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### **Ninth CGD bidding round may fetch Rs 70,000 crore investments: CRISIL**

The ninth round of the city gas distribution (CGD) licences auction, beginning this week, may see funds worth Rs 70,000 crore from winning bidders, which is four times the cumulative Rs 15,000-18,000 crore invested till fiscal year 2018, said a report. On offer are 86 geographical areas in 174 districts covering 29% of the population, compared with a cumulative 56 geographical areas awarded in the previous eight rounds in the past 10 years. The new geographical areas on offer include Chennai, Coimbatore, Visakhapatnam, Aurangabad and Bhopal, which have good demand potential. "We expect the ninth round to receive way better response than before because of revised bidding norms, and the push from government through favourable policies," Crisil said, and pointed out the new norms like marketing exclusivity period of eight years which is extendable by two more years, compared with five years earlier, tariff floors to discourage unviable bids, removal of additional bid bond requirement and evaluation of bids based on higher infrastructure creation as winnable factors. Since gas distribution businesses in large cities are more profitable, licences for them are expected to draw greater bidding interest. Bidders are also expected to favour geographical areas adjacent to existing pipeline networks, the report said. "We expect greater participation as the ninth round auction has put a cap on the performance bank guarantee amount," said the report, adding, "In the earlier rounds, the bank guarantee amount became the winning stroke."

Source: ET EnergyWorld

### **City gas distribution licensing: India expects multiple bids on July 10**

The petroleum and natural gas regulator expects multiple bids for at least 90% of the area on offer under the ongoing bidding round for city gas licensing, which is expected to double the volume sold through the city distribution networks in India. Through the current round of bidding, city gas distribution (CGD) volumes are expected to increase from 25 MMSCMD per day to 50 MMSCMD in five years. All public sector undertakings are likely to put in bids in this round, said another official in the know. Mr. Saraf, the Chairman of the Board added while the previous eight PNGRB rounds and pre-PNGRB areas put together covered around 19% of the country's population and 11% of the geographical area, the current round itself will cover 29% of the population and 24% of the area. Based on the current road map, gas distribution in these areas is likely to kick off by April 2019. The selected bidders would get the rights to sell CNG and piped cooking gas in the areas under offer. The bidding round is part of the overall strategy by the government to raise the share of natural gas in India's energy basket. The marketing exclusivity period of companies is increased to eight years, compared to five in the earlier rounds. "We are also looking to create proper infrastructure in place to ensure the availability of gas," he said. To link the eastern region to the national gas grid, the government is working on the Rs 129.4-billion Urja Ganga Gas Pipeline Project now.

[https://www.business-standard.com/article/economy-policy/city-gas-distribution-licensing-india-expects-multiple-bids-on-july-10-118070501095\\_1.html](https://www.business-standard.com/article/economy-policy/city-gas-distribution-licensing-india-expects-multiple-bids-on-july-10-118070501095_1.html)

### **PIL seeks subsidy for CNG vehicles in Gujarat**

Gujarat high court on Wednesday, July 11, issued notice to the state transport commissioner and Gujarat Pollution Control Board (GPCB) over a PIL demanding a subsidy on purchase of CNG-run vehicles to curb pollution. An NGO, Paryavran Mitra, filed the PIL through advocate N M Kapadia, seeking court intervention in phasing out of old vehicles and promoting CNG and electric vehicles in Gujarat. The lawyer submitted that a subsidy should be given to those who buy CNG vehicles after scrapping old diesel and petrol vehicles. The PIL requested directions to the authorities to phase out all 15-year-old petrol and 10-year-old diesel vehicles in the state. It cited the transport commissioner's reply to a legal notice that the government is mulling phasing out all commercial vehicles that are 15 years old. The petition contended that if people scrap old vehicles and opt for CNG and electric vehicles, they should be given relaxation in GST and RTO tax for new purchases. The petition also said that efforts should be made to establish more CNG pumps across the state. In the past, Gujarat HC ordered that all four-wheelers playing in the state be converted to use natural gas and till then follow pollution norms be strictly followed for vehicles run on diesel. After this, the state authorities have to take permission from the National Green Tribunal (NGT) to buy diesel vehicles for government bodies, because the NGT has ordered an interim stay on such purchases.

