, C\$2.5 million when construction begins and another C\$2.5 million when gas starts to flow.

The Nisga'a will also receive a yet-to-be determined share of the C\$10 million a year in ongoing benefits that will be available to all aboriginal communities along the pipeline's 900-kilometer (560 mile) route.

The province has previously reached similar deals with 15 of the 16 aboriginal communities on the route of a separate natural gas pipeline that would serve an LNG project being developed by Royal Dutch Shell. (November 21, 2014)

11/21/2014

OMAN:

Oman Shipping takes delivery of new LNG carrier

Oman Shipping Company (OSC) has taken delivery of one of the world's most advanced fuel efficient LNG carriers – the Adam LNG.

The 162,000 cu m capacity vessel was built by Hyundai Heavy Industries (HHI) in Ulsan South Korea. It will operate worldwide with 25 crew including four Omani cadets.

OSC acting chief executive officer Tarik Al Junaidi said the Adam LNG is a powerful demonstration of the Muscat-based company's 'driving commitment to constant innovation' in its fleet which now numbers 43 vessels and is one of the biggest in the Gulf.

He said Adam LNG will be offered on the 'open market' to oil and gas companies worldwide.

"This state-of-the-art LNGC offers considerable benefits to customers," he said. "Its innovations mean it is exceptionally fuel efficient, cost effective and environmentally friendly. We have listened to industry and we understand this is what customers want. Our core activity is oil and gas transportation. The delivery of the Adam LNG, together with the ordering of 11 medium range products tankers, reflects our ambition to grow not only in Oman, and the Middle East, but also worldwide. The arrival of the Adam LNG sees us redouble our efforts to promote our fleet, which is now among the best managed, most advanced, fuel efficient, cost effective, diverse and eco-efficient in the world."

Al Junaidi said key innovations on the Adam LNG included its propulsion system and the design of its aft hull form.

"To slash harmful emissions we have deployed the latest Dual Fuel Diesel Electric (DFDE) technology," he said. "This enables the engine to operate on the lean-burn principle which increases engine efficiency and reduces peak temperatures which cuts Nitrogen Oxide emissions. In addition the ship has been coated with a new low friction paint which reduces fuel consumption by improving the sailing efficiency of the vessel. It does this by reducing the friction resistance of the hull. Furthermore, the design of the aft body hull forms a shape to improve wake pattern and increase propeller efficiency."

OSC chief operating officer David Stockley said another prime benefit OSC can offer customers is in-house management through Oman Ship Management Company (OSMC), a fully-owned subsidiary of OSC. He said the Adam LNG will be managed by OSMC.

"OSMC is a fundamental part of OSC and is growing fast," he said. "In the last year the number of vessels OSMC is managing has increased from 20 to 27 and these include VLCCs, VLOCs, LNG carriers, LPG carriers, product tankers and multi-purpose vessels. OSMC remains absolutely committed to, and passionate about, maintaining the highest international standards of safety, environmental responsibility, quality and cost efficiency. We have still not suffered a lost time accident since we started keeping records in 2009. Moreover, we are rated a 'better operator' by the Tanker Management Self Assessment (TMSA) programme. We believe OSMC offers customers a dedicated personal service at great value underpinned by experience and expertise."

Junaidi said a key dimension to OSC's growth plans is the development of the Port of Duqm on the South West coast of the Arabian Sea. - TradeArabia News Service. (November 18, 2014)

11/19/2014

SUPPLIES - IMPORTS - EXPORTS

UNITED STATES:

Aurora LNG to evaluate Digby Island site

Aurora LNG, one of British Columbia's natural gas export proposals, will move forward with site evaluation work for a potential **LNG project at Digby Island.**

At Aurora LNG's request, B.C. has agreed to transfer the sole proponent agreement (SPA) from the northern portion of Grassy Point to Digby Island, which the company has identified as more suitable site for an export facility.

Under the pre-existing SPA with Aurora LNG, the Province has **collected two non-refundable payments totalling CAN\$ 18 million.**

Aurora LNG is joint venture between Nexen Energy ULC (a CNOOC Limited company), INPEX Corporation and JGC Exploration Canada Ltd. (November 26, 2014)

11/26/2014

UNITED STATES:

US closer to LNG exports

The recent final approvals and construction groundbreakings for several LNG export facilities in the US Gulf Coast will make LNG exports a reality in the near term, Fitch Ratings reports.

The US Department of Energy (DOE) recently approved Freeport LNG's Expansion and liquefaction facility. Freeport and Cameron LNG have broken ground on export facilities and Sabine Pass is in advanced construction, moving the US closer to becoming a major exporter of LNG.

Authorisation changes

The DOE recently stopped reviewing non-Free Trade Agreement (FTA) export applications. Instead it will only act on applications after the review required by the National Environmental Policy Act (NEPA) has been completed and suspend its practice of issuing conditional decisions prior to final authorisation decisions. While Fitch believes this may quicken the pace of approvals, the actual timing and overall number of approvals remain unknown.

With Freeport LNG, Cameron LNG, and Dominion's Cove Point LNG projects underway and Cheniere set to finish construction on Sabine Pass and start exporting gas in late 2015, the US is moving closer to becoming a larger scale energy exporter. Whether or not this will have a meaningful impact on gas price remains unclear as the approved levels of export activity remain a small percentage of total US gas production.

Energy diversification

The emergence of US LNG exports is contributing to the energy diversification strategy in countries such as Japan that have been reliant on nuclear energy. However, the additional LNG capacity from the US is not expected to dramatically affect global pricing, as the projected US volumes are insufficient to materially alter the balance of global supply and demand.

With final approvals received and construction underway at Cameron and Freeport, there are currently **three LNG export projects under construction in the US, representing approximately 3.7 billion ft³/d of liquefaction capacity. Upwards of 28 billion ft³/d of capacity remains in the queue for DOE or FERC approval** before being able to commence construction.

Fitch concludes that these approvals are critical to the success of those facilities as non-FTA countries are the majority of the potential LNG market. (November 25, 2014)

11/25/2014

PAKISTAN - CHINA:

China to help build \$3b LNG pipeline and terminal

The \$45 billion worth of agreements signed by Pakistan and China earlier this month included a multibillion-dollar LNG pipeline and terminal deal, which will work as an alternative to the troubled gas import project with Iran as the pipeline will be extended to the Gulf state after international sanctions are lifted, according to a report in the local media.

“The agreement was signed during Prime Minister Nawaz Sharif’s visit to China. It is a state-to-state deal and no bidding will be held for the award of contract,” the report quoted an official.

According to initial estimates, **the project is expected to cost \$3 billion – \$1 billion will be needed to lay the pipeline from Gwadar and over \$2 billion will be required to construct the terminal with liquefied natural gas (LNG) handling and re-gasification facilities and to develop large storages.**

China will meet 85 per cent of the financing needs for constructing the LNG pipeline from Gwadar Port to Nawabshah.

The Ministry of Petroleum and Natural Resources is seeking the support of economic decision-makers for relaxing the Public Procurement Regulatory Authority (PPRA) rules.

“The ministry will approach the Economic Coordination Committee (ECC) to win its approval for easing PPRA rules,” the official said. “This will clear the way for direct award of a lucrative contract to a Chinese state-owned company.”

This will be the second LNG terminal in the country as a fast-track terminal is already being built by Elengy Terminal Pakistan Limited (ETPL) at the Port Qasim, which is likely to be **completed in February next year.**

The LNG pipeline will be extended from Gwadar to Iran for gas import when sanctions on Tehran are lifted. Its capacity will be one billion cubic feet per day.

The pipeline will have the same specifications that were proposed for the Iran-Pakistan gas pipeline including a diameter of 42 inches.

According to the report, since Pakistan has not been able to lay a 781km pipeline from the Iranian border to Nawabshah because of its failure to tap foreign finances, it has decided to build the pipeline from Gwadar to Nawabshah in partnership with China.

This will transport at least 500 million cubic feet of gas per day (mmcf/d) after re-gasification of imported LNG.
(November 25, 2014)

11/25/2014

CYPRUS:

Energy companies will call final shots for Cyprus gas

Whereas the talks in Nicosia on Tuesday provide a political backbone for potential natural gas deals, it is the energy companies that will ultimately call the shots, energy expert Charles Ellinas has told the Cyprus Mail.

British energy outfit **BG Group are currently desperate to secure gas supplies for their liquefied natural gas (LNG) facilities in Idku, Egypt, which are operating at below capacity.** The Idku plant has a capacity of around **7.2 million tonnes of LNG per annum, but is currently working with around 2 million tonnes.**

BG are exploring a number of options to plug that gap, with Cypriot gas from the Aphrodite field being one such alternative.

If developed, **Aphrodite could plausibly yield anywhere from 3.5 to 4 million tonnes a year**, channelled to Egypt by pipeline from the Aphrodite reservoir. The pipeline must be coupled with a floating production, storage and offloading (FPSO) unit built on top of the gas well. An FPSO is essentially a platform producing and treating the gas on-site.

The **earliest completion date for such a project would be late 2019**, Ellinas said. It is less capital-intensive than either onshore or marine-based LNG and, given falling LNG prices worldwide, would make more economic sense for Noble Energy, operators of the Aphrodite field.

Assuming Noble clinches a deal to pipe the bulk of the Aphrodite gas to Egypt, the revenues from the contract might then make it worthwhile to construct a second, small-diameter pipeline running from offshore Block 12 to Vasilikos on the southern coast of Cyprus, supplying small quantities of gas for domestic electricity generation here.

It's understood that Noble has been discussing these scenarios with BG as well as with the Cyprus Hydrocarbons Company.

By way of example, were Cyprus to buy the Aphrodite gas for \$10 per million BTU (mmbtu), and the profits to be made are around \$3 per mmbtu, Cyprus would pocket two-thirds (\$2 per mmbtu) of the profits, as it owns two-thirds of the Aphrodite gas. That leaves a net cost of \$8 per mmbtu for gas purchased from the Block 12 reservoir, a substantially lower price compared to importing natural gas via the so-called interim solution.

But when it comes to supplying BG's gas-starved export plant, Cyprus faces stiff competition. BG has already signed a letter of intent with the partners in Israel's Leviathan gas field for approximately 5 million tonnes of LNG a year. And BG is in talks with BP to link their two gas developments off Egypt's coast. BP's North Alexandria gas field is expected to come online next year – far sooner than Cyprus' Aphrodite field – and could provide BG's plant with up to 2 million tonnes of LNG per annum.

“Right now everything is on the table,” Charles Ellinas said.

The expert also drew a connection between the technical study for a Cyprus to Egypt pipeline – unveiled by the two countries' energy ministers on Tuesday – and the ongoing gas supply tender put out by the Natural Gas Public Company (DEFA).

DEFA chairperson Eleni Vasiliadou has confirmed to the Cyprus Mail that the validity period of the 'interim gas' tender has been extended – for a second time – to the end of January 2015.

DEFA on Tuesday began assessing the three remaining bidders' revised financial offers. According to press reports, the prices quoted by the bidders hover around the \$14 per mmbtu mark.

Time-wise, the new validity period of DEFA's tender now coincides with the completion of the technical study for the Cyprus-Egypt pipeline.

“It's very likely that officials are waiting on the Cyprus to Egypt pipeline analysis to come through before plunging ahead with the DEFA gas imports,” offered Ellinas. (November 26, 2014)

FINLAND - ESTONIA:

Finland and Estonia to build LNG terminals

Finland and Estonia Monday reached an agreement to build two LNG terminals, connected by a pipeline across the Gulf of Finland by 2019.

A large regional terminal would be built in Finland while Estonia would get a smaller gas distribution terminal, the Finnish government said in a statement.

The plan, which aims to cut the countries' dependence on Russian gas, was put on hold a month ago due to failure to agree on how the countries' gas companies can share EU financial assistance.

Finland said that it remained unknown whether there would be adequate support available from the European Union.

"The entity must be economically viable. At the end of the day, the costs of the investment must be paid by the gas users," economy minister Jan Vapaavuori said in the statement.

The countries expect the EU to cover 75% of the pipeline's estimated cost of €200 million. Together with the two terminals, the total cost of the project is seen at around €500 million.

The deal also included future access to Latvia's underground gas inventories, Finland said.

It added that it and Estonia would proceed with the project as quickly as financially possible. If the regional terminal was not well advanced by the end of 2016, it could be built in Estonia.

The Finnish government earlier this month prepared for the LNG move by taking control of the country's sole gas utility Gasum in a €510 million deal. (November 18, 2014)

11/18/2014

UNITED STATES:

Freeport LNG receives final FERC and DOE approvals

Freeport LNG Expansion, L.P. (Freeport LNG) has received final approvals for its proposed natural gas liquefaction and LNG export facility on Quintana Island near Freeport, Texas. On 13 November, the Federal Energy Regulatory Commission (FERC) denied pending rehearing requests and, on 14 November, Freeport received a final authorization from the Department of Energy (DoE) to export to Non-Free Trade Agreement countries.

Freeport LNG received conditional authorization from the DOE to export the entire contracted LNG production volume of the initial three trains of the liquefaction project. On 30 July 2014, Freeport LNG received FERC approval for the initial three train liquefaction project, and in October 2014, FERC granted Freeport LNG authorization to proceed with construction. Now, with receipt of an order from FERC denying pending rehearing requests and a final export authorization from DOE, Freeport anticipates closing on financing and beginning construction on the first two trains later this month. Financing and commencement of construction on the third train is expected in second quarter 2015.

Michael Smith, Chairman and CEO, Freeport LNG, commented: "We're very pleased to have received the final two approvals needed to begin construction and operation of our three liquefaction trains. As I said at our ceremonial groundbreaking just last Monday, this project will have a significant economic impact on this region and our nation, and achieving these milestones is gratifying. We look forward to moving quickly towards financing close and start of construction".

Freeport LNG awarded contracts to a joint venture between CB&I, Inc. and Zachry Industrial, Inc. to construct the initial two trains of the liquefaction project. The first two trains are anticipated to commence operations 45 and 50 months from start of construction, respectively, with the third train expected to be in operation approximately six months following the second train. Each liquefaction train has a nameplate design capacity of 4.64 million tpy. Approximately 13.2 million tpy of the production capacity of the three liquefaction trains has been contracted under use or pay liquefaction tolling agreements with Osaka Gas, Chubu Electric, BP Energy Company, Toshiba Corp. and SK E&S LNG, LLC. (November 18, 2014)

11/19/2014

INDIA:

India in a sweet spot as LNG prices crash in Asia

Spot LNG prices are plunging and are expected to fall further notwithstanding the onset of winter, which traditionally drives prices higher. The fall is not just an outcome of drop in oil prices, but also a strategic shift in the demand-supply balance, and augurs well for Indian consumers.

"KOGAS in South Korea has been diverting some of its long-term contractual obligations. Similarly, utility buyers in Japan are well-balanced now. The demand from Taiwan and China, too, has been relatively slow. This has disturbed the supplydemand balance," said Roman Kazmin, editor of ICIS LNG Market Daily, a global publisher of pricing data.

India imported a total 13 mt LNG in FY14 for \$8.5 billion, according to the export-import data published by the ministry of commerce. **India is the fourth biggest LNG importer with consumption of natural gas** slated to grow faster than oil.

Hence, the crash in spot prices is good for India. **Recent spot LNG contracts were struck at prices as low as \$10.5 per mmbtu, nearly 45% down** from year ago period and **25% down from those struck in October 2014**. These contracts are for delivery after two months; hence, contracts in November related to deliveries in January 2015. There are indications the trend will continue well in future. November 25, 2014

11/25/2014

MALAYSIA:

Samsung C&T awarded LNG contract in Malaysia

Samsung C&T Corporation, together with Science-Tech Solutions (STS), has been awarded a contract by Petronas Gas Berhad to build an **LNG regasification terminal in Johor, Malaysia**.

Samsung C&T will carry out the engineering, procurement, construction and commissioning (EPCC) work for the regasification terminal, which will have a send-out capacity of **5 million tpa and two 200,000 m3 LNG storage tanks**.

Construction is expected to be completed by **April 2018**.

The regasification terminal (RGT-2) is part of Malaysia's development plan to secure a stable natural gas supply for the nearby Refinery and Petrochemical Integrated Development (RAPID), Pengerang Co-generation Plant (PCP) and to the Peninsular Gas Utilisation (PGU) Grid.

Commenting on the award, a representative from Samsung C&T said: "We feel privileged to participate in the RGT-2 project together with our partners. Based on our LNG experience and expertise, we look forward to contributing to development of the Malaysia's LNG industry, while maintaining a strict emphasis on site safety." (November 24, 2014)

11/24/2014

MALAYSIA:

Samsung wins Petronas LNG contract

PETRONAS has awarded a contract to Samsung Construction & Trading to build an LNG regasification terminal that will supply gas to a new huge chemicals complex in Malaysia.

The engineering, procurement, construction and commissioning (EPCC) contract is worth US\$486m and the work is expected to be completed in late 2017.

The project will consist of a regasification terminal to accept shipped-in LNG and two 200,000 m3 LNG storage tanks. The LNG will be used to feed Petronas' Pengerang Integrated Complex in Johor. This includes a world-scale refinery and petrochemical complex that is estimated to cost US\$27bn.

Partners in the contract include Malaysian engineering firm STS and UK LNG facilities design firm Whessoe, which Samsung acquired in 2013. (November 27, 2014)

11/28/2014

SOUTH KOREA:**South Korean Kogas' October LNG sales fall 9.8% on year to 2.51 million mt**

State-owned Korea Gas Corporation's LNG sales fell again in October, sliding 9.8% year on year to 2.51 million mt, the company said Wednesday, November 19.

LNG sales to power generation companies dropped 13.6% year on year to 1.34 million mt in October, and sales to retail gas companies for household and business use fell 5.1% over the same period to 1.17 million mt.

Compared with September, the state-owned utility's October LNG sales grew 17.9%, led by a 30.4% rise in sales to retail gas companies, while sales to power generation companies climbed 8.8%.

The year-on-year decline came after its sales climbed 2.5% from a year ago to 2.13 million mt, the first year-on-year increase since November 2013, largely because of the temporary shutdown of nuclear reactors for maintenance.

The company's LNG sales in August fell 21.2% from a year ago to 1.97 million mt, the biggest decline in five years and the 10th straight month of year-on-year declines.

This was due to moderate temperatures, higher use of coal for power generation as prices were relatively cheaper compared with LNG, and nuclear reactors having restarted from maintenance and safety checks.

Kogas did not disclose how much LNG it sold over January-October, but calculations based on previous Kogas reports showed it sold 27.6 million mt, down 9.6% year on year.

The company sold 38.68 million mt of LNG in 2013, up 5.8% from 36.55 million in 2012. The world's single-largest LNG buyer imported 39.33 million mt of LNG in 2013, up 12.5% from 34.97 million mt in 2012. (November 19, 2014)

	Sales (mt)	Year-on-year change(%)
Oct	2,511,000	-9.8
Sep	2,130,000	2.5
Aug	1,974,000	-21.2
Jul	2,374,000	-7.7
Jun	2,092,000	-15.7
May	2,272,000	-14.5
Apr	2,679,000	-16.5
Mar	3,519,000	-0.9
Feb	3,709,000	-5.1
Jan	4,341,000	-9.3
Total	27,601,000	-9.6

USE AS AUTOMOTIVE FUEL

CHINA:

China LNG Group, Sinopec to Cooperate in Transport LNG Sector

China LNG Group on Tuesday signed a framework agreement with Sinopec Fuel Oil Sales Corporation Limited in relation to cooperation in the development of LNG refueling station and application of LNG heavy trucks businesses in China.

Both parties intend to select two highways, Huhangyong highway, which is an important highway in connecting Shanghai Shen Zhuang Zhen and Hangzhou Peng bu Zhen and Hang Pu highway, which connects Shanghai Pudong and Hangzhou Dajing, as a pilot scheme for adding LNG refueling facilities in existing gas stations along these two highways.

Following successful implementation of such stations, Sinopec will increase the number of LNG fuel stations based on the demand and development of the company's LNG businesses.

Sinopec Fuel Oil Sales Corporation Limited is a wholly owned subsidiary of China Petroleum and Chemical Corporation (Sinopec Corp.). It is specialized in comprehensive operation and professional management of fuel oil business of Sinopec Corp. (November 27, 2014)

11/28/2014

NETHERLANDS:

Dutch company orders Iveco LNG truck

Dutch transportation company Speksnijder Logistics BV has received a new LNG-powered Iveco Stralis Hi-Road truck, chosen for its compatibility with the company's sustainable business programme.

The new truck, supplied by Iveco Schouten, will be used for distribution activities and will refuel at the Rolande LNG fuelling station in Tilburg.