<https://timesofindia.indiatimes.com/city/ahmedabad/pil-seeks-subsidy-for-cng-vehicles/articleshow/64953277.cms>

### **Adani, IOC, HPCL, BPCL in fray for city gas licence; govt gets 400 bids**

Around 400 bids have come for 86 geographical areas on offer under the ongoing round, the ninth one, for city gas licensing. Tuesday was the final date for these. The technical bids would be opened between Thursday and the week after. Adani Gas, part of Adani Group, has bid for a little more than 50 areas. The three government-owned oil marketing companies Indian Oil Corporation (IOC), Bharat Petroleum Corporation and Hindustan Petroleum Corporation have also bid aggressively for a majority of the blocks. Adani has reportedly bid jointly with IOC in some areas, through an existing joint venture. Other state-owned companies in the fray are GAIL Gas, Indraprastha Gas and Mahanagar Gas. Other major private companies in the race include Subhash Chandra's Essel Group, the Sudhir Mehta-led Torrent Group, Haryana City Gas, Cadilla Group company IRM Energy, Sanwariya Gas and Hiranandani Group. The Petroleum and Natural Gas Regulatory Board (PNGRB) said the current round of bids, once awarded, would bring investment of about Rs 700 billion and "play a significant role in achieving the shift towards a gas-based economy, with natural gas as the next-generation, cheaper and environment friendly fossil fuel". PNGRB had launched this ninth City Gas Distribution Bidding Round on April 12. The 86 geographical areas on offer cover 174 districts (156 completely and 18 partly) in 22 states and Union Territories. This is expected to cover an additional 24% of India's area and 29% of its population. A lot of new players are expected to participate in the current rounds. The government is planning to finalise the successful entities by October, after technical and financial evaluation of the bids. PNGRB said it was trying to expedite the process.

[https://www.business-standard.com/article/companies/adani-ioc-hpcl-bpcl-in-fray-for-city-gas-licence-govt-gets-400-bids-118071001327\\_1.html](https://www.business-standard.com/article/companies/adani-ioc-hpcl-bpcl-in-fray-for-city-gas-licence-govt-gets-400-bids-118071001327_1.html)

## 1,000 electric buses to roll out soon in Delhi

With the aim improve public transportation system and reduce air pollution in Delhi, the city government on Wednesday approved the hiring of a consultant to run 1,000 electric buses. Delhi is the first city in the world to switch to 100% CNG buses. Delhi government has given the charge to Delhi Integrated Multi-Modal Transit System (DIMTS) and asked it to submit its report within three months. "The move will have a big impact on pollution, particularly the particulate matter. However, CNG vehicles emit a lot of NOx (Nitrogen Oxides) and Volatile Organic Compounds, which cause severe health issues and also contribute to smog. Therefore, in the long-term, it is essential that Delhi transitions to zero-emission fuel," said a transport department official. The department will construct bus depots at six locations-East Vinod Nagar, Bawana Sector 5, Burari, Rohini Sector 37, Revla Khanpur and Narela. Electric power for charging of electric buses and the housing of requisite numbers of charging units shall be the responsibility of the concessionaire, who will arrange the infrastructure at its own cost in consultation with discoms. Transport department has also been directed to explore the possibility of Hydrogen buses as suggested by Supreme Court.

<https://www.indiatoday.in/mail-today/story/1-000-electric-buses-to-roll-out-soon-in-delhi-1283358-2018-07-12>

## LPG subsidy a distortion, provide fuel-agnostic cooking sop: NITI Aayog

The NITI Aayog has suggested to the Ministry of Petroleum and Natural Gas that eligible beneficiaries receiving subsidy on liquefied petroleum gas (LPG) should rather be given a 'cooking subsidy' through direct benefit transfer (DBT). The NITI Aayog has suggested to the Ministry of Petroleum and Natural Gas that eligible beneficiaries receiving subsidy on LPG should rather be given a 'cooking subsidy' through DBT. While 4.6 crore LPG connections released under the Pradhan Mantri Ujjwala Yojana (PMUY) have led to smoke-free kitchens in rural India, the NITI Aayog in a note to the ministry said the 'subsidy' attached to LPG is creating distortions in adopting cleaner forms of fuel. The note advocates that piped natural gas (PNG) is the most efficient form of fuel in urban areas and biogas should