Speksnijder Logistics specialises in transport, distribution and warehousing, in particular the transport of temperature-sensitive products.

The new Iveco Stralis truck is fitted with a 330 horsepower gas engine, coupled with a manual gearbox with double H-pattern and splitter. The combination of engine and gearbox ensures very low nitrogen and carbon dioxide emissions.

The IVECO Stralis Hi-Road is the first vehicle Speksnijder Logistics' fleet to use LNG as fuel. (November 18, 2014)

11/19/2014

USE AS MARINE FUEL

UNITED STATES:

BC Ferries expects to save millions by converting largest vessels to LNG

BC Ferries plans to convert its two largest vessels to liquefied natural gas in an effort to **save fuel costs after sinking \$126 million into marine diesel fuel last year.**

The company announced Tuesday that it has the BC Ferries commissioner's approval to upgrade the Swartz Bay-to-Tsawwassen route ships.

BC Ferries says it expects to save about \$9.2 million annually by switching the two Spirit Class vessels to LNG because they account for 15 per cent of the fleet's total fuel consumption.

It also has plans to build three dual-fuel vessels for the southern Gulf Islands and the Powell River-to-Comox route, with completion set for 2017.

The company says all five vessels are set to be operational by 2018, with the Spirit of Vancouver Island upgrades expected to be finished before those of the Spirit of British Columbia.

BC Ferries spokeswoman Deborah Marshall says the cost of the projects is not yet known and that contracts are expected to be awarded next year. (November 26, 2014)

11/26/2014

QATAR:

DNV GL and N-KOM promote LNG

DNV GL and Qatar's Nakilat-Keppel Offshore & Marine (N-KOM) have signed a memorandum of understanding to promote LNG as fuel within the maritime and offshore sectors.

The signing ceremony took place during DNV GL's 150th anniversary celebrations in Dubai, at which N-KOM's CEO Chandru Rajwani and Dr Henrik Madsen, DNV GL's Group President and CO, signed the memorandum.

The MOU will further strengthen the position of N-KOM in the areas of LNG-fuelled vessel conversions and construction of related floating assets. N-KOM will capitalise on DNV GL's competence and experience in LNG, working with shipyards, ship owners and other key stakeholders to develop synergies related to the promotion of LNG as fuel within the maritime and offshore industry.

"Qatar is the single largest producer and exporter of liquefied natural gas in the world and has become a leading cluster for gas related activities. Therefore, we look forward to establishing a valuable partnership with N-KOM which further cements our strong market position on LNG as fuel in this region and benefits the environment by making the shipping industry greener," said Dr Henrik Madsen.

Chandru Rajwani added: "N-KOM has already established itself as a leading destination for gas carrier repairs in the region. With the signing of this MOU, we take a significant step further in becoming the preferred gas solutions provider on a global scale. Through mutually sharing our knowledge on latest technology, environmental, safety and quality issues with DNV GL, we will be able to offer our customers an even wider range of solutions and facilities for liquefied natural gas as marine fuel and other gas solutions."

As part of the agreement DNV GL and N-KOM will cooperate, amongst others, on the development and newbuilding of bunker barges, of coolant barges for temporary gas storage as well as to promote the use of LNG as fuel in the offshore sector. Moreover, a training program is to be conducted in the N-KOM facility on LNG carrier or LNG-fuelled vessel repairs. Both partners will also offer project management support for conversion projects to third party yards.(November 20, 2014)

11/21/2014

LPG

SUPPLIES - IMPORTS - EXPORTS

INDIA:

Itochu to expand LPG business into India

Japanese trading house Itochu has agreed with India's Aegis Logistics to buy a 40pc stake in its Singapore-based LPG arm Aegis Group International (AGI) for \$5.85mn.

AGI handles more than 700,000 t/yr of LPG shipped to India. The deal will give it a chance to assess the state of the Indian LPG market where demand is expected to hit more than 24mn t/yr in 2020 from a current 16mn t/yr, Itochu said.

Itochu currently handles around 5mn t/yr of LPG, which is mainly delivered to Asia-Pacific consumers such as Japan, South Korea, the Philippines, Indonesia, Thailand and Malaysia. (November 17, 2014)

11/17/2014

CNG

USE AS AUTOMOTIVE FUEL

UNITED KINGDOM:

DHL packages natural gas truck as greener alternative

DHL has launched a **delivery truck powered by natural gas**, which the logistics giant says will provide a cleaner and quieter alternative to diesel vans.

The new truck uses **Compressed Natural Gas (CNG) and Bio-Gas** to reduce its CO2 footprint and harmful pollutants, producing 68 per cent less Particulate Matter (PM) and 39 per cent less Nitrogen Oxides (NOx) than a standard Euro 6 diesel vehicle.

According to the company, the inclusion of a new spark ignition 'Otto Cycle' engine can also result in 50 per cent less engine noise, which is crucial for making quiet out of hours deliveries in urban environments.

Last year, DHL had more than 60 trucks fuelled by liquefied natural gas (LNG) in its fleet and also took delivery of a prototype hybrid truck that is expected to cut CO2 emissions and fuel consumption by a quarter compared to standard diesel trucks.

Tim Slater, managing director of transport at DHL Supply Chain UK and Ireland, said: "While I truly believe this vehicle will be transformational in driving industry towards a better future, DHL will continue to invest in innovative vehicle technology, alternative fuels, accident prevention systems and driver training to ensure we're always delivering the best service for our customers and supporting the UK's environmental health." (November 28, 2014)

11/28/2014

PAKISTAN:

Energy shortage: CNG stations to switch to LNG by February

Minister of State for Education, Training and Standards in Higher Education and Interior Muhammad Balighur Rehman has said the government is making all-out efforts to overcome the energy crisis.

He was speaking at the closing ceremony of a three-day international conference on Energy Systems and Policies at Air University.

The minister told the audience that by February next year, all compressed natural gas (CNG) stations would switch to liquefied natural gas (LNG) to overcome the difficulties faced by them and the vehicle owners.

He spoke about several planned power projects including a 1,100-megawatt solar power plant in Bahawalpur.

“It is a positive sign that educational institutes are taking initiatives in the national interest considering their social responsibility,” he remarked.

He appreciated the Air University management for organising the conference and bringing together international and national scholars and experts, who gave useful inputs to tackle the energy problem. (November 27, 2014)

11/27/2014

NGV

TRANSPORT - DISTRIBUTION

UNITED STATES:

Natural Gas Vehicles See Steady Growth

The abundance of natural gas is allowing utilities to increasingly burn the fuel in power plants for electricity – a well-known trend that continues to accelerate.

But another sector also stands to benefit – the transportation sector. In particular, natural gas is likely to become a serious option for transportation fuels, particularly as an alternative to diesel in long haul trucking or in shorter fleet operations. It can either come in the form of compressed natural gas (CNG) or liquefied natural gas (LNG).

There are several advantages that natural gas has over traditional diesel or gasoline powered vehicles First natural gas can be a lot cheaper on an energy equivalent basis, generally a little more than \$2 per gallon. There was certainly a much bigger disparity in prices earlier this year when gasoline prices cost more than \$4 per gallon, but there is still a financial gain to be had. (November 15, 2014)

11/17/2014

NATURAL GAS

EXPLORATION

UNITED KINGDOM:

Major gas field discovery - Teesside could enjoy jobs boost from development

The discovery of a major new North Sea gas field provides a huge opportunity for the Teesside economy, industry chiefs have said.

Tests carried out by Centrica Energy have showed “very positive” flow rates of gas for the Pegasus field, 130 miles off Teesside’s coast.

The development could create hundreds of jobs, both direct and in the supply chain. While Centrica says it is too early to confirm potential employment figures, it is thought Pegasus is around a tenth of the size of the neighbouring Cygnus development hub, which is estimated to create 1,000 direct and 3,000 indirect jobs at peak production.

The company has not yet confirmed whether gas would be brought ashore to Teesside but industry chiefs are hoping there could be spin-offs for key engineering, marine and process sector industries on Teesside - and the UK’s ability to keep the lights on.

Paul Livingstone, business development manager at NOF Energy, said: “Teesside, along with the wider North-east, is perfectly placed to support operations in the Pegasus field, both in terms of geography and skills.

“The area contains some of the most experienced and talented offshore industry supply chain companies, which can deliver the kind of cost-effective products, skills and services that Centrica Energy will require.

He added: “This discovery highlights the continuing role of the North Sea to the UK’s energy mix and the opportunities it is creating for the supply chain.”

Jerry Hopkinson, from PD Ports, said: “Infrastructure will be needed for this project - and that’s got to present an opportunity to the engineering businesses on Teesside.

“Similarly, for Teesside and Teesport in terms of servicing both the development and on-going operation of the gas field.

“The economics of this type of project will demand a logistics chain that’s as short as possible; the shorter the linkages, the lower the costs.

“It’s early days, we need to understand more about the development and timescale.

“But we have world-class engineering capabilities in this region, excellent deepwater ports, and our capacity to service the gas field from a marine perspective, provide the technological expertise and capability to develop it is second to none.

“We will be keen to take part. This is good news for Teesside.”

Stan Higgins, chief executive of NEPIC (North East Process Industry Cluster) said: "Anything that strengthens the UK's energy self-sufficiency is going to be better, because we have to purchase so much of our energy from abroad.

"The process industry is reliant on gas - certain parts are very reliant - anything that will enable us to get over any peaks and troughs in supply, caused by problems in more unstable regions of the world, is good.

"We have one of Europe's biggest and deepest dry docks - and best support facilities - which would be very useful. We are one of the very few UK places where offshore gas arrives and is treated, ready for use by the consumer, we have the on-shore gas handling facilities to do that."

Centrica Energy has suspended the Pegasus West well, while it assesses the data gathered, working with partners to decide the most 'cost-effective' means of developing the field.

The company is the majority shareholder for both Cygnus and Pegasus.

A spokesperson for Centrica said: "It's great to be able to confirm the Pegasus discovery, as it proves once again that there are many years left in the North Sea.

"Cygnus as a hub development is much bigger - it's the largest discovery in the Southern North Sea for 25 years." (November 29, 2014)

11/20/2014

OMAN:

Oman Plans to Spend \$2 bn on Gas Exploration

Petroleum Development of Oman (PDO) plans to invest between \$1.5 billion and \$2 billion from next year for gas exploration, the company said Monday.

"We are currently producing some 90 million cubic feet, but from next year we are going to invest between \$1.5 billion and \$2 billion for gas exploration," Raul Restucci, PDO's Managing Director told Times of Oman.

The Sultanate's national oil company has recorded an average production of 1.25 million barrels of oil equivalent per day in 2013. Also, the total natural gas-developed reserves increased by 1.3 trillion cubic feet last year, Times of Oman said.

Oman is working on some major gas projects. Sanctioned in December 2013, the Khazzan project represents the first phase in the development of one of the Middle East region's largest unconventional tight gas plays.

Khazzan has the potential to be a major new source of gas supply for Oman for many decades, according to BP.

BP is the operator of Block 61 and holds a 60% interest. The Oman Oil Company for Exploration and Production (OOCEP) holds remaining 40% interest.

OOCEP is also preparing to bring its Abu Butabul tight gas field in Block 60 into commercial production. The project will be Oman's first unconventional hydrocarbon project to become operational. (November 18, 2014)

11/18/2014

TURKEY:

Turkey signs increased gas deal with Algeria

Turkey and Algeria are to develop new energy projects in gas exploration, renewables and electricity transmission.

ALGIERS

Turkey will increase gas imports from Algerian under the terms of a renewed gas trade agreement signed in Algiers on Wednesday.

Under the terms of the new contract, which will run for ten years, Turkey will import 4.4 billion cubic meters of liquefied natural gas per year from Algeria, up from 4 billion per year under the previous contract.

The increase will slightly raise Algerian imports' share in Turkey's total energy mix, which has been nine percent previously.

Turkish Energy Minister Taner Yildiz signed a joint declaration on cooperation in energy with Algeria's Minister of Energy, Youcef Yousfi. Turkish President Recep Tayyip Erdogan also attended the ceremony.

Turkey has imported 4 billion cubic meters of liquefied natural gas, or LNG, every year from Algeria since 1988. The contract was set to expire by the end of this year.

The declaration also plans cooperation in different fields of the energy sector between two countries, according to Energy Ministry officials.

Turkey and Algeria will develop new projects on natural gas exploration and production, collaborate on renewables, with a priority for solar energy, and cooperate in electricity transmission and system operations, the agreement says. (November 19, 2014)

11/20/2014

PRODUCTION

ANGOLA:

Eni and Sonangol to jointly develop oil and gas projects, offshore Angola

Eni and Sonangol have signed an agreement to jointly develop oil and gas projects, offshore Angola.

The deal will see both firms establish a joint team to study the potential of the non-associated gas present in the Lower Congo Basin, a hydrocarbon production area located offshore Angola.

"In the coming years, Angola will become one of the most important oil and gas hubs for the Sub-Saharan activities of Eni."

The companies will analyse several gas valorisation options both internationally and in the domestic market.

Both firms will also develop projects on the mid-downstream business, which will be undertaken in Angola.

Eni CEO Claudio Descalzi said: "This agreement will strengthen the prolific cooperation between Eni and Sonangol, confirming Angola as one of the key countries for the company's organic growth strategy."

"In the coming years, Angola will become one of the most important oil and gas hubs for the Sub-Saharan activities of Eni."

Eni, which has been operating in Angola since 1980, presently has an equity production of about 80,000 barrels of oil equivalent per day (boepd).

The company will also work as operator of the start-up of the deepwater Block 15/06 West Hub project, which is expected to commence by the end of this year.

Eni operates the Block 15/06 with a 35% interest, while Sonangol P&P and SSI Fifteen hold 30% and 25% stakes respectively; Falcon Oil Holding Angola and Statoil Angola each hold 5% stakes in the block. (November 19, 2014)

11/20/2014

KAZAKHSTAN:

New gas field put into operation in Kazakhstan

On the eve of the Day of First President Zhambyl region has commissioned the new gas field "Zharkum", the press service of the regional administration informs.

The ceremony was attended by the Mayor of Zhambyl region Karim Kokrekbaev and the General Director of "AmangeldyGaz" Kaldybai Tulekeshev.

There have been commissioned gas gathering stations and the first stage of "Zharkum - Amangeldy" pipeline with the capacity of 210 million cubic meters per year. The pipeline will deliver gas to the central processing facilities of the field.

Zharkum gas field is located 215 km from the town of Taraz. It has significant proven geological reserves of gas and condensate. According to experts, gas reserves reach 1.27 billion cubic meters and gas condensate - 41 thousand tons. Recoverable reserves of dry gas equal to 833 million cubic meters, and 26 thousand tons of condensate.

"KazTransGas" will carry out pilot development of Zharkum field. At the initial stage, the gas will be extracted from 4 gas wells. (November 28, 2014)

11/28/2014

UNITED ARAB EMIRATES:

UAE to invest in expanding oil capacity despite low prices: minister

The UAE will continue to invest in expanding its oil and gas production capacity to meet global demand despite falling oil prices, UAE energy minister Suhail al-Mazrouei said this week.

"We will also work with OPEC to stabilize the supply-demand equation. ... We don't see any need for politicizing the oil and gas pricing mechanism," al-Mazrouei said at an energy conference in Abu Dhabi, according to state-run WAM news agency.

OPEC meets November 27 in Vienna to discuss possible production cuts after oil prices dropped below \$80/barrel in recent weeks.

The minister said world demand for oil and gas was rising 1-1.5% annually. To meet this, Mazrouei reiterated that the UAE is investing more than \$70 billion to lift its production capacity to 3.5 million b/d by 2017. Mazrouei said the current slump in global crude prices "will not bode well for sustained investment by small and medium oil and gas companies, particularly in shale gas" because of high production costs.

He estimated UAE's own annual demand growth for power at 6%, adding that the country will depend on three different resources to diversify its energy mix to meet the demand.

Natural gas will remain the primary feedstock for power generation, contributing 70% by 2020, while nuclear power and renewable energy will contribute 25% and 5%.

Abu Dhabi is currently commissioning its \$11 billion Shah gas development, after five years of construction.

The major sour gas project is expected to produce 500,000 Mcf/d of gas. Another 500,000 Mcf/d will come from the \$10 billion development of the Bab sour field in 2018.

At the same time, the emirate is also planning to complete the expansion of its Integrated Gas Development by 2019, which will increase offshore gas production to 1.6 Bcf/d from 1 Bcf/d currently.

The UAE currently has the capacity to import around 3 million mt/year of LNG at Dubai's Jebel Ali terminal.

By the middle of 2018, it will be able to import another 9 million mt/year at its planned Emirates LNG facility in Fujairah.

The new facility's capacity will be expanded to 15 million mt/year eventually, taking the UAE's total import capacity to 18 million mt/year. (November, 19 2014)

11/19/2014

TRANSPORT - DISTRIBUTION

ISRAEL:

Israel pitches 'massive' natural gas pipeline plan to Europe

Silvan Shalom proposes multi-million euro idea to fellow energy ministers in Rome; project would reduce EU dependence on Russia.

Israel has proposed that EU countries invest in a multi-billion euro pipeline to carry its natural gas to the continent, noting that the supply from Israel would reduce Europe's current dependence on natural gas from Russia.

A proposal for the "massive" project was introduced by Israel's Energy Minister Silvan Shalom to energy ministers from Euro-Mediterranean countries who met in Rome earlier this week, Israel's Channel 2 reported on Thursday.

It said the project would require a multi-billion euro investment from Europe to build a pipeline from Israel's Mediterranean coast to Cyprus, from where the gas would be carried on to Greece and Italy.

The TV report said Cyprus, Greece and Italy were all supportive of the idea, and that Israel would make a formal presentation of the project to European representatives in Brussels in three weeks' time.

It would be cheaper for Europe to work on a supply route with Egypt, but this could expose the Europeans to instability because of the unpredictable political developments in Egypt, the report noted. Similarly, a pipeline from Israel to Turkey would be less expensive, but bilateral relations rule this out so long as Recep Tayyip Erdogan, a prominent critic of Israel, holds power there.

In September, Israel signed a deal to supply Jordan with \$15 billion worth of natural gas from its Leviathan energy field over 15 years. The deal was Israel's largest collaboration with Jordan to date, and will make Israel its chief supplier. Representatives of the gas companies involved, Delek Group Ltd. and Nobel Energy Inc., were in Jordan to sign the agreement.

Shalom hailed that deal as "a historic act that will strengthen the economic and diplomatic ties between Israel and Jordan." Thursday's report underlined that Israel hopes a natural gas partnership with Europe would also boost diplomatic relations with the EU, which are strained by major differences over policy on the Palestinians.

Israel decided last year to export 40 percent of the country's offshore gas finds, and has since also signed a 20-year, \$1.2 billion deal with a Palestinian firm. In June it signed a letter of intent to supply energy to an Egyptian facility as well.

Israel began pumping natural gas in March 2013 from the Tamar deposit — discovered in 2009 and located some 90 kilometers (56 miles) west of Haifa — which holds an estimated 8.5 trillion cubic feet of natural gas.

In addition to Tamar, in 2010 an even larger deposit, Leviathan — which boasts an estimated 16-18 trillion cubic feet of gas — was discovered 130 kilometers (81 miles) west of Haifa. It is expected to become operational in 2016. (November 21, 2014)

11/21/2014

SERBIA - HUNGARY:

South Stream project is of interest to whole Europe — Serbia, Hungary foreign ministers

The whole of Europe has a common interest in building the South Stream gas pipeline, Serbian Foreign Minister Ivica Dacic and his Hungarian counterpart Peter Szijjarto said after talks on Friday.

“We are going to implement this project because we are convinced that it will considerably improve the **safety of gas supplies** to Central Europe. That is why we believe that the South Stream project is of European interest,” Szijjarto said.

According to him, Hungary has three major interests in Central Europe: peace, reliable energy supplies and improvement of economic ties. Reliable energy supplies can be achieved, among other things, through diversification of gas supply routes, Szijjarto said. He also called on Russia and the European Union to resume a dialogue on the South Stream project.

Serbian Foreign Minister Ivica Dacic, in turn, confirmed that the construction of the South Stream project is in the interests of both countries. He added that the cost of works in Serbia was estimated at more than **\$40 million** and that the country would annually receive hundreds of million euros worth of gas transit revenues.

“That is why we insist that the European Union work out a common approach to all projects without double standards when it comes to projects that concern some other countries which are not obliged to meet the requirements that are currently being imposed on the South Stream project,” Dacic said.