be the preferred option in rural areas given availability of raw materials. The note compares pricing and carbon-dioxide emissions for various forms of fuel such as biomass, biogas, PNG, LPG and kerosene. However, the response of the petroleum ministry on the suggestion by the NITI Aayog could not immediately be ascertained by FE. Given the success of the PMUY scheme, finance minister Arun Jaitley announced in the latest Budget to allocate an additional Rs 4,800 crore and increased the target to 8 crore beneficiaries. The scope of the scheme has also been widened. Under the PMUY, the government bears a burden of Rs1,600 per connection and almost an equal amount is borne by beneficiaries, who either pay upfront or take a loan from the OMCs, the programme executors. The loan is repaid by beneficiaries by letting go the subsidy with each refill. However, to push the refill rate, OMCs earlier this year announced that they will defer loan recovery by six months for every existing as well as new beneficiaries. The NITI Aayog believes that PNG will be a better option even in tier-II, tier-III and large villages and the Petroleum and Natural Gas Regulatory Board should promote the cooking fuel in these areas by allowing more

number of distributors..

<https://www.financialexpress.com/economy/lpg-subsidy-a-distortion-provide-fuel-agnostic-cooking-sop-niti-aayog/1241308/>

## Gujarat Gas plans to acquire GAIL's stake in Vadodara Gas

Gujarat Gas Ltd., the country's largest city gas distribution company, is in talks with GAIL Ltd. to buy its entire 50 percent stake in Vadodara Gas Ltd. "The acquisition cost is close to Rs 200-250 crore and is expected to be completed in nearly a month," Gujarat Gas Chairman JN Singh told BloombergQuint in an interview, adding that the acquisition would aid in expanding its footprint in the industrial areas in Gujarat. The news was first reported by newspaper Mint yesterday, quoting three senior government officials close to the development.

Singh said that the company is bidding for the ninth round of the city gas auctions and plans to expand its presence in Gujarat and rest of India going forward. The scheduled to take place mid-July, he added.

Shares of Gujarat Gas rose as much as 1.9 percent to Rs 750 apiece in early trade.

[Source: BloomberQuint/LNG Global](https://www.bloomberquint.com/news/energy/gujarat-gas-plans-to-buy-gail-stake-in-vadodara-gas)

## India makes move toward LNG fuelling infrastructure for major highways

Major oil companies (Petronet LNG, Indian Oil Corporation, BPCL) in India are moving collectively to introduce close to 20 Liquefied natural Gas (LNG) fuelling stations on some of the country's main heavy transportation routes next year. Mr. V. K. Mishra Director, (Finance), Petronet LNG Ltd, says tenders will be issued for this purpose in next 15 days. Mishra says the intention is to establish a pilot project base of some 5,000 LNG-fuelled trucks travelling five leading national highways. The remarks were made while addressing a Conference on "City Gas Distribution in India" under aegis of PHD Chamber of Commerce and Industry on July 12. "Following its successful experiment, this exercise would have a repeat in subsequent year of 2020 for another estimated 5,000 trucks that can run on national highways on LNG with a fuel cost saving of nearly 25% as well effectively addressing the issue of fuel pollution," said Mishra. The development fits within the government's determination to cut fuel costs and address air pollution. Inspiration for the initiative also comes from China's extraordinary embrace of LNG for HDVs, where there are reportedly close to 300,000 LNG trucks operating. Indian manufacturers including Tata and Mahindra are also being encouraged to produce LNG-fuelled vehicles and thereafter buses in order to grow the project base. Officer on Special Duty (OSD) to CMD, GAIL India Ltd. & Chairman, Energy Committee, PHD Chamber, Rajeev Mathur in his observations drove home the point that until EVs become the reality of the day, the natural gas should be encouraged as a better alternate fuel to feed the transportation sector as it would not only save on cost but also immediately address the issue of increasing vehicular pollution.

<http://www.ngvglobal.com/blog/india-makes-move-toward-lng-fuelling-infrastructure-for-major-highways-0713>

## GAIL pipeline works in Kannur in Kerala in final phase

Welding work of pipeline on a stretch of 64 km completed. The ongoing work of laying the natural gas pipeline in the 83-km stretch of the GAIL (India) Limited's Kochi-Mangaluru pipeline project has reached its final phase. The pipeline stretch in the district is from Kadavathur in Trippangottur village to Puthur in Peralam village. Of this 83-km stretch pipeline laying work, welding work of the pipeline in a stretch of 64 kms were completed, a press release informed. The pipeline had been lowered into the trench for a total stretch of 52 kms, the release said adding that the final phase examination work remains to be done in this stretch. The Right of User (RoU) of 20 metre width of land for the stretch of 83 kms was being acquired for the project under the Petroleum and Minerals Pipeline (P&MP) Act, 1962. As and when the pipeline laying works are completed, the acquired width would be restricted to 10 metres and the remaining 10 metres would be handed over to the owners. The release also informed that GAIL had already paid Rs. 38 crore to land owners in payment of crop compensation for the entire 20 metres. Works are progressing to calculate the land compensation for the 10-metre width of land, it added. The gas pipeline passes through five rivers in the district. The work of pipeline laying across the Kuppam river had been completed, while the laying works across

the Perumba, Anjarakkandy, Eranholi and Valapattanam rivers are in different stages of progress, the release said. The pipeline is being laid 10 metres under the river bed, it said adding that horizontal directional drilling machine is being used for laying the pipeline under the river bed. Over 50% of works for setting up the Intermediate Piggings station at Kurumathur had been completed. The works of constructing section valve stations in five locations were also nearing completion, the press release said.

<https://www.thehindu.com/todays-paper/tp-national/tp-kerala/gail-pipeline-works-in-kannur-in-final-phase/article24345513.ece>

## ONGC Board gives nod to explore group restructuring options

The board of state-owned ONGC has given in-principle approval for exploring options for a restructuring of the group firms including the merger of subsidiaries MRPL and HPCL. The India's largest oil and gas producer, Oil and Natural Gas Corp Ltd. has several subsidiaries and joint ventures including two in refining sector - Hindustan Petroleum Corp Ltd and Mangalore Refinery and Petrochemicals Ltd; and two petrochemical units - ONGC Petro Additions Ltd (OPAL) and ONGC Mangalore Petrochemicals Ltd. It also has an overseas investment arm in ONGC Videsh Ltd. The board of the company will take a call on the options sug-

gested by the advisor. ONGC is looking at trimming down the structure by merging some of the subsidiaries. Sources said while there is certainly a case for merger of MRPL with HPCL for not just business synergies but also help avoid penalties from market regulator SEBI for not meeting public float requirement in case of the former. Also, some other units too can be combined. MRPL in a separate regulatory filing said it will seek more time from the SEBI to comply with the listing requirement. In the regulatory filing, ONGC referred to the acquisition of government's stake in HPCL earlier this year as part of government's proposal to create a public sector 'oil major' which will be able to match the performance of international and domestic private sector oil and gas companies. ONGC has in past spoken of benefits of bringing all refining business under one company. HPCL management too has supported taking over MRPL to create India's second-biggest public sector oil refining firm. Meanwhile, MRPL in a separate regulatory filing said its board considered a proposal for enhancement of public shareholding limit to 25 percent by way of preferential allotment. The proposal was under consideration and the board advised to seek extension of time from the SEBI for compliance in view of the ongoing restructuring in the group, said the filing.

<https://www.bloomberquint.com/business/2018/07/02/ongc-board-gives-nod-to-explore-group-restructuring-options>

## ONGC wants \$8.3 price for CBM gas from West Bengal

State-owned Oil and Natural Gas Corp (ONGC) wants a gas price of at least USD 8.35 to break even on producing coal-seam gas (CBM) from Raniganj block in West Bengal after part of its acreage was taken away for building of an airstrip. Of the 350 square kilometer area in North Raniganj coal-bed methane (CBM) block, 7.05 sq km is part of an Airport City Project (BAPL). Top officials said the project BAPL overlaps 7.05 sq km. To compound the problem, Ardhamgram coal block falling in assessment area has been allotted to OCL Iron Steel. This has reduced the scope for ONGC to produce CBM gas from the block," an official said. Two options are under consideration but none of them would be viable unless a gas price of at least USD 8.35 per MMBtu is paid, he said. In the first option, the entire BAPL overlap area is excluded and 67 wells drilled on the remaining area. But the break-even price of gas for the investment made would come at USD 8.77 per MMBtu. The other option is to consider drilling eight deviated and two vertical wells in the overlap area apart from the 67 vertical wells, officials said adding the break-even price of gas under this option comes to USD 8.35 per MMBtu. "The project is commercially not viable on standalone basis. The break-even price in both the options is significantly higher than the expected realisation price," an official said. ONGC is the operator of the Raniganj North block with 74% stake, while the remaining 26% is with Coal India Ltd. The firm has partnerships in other blocks, too, with CIL holding 10 per cent stake in Jharia and Indian Oil Corporation holding 20 per cent stake in Bokaro and North Karanpura. ONGC has sold gas from its Bokaro CBM block for USD 5.77 per MMBtu on a gross calorific value basis. State gas utility GAIL India is buying gas found below coal-seams in the North Karanpura block at USD 5.56 per MMBtu while private sector company Positron Energy would offtake gas from Jharia CBM block at USD 6.12 per MMBtu. ONGC expects peak volumes to touch 3 MMSCMD. Essar Oil and Gas Exploration and Production (EOGEP) has sold CBM gas from its Raniganj block for USD 7.1 per MMBtu. Reliance Industries' Sohagpur gas at today's oil price comes to USD 7.15 per MMBtu on GCV basis.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/ongc-wants-8-3-price-for-cbm-gas-from-west-bengal/64814747>