He added that Serbia wants Europe to be stable and promised that Serbia which is taking over the OSCE rotating chairmanship in 2015 will do everything possible to include all the parties concerned in the solution of these problems.

South Stream is a global infrastructure project of Russia’s gas giant Gazprom for laying a gas pipeline with a throughput of **63 billion cubic meters** (part of it under the Black Sea) to countries in Southern and Central Europe with an aim to diversify export routes for natural gas and warding off transit risks. The ground stretch of the South Stream pipeline is to cross Bulgaria, Serbia, Hungary, Slovenia and Austria.

In the autumn of 2013, the European Commission launched an anti-monopoly investigation into the South Stream project on suspicion that it disagrees with the rules of the EU’s Third Energy Package under which companies are supposed to separate generation and sales operations from transmission networks. (November 23, 2014)

11/24/2014

TURKEY:

TANAP to ensure Europe's energy security – Turkish minister

The Trans-Anatolian gas pipeline (TANAP) project is a step towards ensuring the energy security of European countries, as well as Turkey, TRT Haber TV channel quoted Turkish Minister of Energy and Natural Resources Taner Yildiz as saying on Nov.20.

The minister said TANAP is one of the global projects. "The implementation of the TANAP project will be a serious step towards resolving the energy security problems."

Yildiz also expressed gratitude to Azerbaijan for the implementation of this project.

The TANAP project envisages gas transportation from Azerbaijan's Shah Deniz field to Europe via Turkey.

The initial capacity of TANAP is expected to reach 16 billion cubic meters of gas per year.

Around six billion cubic meters of the total volume of gas to be produced as part of the Stage 2 of development of the Shah Deniz field will be delivered to Turkey and 10 billion cubic meters to Europe per year. In the future, the pipeline may be expanded up to 31 billion cubic meters a year.

Plans are to commission the TANAP pipeline in 2018. The project cost is estimated at \$10-11 billion.

Contracts for the supply of pipes for the construction of TANAP were signed in Turkey's Ankara city on Oct.14 with six Turkish and one Chinese company.

Turkey's Mannesmann-Noksel-Erciyas and Umransu-Emek consortiums, Toscelik Profil ve Sac Endustrisi company, as well as a Chinese contractor Baosteel Europe won the tender for the supply of pipes for the TANAP project.

All the companies which will participate in the construction and supply of the TANAP project in Turkey, are exempt from VAT. (November 20, 2014)

11/21/2014

TURKMENISTAN TO AFGHANISTAN-PAKISTAN-INDIA:

TAPI consortium to choose project development leader

The countries involved in the **Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline** project, will choose a project development leader after an international tender is announced in early 2015, the Turkmen government said Nov. 21.

The 19th meeting of the TAPI steering committee took place in Ashgabat. It consisted of the ministers of the countries participating in the project, representatives of the Asian Development Bank (ADB), which is a TAPI transactional advisor, a statement says.

"A decision was made to hold additional consultations on assessing and choosing the potential partners and a **leader of the consortium** before **February 2015** given the completion of the preparatory work for the implementation of the TAPI project and all recommendations and statements," a statement says. "After these procedures, the steering committee will announce an international tender to choose a leader of the "TAPI Ltd" consortium."

The participants of the meeting confirmed the readiness of their countries for the beginning of construction work, the great interest of the sides in the rapid implementation of the TAPI gas pipeline project and Turkmen natural gas supply to South Asia's markets, a statement says.

The sides held the meetings of the "TAPI Ltd" Board of Directors and a technical working group in Ashgabat.

They coordinated the issues related to the update of the project feasibility study and "TAPI Ltd" registration.

"The matter rested in attracting the leading foreign companies having the necessary technical capabilities, advanced technologies and practical experience in the construction of pipelines," a statement says.

"The implementation of the TAPI project is part of Turkmenistan's energy strategy," Turkmen Dovlet Khabarlary state news service reported. "It envisages the diversification of export routes and aims at ensuring safe energy supplies to the world markets.

Turkmengaz State Concern, Afghan Gas Corporation, Pakistan's "Inter State Gas Systems (Private) Limited" and Indian "GAIL (India) Limited" with equal shares have recently established "TAPI Ltd." operating company. It will own the pipeline in the future.

The project implementation can begin in 2015, the sides said. The Ashgabat interstate agreement of the member-states is a basic document signed in 2010. The TAPI capacity will be up to **33 billion cubic meters of gas per year**. (November 21, 2014)

11/24/2014

ISRAEL:

The most practical route for the delivery of Israeli natural gas to Europe is through Turkey

Israel plans to export its natural gas by one of two possible routes to reach the European market, according to energy experts.

While one of the options is to deliver the gas through southern Cyprus to Greece and to Europe, the other viable option is to use the route through northern Cyprus to Turkey and then to Europe.

"Delivering the Israeli gas through southern Cyprus is not feasible," said Fazil Can Korkut, Ambassador of the Turkish Republic of Northern Cyprus to Turkey, at an event to commemorate the foundation of Turkish Republic of Northern Cyprus in Ankara.

"The cheapest and most practical way is to transfer the gas to Europe through Turkey," he added.

Both Israel and Egypt held trilateral meetings with Greece and the Greek Cypriot administration in November to discuss a strategy for the natural gas resources in eastern Mediterranean.

While Egypt needs natural gas imports to satisfy its rising demand for energy, Israel is said to have vast untapped gas resources at the Leviathan field, located off the coast of Israel and southeast of Cyprus.

The Leviathan field is estimated to have 510 billion cubic meters of natural gas reserves, while Cyprus' Aphrodite gas field has 200 billion cubic meters, according to the U.S. Energy Information Administration data. (November 16, 2014)

11/17/2014

UKRAINE:

Why is Statoil interested in our gas pipelines?

The government of Ukraine is prepared to allow Norwegian companies to invest in the gas transportation system (GTS). According to Ukraine's Prime Minister Arsenii Yatseniuk, the state intends to adopt more laws that will enable Statoil, a Norwegian gas transportation company, to take part in the bidding for managing the Ukrainian pipelines and underground gas storages.

"If Norwegian energy sector companies are prepared to invest in the Ukrainian gas transportation system, the government of Ukraine is prepared to move a special bill that will enable not only EU and US, but also Norwegian companies to directly invest in the Ukrainian GTS and has storages," Yatseniuk said, addressing a Ukrainian-Norwegian forum.

This seems to be a good idea. The more wishers there are, the better will be the results of the project to set up a GTS management consortium. Yes, experts say, but the concrete case of a Norwegian company has a "but" which the Ukrainian government cannot help noticing. The details are in the following commentary by Yurii KOROLCHUK, member of the Supervisory Board, Institute of Energy Strategies:

"Premier Yatseniuk's proposal that a Norwegian company take part in the GTS leasing is an act of despair. The despair is caused by the lack of real interest on the part of EU companies. The US is standing totally clear of this process, although it promised to help search for an investor.

"Tellingly, Ukraine is inviting Norway, a country that is not an EU member and requires the creation of new conditions, to take part in the leasing of the GTS. Actually, Yatseniuk, who does not represent now either the coalition or the majority in the new parliament, has readily promised [the creation of special conditions].

"At first glance, Norway looks attractive and promising from the viewpoint of the financial resources it has. But leasing the GTS is not interesting to Statoil either from the angle of benefits for its own business or from the angle of an attractive investment.

"Ukraine's GTS cannot be used to transport gas from the North Sea shelf to Statoil's customers in Western Europe.

"As a common financial investment, this option is not lucrative for Statoil because the GTS of Ukraine is already reducing the transit of Russian gas, which in turn cuts down its transit earnings, and needs at least 5 billion dollars to modernize.

"After all, Norway is facing the necessity to stop the fall of its gas and oil production, so the free funds will be channeled, above all, to this sector rather than for the purpose of leasing or buying Ukraine's GTS.

"Finally, from the viewpoint of technological operation, **Statoil mostly deals with 8,100-km-long shelf gas pipelines. At the same time, Ukraine's GTS is more than 22,000 km of gas mains alone.** Ukraine will reap no benefits from the Norwegian experience.

“But even if we assume that Norway leases the GTS of Ukraine, this will still raise a question: why is Statoil meddling in this? For, according to Naftohaz Ukrainy representative Yurii Vitrenko, 49 percent of Ukraine’s GTS will be put on sale in two or three years’ time. There is no sense for Statoil to deal with Ukraine’s GTS problems for a couple of years in the capacity of a leaseholder if an altogether different company will be the buyer.

“I hope there are no adventurers in the government and Naftohaz, who will lead Ukraine’s GTS into a dead end. And, to begin with, they should decide whether they will take the GTS of Ukraine down the road of leasing or selling.

“In the long term and from a strategic angle, Ukraine’s GTS is a direct rival to Norway, for it transports to the EU the Russian gas that competes with that of Norway in Europe.

“Moreover, for Ukraine, Norway’s Statoil is a mirror reflection of Russia’s Gazprom. Gazprom shows no interest in the development of Ukraine’s GTS because the Russian strategy is putting emphasis on bypass gas pipelines (Nord Stream, Blue Stream, and South Stream). Statoil is also uninterested in the development of Ukraine’s GTS, for it is important for Norway that as little as possible Russian gas should come to Europe. It is Germany, Austria, Italy, the Czech Republic, and, to some extent, Turkey that may be interested in the development and functioning of Ukraine’s GTS. A ‘pool’ of all or some of these countries might evince interest in leasing or buying a part of Ukraine’s GTS.” (November 27, 2014)

11/27/2014

SUPPLIES - IMPORTS - EXPORTS

CHINA:

100 bcm of gas delivered by China-Central Asia pipelines

Natural gas import to China through the China-Central Asia Gas Pipelines had exceeded 100 billion cubic meters (bcm) by 10:55 p.m. Thursday, China National Petroleum Corp. (CNPC) announced Friday.

As a part of major developments for the "Silk Road Economic Belt", the China-Central Asia Gas Pipelines have a further three lines in production. The construction of Line D started in September this year.

The 1,000-kilometer long Line D, one of China's major energy cooperation projects in central Asia, will run from Turkmenistan across Uzbekistan, Tajikistan and Kyrgyzstan to China, with an expected delivery capacity of 30 bcm of natural gas every year.

Cao Yaming, general manager of CNPC's central Asia gas pipelines, said investment in Line D had hit 6.7 billion U.S. dollars and the project would be completed by the end of 2020, when the annual equivalent weight of oil and natural gas imports will stand at 90 million tonnes.

CNPC so far has transported 70 million tonnes of crude oil and 10 bcm of natural gas back to China, and created tens of thousands of jobs in the countries the pipelines travel through. (November 15, 2014)

11/17/2014

EGYPT:

Egypt looks to import Cypriot natural gas

Egypt's petroleum minister says his country is speeding up talks with neighboring Cyprus to import natural gas for its own domestic use and for possible re-export to other countries.

Sherif Ismail says that Egypt can receive as much gas quantities as Cyprus can export.

The gas from a field off Cyprus' southern coast that's **estimated to hold 3.6 trillion to 6 trillion cubic feet of the fossil fuel could be piped directly to Egypt's processing facilities and used to meet the country's huge energy needs.**

Ismail said the gas could also be processed so that it can be exported to other countries.

Ismail spoke Tuesday after talks with Cypriot Energy Minister Giorgos Lakkotrypis. (November 25, 2014)

11/25/2014

EUROPE:

EU expects stable gas supply

The European Union expects stable gas supplies this winter under a deal by Russia and Ukraine, a senior EU energy official said, even while Moscow has yet to resume shipments and Kiev has yet to pay in advance as agreed.

Russia provides a third of European Union gas supplies, and half of that volume flows through Ukraine. Previous spats between Kiev and Moscow led to temporary supply cuts to Europe.

Ukraine and Russia signed an agreement, brokered by the European Commission, at the end of October to cover gas supplies over the winter as a temporary solution to a long-standing price dispute between Moscow and Kiev.

But Russian gas producer Gazprom has not resumed shipments, suspended in June, and Ukraine has not provided the pre-payment that Moscow says is a condition for restarting supply.

Sefcovic's comments were among the first from newly appointed members of the EU executive body on the gas supply issue.

Under the EU-brokered deal, Ukrainian state firm Naftogaz has agreed to pay Gazprom \$2.2 billion in debt and upfront payments before supplies resume.

Naftogaz has transferred the first \$1.45 billion tranche of the payment, but it has not said when it will place new orders, nor for what volume.

Naftogaz Chief Executive Andriy Kobolev said on Monday that Ukraine planned to buy 1 billion cubic meters (bcm) of gas from Russia by the end of the year and up to that amount monthly through the winter.

Ukraine's gas storage sites currently hold around 3.5 months of supply, depending on the weather.

Kiev, meanwhile, has declared a state of emergency in its electricity market due to a shortage of coal, rather than gas, after conflict in eastern Ukraine has cut off supplies.

Moscow says Kiev owes state-controlled Gazprom up to \$5.4 billion for gas, but a tribunal in Sweden will rule on the exact amount of Ukraine's debt. (November 27, 2014)

11/27/2014

EUROPE:

EU Predicts Stable Gas Supply For Winter Despite Ukraine-Russia Payments Conflict

The European Union expects a **steady gas supply** to the continent during the winter following an interim deal between Ukraine and Russia, Reuters reported, citing a senior EU energy official. The statement comes despite Russia not having resumed its gas shipments and Ukraine yet to make payments to Russia.

"So far, everything is in order," Maros Sefcovic, the European Commission's new energy chief, said, according to Reuters, adding: "We are in close and, I would even say, everyday contact with both Ukraine and the Russian Federation, and I hope that we will have no problem with gas this winter."

Russia provides a third of the EU's gas supplies and half of that is transported through Ukraine. Andriy Kobolev, CEO of Naftogaz, had said on Monday that Ukraine plans to order 1 billion cubic meters of gas from Russia by the end of 2014, and plans to increase that amount every month through the winter season. Ukraine's storage facilities currently have 3.5-months worth of stock, depending on the weather, according to Reuters. (November 27, 2014)

11/28/2014

BELARUS:

Gazprom to supply more natural gas to Belarus in Q4 2014

AO Gazprom will supply over 6 billion m3 of natural gas to Belarus in Q4 2014 or roughly 46% up from Q3 2014, the public relations service of OAO Gazprom Transgaz Belarus told BelTA.

This year Belarusian consumers will get a total of about 20 billion m3 of natural gas just like it was planned, said the source.

Asked about transit, representatives of Gazprom Transgaz Belarus told BelTA that this year 45.4 billion m3 of natural gas will be transported via Belarus, including over 11 billion m3 in Q4 2014. In 2013 nearly 49 billion m3 of natural gas was transported via Belarus.

The source said that a regular session of the supervisory board of OAO Gazprom Transgaz Belarus took place on 18 November. The session focused on reports concerning the development of the justification of investments for the enhancement of the gas transport system in the Republic of Belarus.

The supervisory board also heard out reports concerning diagnostics, overhaul and maintenance operations on the gas transport system in 2014 and the relevant draft plan for 2015-2017. The session approved the corrected budget of OAO Gazprom Transgaz Belarus for 2014 and reviewed the draft investment program for 2015-2017.

In April 2013 OAO Beltransgaz was officially renamed into the public joint-stock company Gazprom Transgaz Belarus, with Russian OAO Gazprom owning all the shares. The gas transportation system of the company in Belarus comprises 7,870km of trunk pipelines and gas pipeline branches, 13 compressor stations, 224 gas distribution stations, seven gas-measuring stations, and 27 automobile gas refueling compressor stations. The company also operates three underground gas storage facilities: the Osipovichskoye one and the Pribugskoye one that use water-supplying structures and the Mozyrskoye one that uses rock salt deposits. The trunk pipelines, which are located in Belarus, are used to deliver Russian natural gas to Russia's Kaliningrad Oblast, to Lithuania, Ukraine, and Poland. (November 19, 2014)

11/20/2014

IRAN - PAKISTAN:

Iran Would Not Terminate Gas Deal With Pakistan

Iran's oil minister has rejected speculations that Iran would withdraw from gas deal with Pakistan, reports Iran's Mehr News Agency (MNA).

Bijan Namdar Zanganeh told reporters that Iran was prepared to start its gas exports to Pakistan. "Pakistan has signed a deal to **import 21.5 million cubic meters of natural gas daily** from Iran and by the **beginning of 2015**, it should start receiving this amount of gas according to agreement," he said.

However, Pakistani officials had ascribed their failure in construction of even single cubic meters of gas pipeline in their soil to international sanctions, and according to provisions signed in the agreement, it would **pay US\$3 million to Iran in compensation for each day delay in its pipeline inauguration.**

Oil ministry officials still have not commented about Pakistani side's claims. Amid uncertainties created by Pakistanis' failure in construction of pipeline, experts from both sides have speculated that the gas deal would be suspended, which Zanganeh rejected these speculations, saying that Iran's daily production of **natural gas increased 100 million cubic meters, bordering 600 million cubic meters daily.**

Oil minister emphasised that Iran was prepared to start gas exports to Pakistan; "the operation to construct pipeline to Pakistani borders approaches final stages, and whenever Pakistanis construct their domestic gas pipeline network, Iran would start gas delivery to eastern neighbour."

On Pakistanis' recent statements relating sanctions to gas agreement with Iran, Zanganeh told Mehr News that the Islamic Republic of Iran had been committed to its obligations made in gas deal with Pakistan, and it expected Pakistan to remain committed to its obligations as well.

"Mere remarks would not be criteria for action, but provisions made in the draft of the agreement would guide the next steps," said the oil minister.

After so many negotiations with Iran's oil ministry officials, Pakistanis ultimately hit a gas import **agreement to buy 21.5 million cubic meters of natural gas daily in 2009.**

According to MNA since four years ago, Pakistan had not constructed gas pipeline on its own soil, and it is predicted that Iran would file lawsuits against Pakistan in international courts and possibly Pakistan would be given verdict of paying Iran in compensations for delayed gas pipeline construction.

Pakistan's Oil and Natural Resources Minister Shahid Khaqan Abbasi arrived in Tehran last week to discuss gas pipeline construction with Iranian counterpart.

Ali Majedi, oil deputy minister for commercial and international affairs had told reporters that Iran had invested **US\$2bn in gas pipeline in Iranian side, and US\$1bn would be required to finish the pipeline.**

If Pakistanis start the pipeline construction project now, it would **take 4 years to complete**; Iran would not support Pakistan in construction of pipeline inside borders," he had told reporters earlier, according to MNA. (November 26, 2014)

11/26/2014

JORDAN:

Jordan \$15b gas deal under threat over intensifying Israeli-Palestinian conflict

A proposal for Jordan to buy \$15 billion (Dh55.08 billion) of natural gas from Israel is facing strong opposition in the kingdom because of the intensifying Israeli-Palestinian conflict, which officials fear could delay or even scupper the deal.

The controversy over the gas deal highlights the high stakes in a sensitive bilateral relationship that sees Jordan's government cooperate closely with Israel on water, security and other issues, despite widespread public antipathy towards Israel and its policies toward the Palestinians.

Following a summit last week convened by the US Secretary of State John Kerry, Jordan's King Abdullah and Israeli leader Benjamin Netanyahu agreed undisclosed measures that cooled tensions over Al Aqsa, for now.

According to Jordanian officials, the 15-year deal to buy gas from Israel's offshore Leviathan reservoir remains on track.

However, they warn that any renewed tensions over Al Aqsa would jeopardise all areas of economic cooperation — tacitly including the gas deal, which awaits final government approval.

Noble Energy of the US and Israel's Delek Drilling initialled the deal — an anchor for their \$6.5 billion Leviathan project — with Jordan's National Electric Power Company (Nepco) in September.

Before the clashes at Al Aqsa began last month, Jordan's energy minister said the country was on track to sign the gas agreement in November. The deal would end Jordan reliance on patchy supplies of gas from Egypt and reduce its annual energy bill by an estimated \$1.4 billion.

However, opposition to the agreement is building among civil society groups and politicians. (November, 20, 2014)

11/21/2014

AUSTRALIA:

Major gas project set for \$1.2b extension

Energy giant Woodside and its partners have **committed \$1.2 billion** to extend Australia's largest oil and gas development.

The Persephone project will be the third development of the North West Shelf project, off the coast of Western Australia, in the past six years.

Woodside said the new development would contribute to the ongoing success of the 30-year-old oil and gas field.

The approval of funds for Persephone comes amid uncertainty about Woodside's future growth, after its exit from the \$US2.7 billion Leviathan joint venture gas deal in Israel in May.

A final investment decision on its other major growth prospect, WA's Browse project, is expected late next year.

"The NWS project celebrated 30 years of domestic gas production and 25 years of LNG exports earlier this year and approval of Persephone is the next step in continuing this success story," Woodside chief executive Peter Coleman said on Thursday.