## “Tell them to change their name from Ministry of Petroleum and Natural Gas to God”

The Supreme Court on Monday launched an unusual attack against the union petroleum ministry, headed by Dharmendra Pradhan, when it asked if the latter considered itself to be ‘God or a super government.’ Angered by the ministry’s laxity in responding to the top court, a bench of Justice Madan B Lokur and Justice Deepak Gupta imposed a fine of Rs 25,000. “Is the Ministry of Petroleum and Natural Gas a God? Are they God? They would respond whenever they want? Tell them to change their name from Ministry of Petroleum and Natural Gas to God”, the bench asked. The bench didn’t stop there. They asked if the petroleum ministry thought that the Supreme Court judges were “unemployed” and they were at the mercy of the ministry. “If they (the Ministry) do not feel like complying with the orders, they do not comply, and think that the unemployed judges of the Supreme Court will give them time. Are we supposed to be at the mercy of Ministry of Petroleum and Natural Gas.” IANS quoted the bench as saying. The judges were incensed when they were informed by Additional Solicitor General ANS Nadkarni, appearing for the Ministry of Environment, Forest and Climate Change, that the Ministry of Petroleum and Natural Gas had only on Sunday apprised them about the issue of ban on import of pet coke, which is used as industrial fuel. “Is MoPNG a super government? Is it above the Government of India? What is the status of MoPNG, tell us. Why are they not complying with any order,” the bench was quoted by PTI. The judges said that they were surprised by the attitude of the Ministry of Petroleum and Natural Gas in taking their own time in responding to the Ministry of Environment’s communication. The bench concluded that the delay was entirely because of the laxity of the Ministry of Petroleum and Natural Gas before slapping a fine of Rs 25,000. The bench asked the ministry to deposit the amount with the Supreme Court Legal Services Authority on or before 13 July.

The bench warned that it would enhance the fine if the amount was not deposited before the given date.

<http://www.jantakareporter.com/business/tell-them-to-change-their-name-from-ministry-of-petroleum-and-natural-gas-to-god/196823/>

## Why India is not worried of oil cartel

Gone are the days when the global crude oil cartel could threaten big customers like India with price spurts. Trying to reduce dependence on crude requirement and steadily moving to electric vehicles (EV), India can now afford to issue a warning to the Organization of the Petroleum Exporting Countries (Opec), an inter-governmental organisation of 15 nations, that if they do not reduce prices, Indian consumers will scout for cost-effective alternatives such as electric vehicles and reduce consumption. Of late, a near failure of India’s deep-sea drilling and exploration had led to a spike in its crude import. In 2017, it imported around 1.6 billion barrels of oil, about

80% of its requirement, mostly from Opec countries. Bloomberg reported that fears of a global supply crunch have led to an almost 5% jump in oil since April. With crude prices hitting fresh three-year highs now and Opec and allies beginning to reduce production, India could have faced an uncomfortable situation. But not anymore! With crude already near \$80, it’s likely that the cost will be seen as too expensive, reducing demand in the next seven years, says the chairman of Indian Oil Corp. While India’s gradual shift to EVs remains a potential threat to Opec, it may be wishful thinking to replace 1 million barrels of the country’s daily oil use by 2025.

<http://www.dnaindia.com/business/editorial-dna-money-edit-why-india-is-not-worried-of-oil-cartel-2636101>

All news and features carried in this NGS NG/LNG Update are compiled from various sources - print and web editions, and have been duly acknowledged.