Woodside will operate Persephone, and holds a 16.7 per cent stake alongside project partners including BP, Chevron, Shell and BHP Billiton.

The project is expected to produce its first gas in early 2018, and will help maintain supply to Woodside's Karratha gas plant.

Woodside shares dropped \$1.09, or 2.8 per cent, to \$38.47, amid further weakness in oil prices. (November 27, 2014)

11/27/2014

TURKEY:

Turkey holds talk for increased gas supply from Russia

Turkish Energy Minister Taner Yildiz and his Russian counterpart Alexander Novak approved a final memorandum agreement which will be signed by heads of states on Dec. 1.

Natural gas talks with Russia to secure price discounts for increased supplies from Gazprom to Turkey are in progress, said Turkey's energy minister on Wednesday in Moscow.

After the thirteenth Turkey-Russia Joint Economic Commission held in the Russian capital, Turkish Energy Minister Taner Yildiz and his Russian counterpart Alexander Novak approved a final memorandum agreement which will be signed by heads of states on Dec. 1.

In a joint press conference after the meeting, Yildiz said that Turkey's natural gas demand is still increasing.

Turkey previously asked for a discount from Russia on the sale of natural gas last month. Gazprom's Deputy Chairman Alexander Medvedev announced that Gazprom was working on a detailed price package in line with the discount request from Turkey.

"We have a proposal for price reductions and we note that we have the right to such a revision," Yildiz said, adding that, Turkey believes Gazprom will offer a price in accordance with market conditions.

"This is a new contract and will be done according to both countries' mutual economic feasibility," he added.

Turkey imported some 45 billion cubic meters of gas in 2013, including 26.6 billion cubic meters from Russia.

During Yildiz's speech, he also spoke about the planned nuclear plant at Akkuyu in the Mersin province on Turkey's Mediterranean coast.

"Akkuyu nuclear plant's environmental impact assessment report was submitted for the approval of the Minister of Environment and Urbanization," Yildiz said.

Akkuyu, the Turkish subsidiary of Russian state-run Rosatom, will construct the country's first nuclear power plant. The company signed an agreement to build and operate the four-reactor nuclear power plant in the Mersin province on Turkey's Mediterranean coast.

The final memorandum of the thirteenth Turkey-Russia Joint Economic Commission will be signed on Dec. 1 by Turkey's President Recep Tayyip Erdogan and Russian President Vladimir Putin at a 'High Level Cooperation Council' meeting in Turkey. (November 27, 2014)

11/27/2014

PRICE

WORLDWIDE:

Natural gas prices holding steady while crude prices tumble

The price of natural gas, which swooned just two years ago to the chagrin of drillers and the delight of manufacturers and utilities, is quietly holding steady or even rising amid a high-profile crude oil price slide.

The gains mostly are seasonal — the price typically rallies or retreats along with winter heating demand — but other factors also are helping natural gas dodge the pressures that have knocked more than 25 percent from the price of crude oil since June.

In fact, analysts said, falling crude oil prices could send gas higher. Natural gas often comes from wells drilled to produce oil. Some of this byproduct, called associated gas, is burned off at the wellhead, but some of it also reaches markets.

If oil production falls because of lower prices, the supply of associated gas on the market will shrink, giving natural gas prices a boost.

U.S. natural gas fell below \$2 per million British thermal units in 2012, thanks both to a torrent of gas flowing from shale plays and a mild winter. This year gas has rebounded above \$4, because of a cold winter and below-normal temperatures so far this fall.

Continued cold weather sent the price up 13 cents to \$4.37 in New York Mercantile Exchange trading Wednesday.

Natural gas prices typically represent a volatile mix of production rates, storage inventories and seasonal demand. It's harder to transport and store than crude oil, which means that some local markets have less flexibility to import gas from other areas or from storage. So prices for gas traded in real-time at various locations can spike quickly in a cold snap.

The futures market, in which buyers and sellers trade contracts for gas sales at later dates, may reflect these moves, but generally its prices aren't as volatile in response to specific events. The benchmark U.S. natural gas price is a contract for delivery the following month at the Henry Hub pipeline and storage complex in Louisiana.

At the most basic level, though, the natural gas market hasn't changed much since technological advances opened up a surge of production from shale rock a little more than five years ago.

"The story about the gas market for the past number of years has been excess supply and tremendous production," said Pearce Hammond, a managing director at energy investment bank Simmons & Co. International.

Nationwide, annual natural gas production jumped to 24.3 trillion cubic feet in 2013 from 18.1 trillion cubic feet in 2005, according to the U.S. Energy Information Administration.

The growth in production has been led by the Marcellus Shale region in Pennsylvania and West Virginia. There, producers focusing mostly on gas have driven production from 2 billion cubic feet per day in 2010 to close to 16 billion cubic feet per day now, according to government data.

The resulting flow of gas has kept prices low and enabled industries to reap the benefits of cheap energy.

Cold has traders bidding

But even when overall supplies are abundant, weather and geography can send natural gas prices on wide swings.

In the mild winter of 2012, benchmark prices slid to near \$1.80.

Earlier this year, by contrast, as the now-infamous polar vortex sent temperatures plunging, markets scrambled to keep up with winter demand. At the Algonquin hub near Boston, with strong winter demand and without sufficient infrastructure links to gas supplies, spot-market prices spiked to near \$78 when the Henry Hub price was around \$8.

Gas suppliers drew their inventories down to decade-long lows — about 1 trillion cubic feet below average winter levels. Those inventories are usually built up in the warmer months and drawn down in the winter.

Since then, suppliers have been working to rebuild inventories.

As the nation experienced its first major cold snap of the fall in recent days, traders bid up the price again, Hammond said.

“People are creatures of our most recent experience,” he said.

At the same time, he added, traders know that falling oil prices are expected to cause many oil production operators to cut back on drilling. If that happens, companies focusing on oil will also be pumping less associated gas - the natural gas that can be produced along with crude.

Still, Hammond said, a pullback or slowing growth in associated gas production wouldn't have much impact on prices until sometime next year. He attributed 90 percent of the recent rally in prices to the colder weather. The price for natural gas isn't expected to move much, he said.

But while analyst models don't have natural gas prices leaving the single digits anytime soon, there is a bit of a range for prices in the coming years.

Michelle Foss, chief energy economist at UT's Center for Energy Economics, said that a cutback in associated gas production could join with an expected increase in demand in the coming years and push the price of natural gas north of \$5.

Demand expected to rise

Consumers already are laying the groundwork for a rise in demand for the fuel over the next decade. Power plants are converting to natural gas from coal, which emits more greenhouse gases when it's burned. Petrochemical makers and other manufacturers are building new facilities to take advantage of the abundant gas.

The Center for Energy Economics has one model that shows gas demand rising from about 70 billion cubic feet per day now to about 109 billion cubic feet per day in 2030. Foss said that the price of gas would fluctuate as higher prices drove more production, but predicted it could trade as high as \$6 by 2017 or 2018.

Simmons & Co.'s demand projections through 2020 follow a similar curve, but the price for gas doesn't rise as high in the near future. If prices were to rise above \$4.50 for an extended period, Hammond said, drillers would open up in plays that aren't seeing much action now. The new gas would drive down prices.

That's a trend that's expected to hold for the coming years as well, said Robert Ineson, a natural gas expert with IHS. Even in existing plays, new wells are seeing sometimes as much as 20 percent to 30 percent gains in efficiency, he said. Those gains could offset the expected decline in associated gas production if oil prices stay low.

Ineson agreed that demand will grow rapidly, but said so far, it isn't growing as fast as producers' ability to pull gas from the ground.

“As much as that prevails and producers hope for higher prices, we keep defeating price pressure with more and more supply,” he said. “Longer-term, medium-term trends — the things we're looking at seem to balance each other out.” (November 25, 2014)

11/25/2014

CONSUMPTION

GLOBAL:

Gas Is Only Fossil-Fuel Loser as Coal Gains Share, Cedigaz Says

Natural gas was the only fossil fuel to experience a slowdown in global demand growth last year as coal and renewables gained market share in power generation, the International Center for Natural Gas Information said.

Demand for gas gained 1 percent in 2013 after rising 2.4 percent a year earlier and 2.8 percent in the decade to 2012, the Paris-based center, known as Cedigaz, said today in an e-mailed report. Coal consumption advanced 3 percent last year and crude-oil usage gained 1.4 percent, said the group, which counts companies from OAO Gazprom to BP Plc among its members.

“As seen in Europe, the double whammy of cheap coal and an increasing share of renewable power seriously undermines the business model of gas-fired power plants,” Cedigaz said. “Even in emerging economies, gas will not displace coal in the power sector without strong policy incentives.”

Gas-fired power plants accounting for almost 30 percent of Europe’s capacity are at risk of shutting or being mothballed as utilities opt to burn cheaper coal, Cedigaz said in June. Europe may run short of power because wholesale electricity prices are too low to encourage spending on new thermal plants, the International Energy Agency in Paris said the same month.

Growth in gas usage is slowing even in Asia, the demand “powerhouse,” Cedigaz said, with consumption in the region advancing 4 percent last year, against 6 percent in 2012. In the U.S., where the heating fuel costs about half as much as in Europe, coal use rose 4.4 percent in 2013 as gas demand from the power industry slid almost 11 percent, the center estimated.

Coal Competition

“Coal is three to five times cheaper than natural gas in gas-importing countries,” Cedigaz said. “Left solely to market forces, gas cannot compete with coal for base-load power and its role is limited to meeting peak-load demand.”

Slowing growth in global natural gas demand also results from “acute” shortages in some producing countries, according to the report. Global marketed production rose 1 percent last year, compared with a 10-year average of 2.5 percent. Reserves gained 0.5 percent to 200.6 trillion cubic meters.

“This slowdown is explained by growing coal-to-gas competition on the demand side and a gas-supply shortfall on the supply side, especially in emerging markets, where the lack of upstream investment is acute,” Cedigaz said. “Egypt, India and countries in the Middle East have seen low, regulated gas prices stimulate gas demand while discouraging the investments needed to boost production.”

Emerging economies faced with the prospects of increasing gas imports and higher state bills will have to carry out market reforms that include reviewing regulated prices, Cedigaz said. That may pose further risks to demand as higher prices make using the fuel less attractive.