## Natural gas may come under GST earlier than expected

Natural gas may become the first of the five petroleum products to be included in the Goods and Service Tax (GST) regime ahead of an earlier agreed schedule, as the Centre and states come to a common ground on universal application of the new indirect tax system. Sources said natural gas may be included under a three-tier GST structure where rates would vary depending on the usage. So, while piped natural gas (PNG) for homes may be kept at a lower rate of 5%, commercial piped gas may attract the median 18% GST and automobile fuel CNG may be kept in the highest bracket of 28%. The effective tax rate on the CNG and PNG in India currently is 13-40% as a proportion of selling price. Even commercial PNG users could get some tax relief as VAT rates in few states are much higher than 18% rate under GST. The impact on CNG users will be neutral but the government wants to keep automobile fuel in the highest GST bracket in line with its thinking of keeping other products, as and when they are included, also in this bracket. Oil companies have estimated additional tax burden to the tune of Rs 25,000 on them if their products are not included in GST. This is largely on account of denial of taxes (GST) paid on inputs and services on sale of products by the oil and gas industry that is not included under the new tax system. Though five petroleum products are out of GST, oil products such as cooking gas, kerosene and naphtha are included in the new regime. This will allow oil companies to get a set-off against taxes already paid. But the dual tax structure would create a messy situation for companies, as they would need to comply with both the old and new tax regimes. Moreover, tax credits won’t be transferable between the two systems.

<http://www.mydigitalfc.com/plan-and-policy/natural-gas-may-come-under-gst-earlier-expected>

## Indian joins Asian peers for smaller LNG contracts

Indian companies like their Asian peers are moving towards shorter and smaller orders for liquefied natural gas (LNG), revealed S&P Global Platts, a leading provider of benchmark prices and analytics for the energy and commodities markets. According to analysts, global natural gas price which is witnessing an increasing trend for the first time in past couple of years is driven mainly by rising crude cost and its influence on oil-linked supply contract. This is apart from the increasing demand globally including that from India which is among the largest importer of energy fuels. Talking on the changing trends in the Indian LNG market, Marc Howson, director, LNG Market Development at S&P Global Platts on the sideline of an industry event in Mumbai, said that the LNG buyers are shifting towards shorter and smaller contracts. According to Marc, among the major global gas hubs, the US still remains the cheapest in comparison to other sourcing countries, despite the high transiting cost on account of distance. India has been slowly registering a sustained growth with regard to LNG sourcing as government plans to double the share of natural gas in country's energy mix to 15% in the medium term from just over 6.5% at present. The glut in global LNG supply combined with a drop in the price has also given further impetus to the government's plan.

<https://www.hellenicshippingnews.com/indian-joins-asian-peers-for-smaller-lng-contracts/>

## GSPC to commission 5 MMTPA LNG import facility at Mundra, Gujarat

Gujarat State Petroleum Corp (GSPC) plans to commission a 5MMTPA LNG import terminal at Mundra, Gujarat, in the next two to three months. Mundra will be the third import terminal in Gujarat to import super-cooled LNG in cryogenic ships and re-convert the liquid fuel into a gas before transporting it by pipelines to customers. GSPC LNG, a joint venture between Gujarat State Petroleum Corp and Adani Enterprises, is implementing the import terminal project. It expects to include a strategic partner such as Indian Oil Corp (IOC) when the terminal becomes completely operational. Gujarat chief secretary and GSPC managing director Jagdip Narayan Singh said: "We will commission Mundra terminal by Au-

gust-end or mid-September. It will operate at 1.5MMTPA capacity for the first 1.5 years before scaling up to full capacity." The Mundra terminal can be expanded from 5MMTPA to 10MMTPA in future. Designed in a way that it can have the berth to receive LNG tankers sized from 75,000m<sup>3</sup> to 260,000m<sup>3</sup>, the terminal will also feature two 160,000m<sup>3</sup> LNG storage tanks with additional facilities for regasification and gas evacuation. Singh added: "We have been in talks with IOC but as the partnership was delayed, we have now decided to first commission the terminal and then see who can we get as a partner." Last August, IOC stated that it will acquire up to a 50% stake in the Adani Group-backed Mundra LNG import terminal in Gujarat for an estimated Rs.7.50 billion.