“The recent announcement by the BRICs about the launch of a new development bank in response to restrictions by the U.S. and Europe on financing new coal plants abroad is a clear indication that those countries will continue to promote coal in the power sector,” Cedigaz said. “This challenge to the golden age of gas and the fight against climate change will have to be addressed through appropriate policies.”(November 20, 2014)

GENERAL INFORMATION

PAKISTAN - IRAN:

IP gas pipeline project 'nearly dead' due to sanctions

The troubled multi-billion-dollar gas pipeline project between Pakistan and Iran is virtually dead as Pakistan's economic managers have decided to stall the \$7.5 billion project until the international community lifts sanctions against the Islamic Republic, according to a report in the local media.

According to the report, the Pakistani government believes that the project couldn't be implemented under the present geopolitical situation because of Tehran's association with the project.

The government decided the border phase of the project would only be implemented once international sanctions were lifted and Pakistan was in a position to construct and connect its portion of the pipeline with the Iranian pipeline with no concern for sanctions on its companies for receiving gas or making gas payments to Iran.

The decision-makers in a meeting of the Economic Coordination Committee (ECC) held on October 2 had noted that since phase-II would comprise construction of an approximately 80-kilometre long pipeline, it would require little time for completion, sources said.

The meeting was informed that a gas sales and purchase agreement (GSPA) between the Inter-State Gas Systems Pvt Limited (ISGS) from Pakistan and the National Iranian Oil Company (NIOC) was signed in June 2009.

Despite Pakistan's best efforts, the project repeatedly hit snags due to the international sanctions imposed on the Islamic Republic for its controversial nuclear programme. Iran's association with the project and possible risk of violating sanctions has scared away potential financiers, reputable international suppliers of crucial equipment and contractors.

Pakistan's economic managers were also informed about Iran's unilateral withdrawal from the government-to-government cooperation agreement and the \$500 million financing for the construction of Pakistan's portion of the pipeline. This had created a force majeure situation for Islamabad and accordingly the matter was taken up with Tehran as per the provisions of the GSPA.

It was also stated that the Gwadar-Nawabshah LNG terminal and pipeline project had been planned keeping in view any future developments in the IP project.

The pipeline would meet growing needs of the energy-starved Pakistan and could also be utilised to link up to the Iranian border in future.

"As work of pipeline route has already been done for the IP project, it has been envisaged that the same specifications should be utilised for this project," an official of the Ministry of Petroleum and Natural Resources said, adding that this project would provide capacity of up to 500mmcfcd of LNG-based gas supply which could be used to cater for the needs of public and private sectors.

It shall also serve as a means to realise the objectives of the IP project for the import of substantial qualities of urgently needed natural gas within three years. After detailed deliberations, the ECC approved in principle the Gwadar-Nawabshah LNG terminal and pipeline.

Officials of the Ministry of Petroleum and Natural Resources said that proposals for this purpose had been shared with Iranian authorities who would respond after discussing with their high-ups. (November 18, 2014)

PAKISTAN - RUSSIA:

Pakistan, Russia agree on energy cooperation

Pakistan and Russia have expressed their willingness to cooperate in different energy related projects including the oil and gas exploration and modernization of infrastructure for the mutual benefit of the two countries.

The prospects of cooperation to this effect were discussed during the third session of Pakistan-Russia Joint Working Group (JWG) on Energy held in Moscow from November 20 to 21, according to a message received here from Moscow on Friday.

The Pakistan delegation was led by Ambassador to Russia, Zaheer A. Janjua, and included representatives of the Ministry of Water, OGDCL and Inter State Gas Services Limited.

The Russian delegation was headed by Deputy Energy Minister Yury Sentyurin. The Pakistan delegation also held meetings with the major Russian state enterprises in the field of energy. During the JWG meeting, the two sides expressed willingness to cooperate in various projects in the field **of oil and gas exploration**, construction of **floating LNG terminals**, **North-South gas pipeline** from Gwadar to Nawabshah, sharing of seismic and geological data, enhanced oil recovery, LPG processing facility and gas purification plants, modernization of oil and gas infrastructure, innovative technology solutions in coal industry, and building/renovation of various power generating units in Pakistan, especially those of Russian origin. The two sides also discussed cooperation in trans-national energy projects, including CASA-1000 and **TAPI (Turkmenistan-Afghanistan-Pakistan-India) gas pipeline**.

Pakistan has shown keen interest in attracting Russia state energy enterprises to invest in Pakistan in the energy projects. The government of Pakistan desires to transform the current cordial political relations with Russia into a long-term and substantive economic partnership, especially in the field of energy, for the mutual benefit of the two countries. (November 23, 2014)

11/24/2014

PUBLICATIONS

WORLDWIDE:

IEA World Energy Outlook 2014

The International Energy Agency (IEA) has released its World Energy Outlook 2014, which **projects that global demand for energy will increase 37% by 2040** despite no growth in energy demand from major developed nations throughout the forecast period. Oil, coal and natural gas remain major energy sources throughout the forecast, representing almost **75% of total demand in 2040**, despite coal and oil demands reaching a plateau by 2040. **Natural gas demand, however, increased by over 50% by 2040.**

The global distribution of energy demand changes over the forecast period with energy use generally flat in Europe, Japan, Korea and North America, and rising consumption concentrated in the rest of Asia (60% of the global total), Africa, the Middle East and Latin America. In the early 2030s, China becomes the largest oil consuming country, overtaking the US but in that decade its energy growth slows dramatically. India, Southeast Asia, the Middle East and sub-Saharan Africa begin to take over as the major consumers of global energy demand growth in the later part of the forecast period.

By 2040, approximately 25% of the world's energy supply comes from low carbon sources including nuclear and renewable energy. This growth in share of low carbon sources, however, does not curtail the growth in global energy related carbon dioxide emissions, which increase by 20%

Natural gas supply and demand

Natural gas demand increases by more than 50% by 2040 – the fastest growth rate of the fossil fuels and the only fossil fuel growing significantly to 2040. China and the Middle East are the main regions that push natural gas demand higher, but new regulations in the US limiting CO2 emissions in the electric generation sector increase natural gas consumption as well.

Natural gas production increases everywhere in Europe with unconventional gas production accounting for almost 60% of global supply growth. IEA sees increased global trade in LNG offering protection against supply disruptions – the main uncertainty being whether its price can remain attractive to consumers while providing enough incentives to increase investment and thus production. IEA expects future gas supplies to be relatively secure due to the increasing number of international gas suppliers, a near tripling of liquefaction facilities in the world, and flexibility in the ability of LNG to supply markets where gas is needed most.

Conclusion

Unlike other outlooks, IEA sees greater uncertainty and more renewable energy in future global energy markets. The outlook still expects fossil fuels to support the majority of energy demand in 2040 (approximately 75%), but oil and coal demand plateau at the end of the forecast period due to energy efficiency gains and government regulations. The agency cautions the world regarding complacency in the oversupply of oil because investment in oil wells will be needed in the Middle East in the future.

The IEA projection is also striking because it sees essentially no growth in demand from OECD nations. Historically, there has been a linkage between economic growth and rising energy consumption, although increasing energy efficiency has had substantial success at tempering that relationship. IEA may be indicating that the wealthy developed world is going to get much more efficient and not need the energy that has traditionally fueled economic improvements. On the other hand, it may be implicitly acknowledging that government energy policies and regulations will undermine the economic status of the developed countries should be following its forecasts closely, because serious decisions will need to be made across the public policy front. (November 25, 2014)

11/25/2014

NIGERIA:

Nigeria loses gas investments to other African countries

Nigeria remains Africa's largest gas consumer and producer, but the focus for new gas projects is shifting to the east coast and to the huge offshore discoveries in **Mozambique and Tanzania**, the **World Energy Outlook Special report 2014** just released has stated.

The World Energy Outlook, recognised as the most authoritative source of strategic analysis of global energy markets said that East coast liquefied natural gas export is helped by relative proximity to the importing markets of Asia.

It explained that natural gas resource-holders can power domestic economic development and boost export revenues, but only if the right regulation, prices and infrastructure are in place.

The incentives to use gas within sub-Saharan Africa are expected to grow as power sector reforms and gas infrastructure projects move ahead but, for the moment, as much gas is flared as is consumed within the region.

According to the report, more than 1trillion cubic metres of gas have been wasted through flaring over the years, a volume that – if used to provide power – would be enough to meet current sub-Saharan electricity needs for more than a decade.

It further said that power will shape the future of Africa. According to the report, a severe shortage of essential electricity infrastructure is undermining efforts to achieve more rapid social and economic development.

For the minority that has a grid connection today, supply is often unreliable, necessitating widespread and costly private use of back-up generators running on diesel or gasoline. Electricity tariffs are, in many cases, among the highest in the world and, outside South Africa, losses in poorly maintained transmission and distribution networks are double the world average, the report said.

Building on successful examples of electrification programmes, such as those in Ghana and Rwanda, the total number without access starts to decline in the 2020s and 950million people gain access to electricity by 2040 – a major step forward, but not enough. More than half a billion people, mainly in rural areas, remain without electricity in 2040.

The report also said that Sub-Saharan Africa will start to unlock its vast renewable energy resources, with almost half of the growth in electricity generation to 2040 coming from renewables.

As regards hydropower, the report said that it accounts for one-fifth of today's power supply, but less than 10 percent of the estimated technical potential has been utilised. The Democratic Republic of Congo, where only 9 percent of the population has access to electricity, is an example of the co-existence of huge hydropower potential with extreme energy poverty. Political instability, limited access to finance, small market size and weak transmission connections with neighbouring countries have all held back exploitation of hydro resources.

These constraints are gradually being lifted, not least because of greater regional co-operation and the emergence of China, alongside the traditional lenders, as a major funder of large infrastructure projects. New hydropower capacity in the Democratic Republic of Congo, Ethiopia, Mozambique and Guinea, among others, plays a major role in bringing down the region's average costs of power supply, reducing the share of oil-fired power.

According to the report, other renewables, led by solar technologies, make a growing contribution to supply, with a successful auction-based procurement programme in South Africa showing how this can be achieved cost effectively. Also, geothermal becomes the second-largest source of power supply in East Africa, mainly in Kenya and Ethiopia.

The report also projects that two-thirds of the mini-grid and off-grid systems in rural areas in 2040 will be powered by solar photovoltaics, small hydropower or wind. As technology costs come down, the attraction of renewable systems versus diesel generators grows (although they are often used in combination), especially where financing is available to cover the higher upfront expense. (November 18, 2014)