[Source: Hydrocarbons/Indian Oil & Gas](#)

## LNG may fuel a boom in Gujarat's ports

Riding on a high growth trajectory, Gujarat's ports sector is set to undergo a major transformation with surging demand for imported LNG in the country. The growing need for energy across sectors mainly in the city gas distribution (CGD) and other consuming industry, has prompted a shift in the pattern of cargo handling at Gujarat ports from dry bulk cargo to

LNG. Known for its numero uno position in the LNG space with two operational LNG terminals with combined handling capacity of almost 15 MMTPA, Gujarat is aggressively ramping up its capacities with one more 5 MMTPA LNG terminal being set up by GSPC LNG Ltd — a joint venture between State-run Gujarat State Petroleum Corporation (GSPC) and Adani Group — at Mundra in Kutch. The State will be the first in the country to set up a floating regasification unit (FSRU) with capacity of 10 mtpa at Jafrabad in Amreli district by Swan Energy Ltd (SEL) in association with Exmar NV of Belgium. The estimated cost of the project is about ₹40 billion. While the GSPC LNG terminal is likely to be commissioned soon, the FSRU for Jafrabad is currently under construction at Hyundai Heavy Industries (HHI)'s shipyard in South Korea. The unit is expected to be delivered by end-2019 and will become operational by early 2020.

The existing two LNG terminals at Gujarat have contributed in setting the foundation for a gas-based economy in the country. Besides the natural advantage of having the longest coastline of over 1,600 km, Gujarat is strategically located to easily connect key markets such as West Asia, Africa and Europe — three of India's biggest trading partners.

[Source: Indian Oil & Gas](#)

## LNG imports jump 20% in the first six months of 2018: S&P Global Platts

India's liquefied natural gas (LNG) imports jumped 20% year-on-year in the first half of this year on strong growth in demand, S&P Global Platts said. It expects imports from the US market to increase in coming years to meet the increasing demand. With the government taking proactive steps to ease infrastructure bottlenecks and push for gas as penetration in energy mix, Howson said LNG is the only option in boosting the country's gas demand in the next few years. The country imports nearly 60% of LNG from the Middle East and the rest from Australia, West Africa and the US, the global energy, metals and commodities information provider said. In the world market, China, ranked second, witnessed 50% growth in LNG imports, while India was ranked as the fourth largest importer of LNG, Howson said. The country has over 20 MMTPA of contracted LNG, of which six MMT is from the US. The country has contracted to buy \$ 2 billion of US LNG annually for 10 years, S&P Global Platts said. Howson said the country's gas market has relatively low penetration of around 6.5 per cent of energy mix as against government's target of 15 per cent by 2020, due to inadequate infrastructure of pipeline for LNG expansion. He pointed out that the LNG contracted volume and length of the derivatives contracts have drastically declined over the last decade.

Historically, the majority of LNG contracts were priced indexed to oil prices, but now more contracts are being priced indexed to gas benchmarks, Howson said, adding that as gas markets become more volatile and buyers have less opportunity to pass through costs in regulated pricing, the importance of gas price hedging has grown.

<https://www.hellenicshippingnews.com/lng-imports-jump-20-in-the-first-six-months-of-2018-sp-global-platts/>

## US gross gas output hit record in April: EIA

US natural gas output hit a record high in April above 89 Bcf/d (2.5bn m<sup>3</sup>/d) as production rose in Texas, Louisiana and Oklahoma. Gross gas production from the lower-48 states rose in April to 89.1 Bcf/d, up by 0.3pc, or 252mn cf/d from March, the US Energy Information Administration (EIA) said today in its monthly production report. April output has surged by 12% from a year earlier as new infrastructure allowed more northeast gas to reach market and as producers continued to shore up fresh oil supplies from places like the Permian basin. Rising gas production and expectations for future supply growth has put downward pressure on prices this year. Natural gas futures so far this summer have failed to sustain a rally above \$3/MMBtu, despite low inventories and hot weather, a sign of confidence in continued growth. Output from Texas, the largest gas-producing state by volume, rose to nearly 23 Bcf/d, up by 1% from a year earlier and a year-over-year increase of 9%. Texas is home to a large swath of the Permian, where oil wells can produce large volumes of associated gas. New Mexico production, which sits atop part of the Permian, increased to 4.1 Bcf/d, a 3.3% gain from a month earlier and a 13% rise from a year earlier. Louisiana output moved 0.5% higher to 7.5 Bcf/d, a year-over-year increase of 44%. Louisiana production can act as a bellwether for the Haynesville shale, a gas-rich formation in underlying the northern part of the state and east Texas. Output from Oklahoma was up by 0.7% in April to 7.8 Bcf/d, 15% higher than a year earlier. Producers in that state are developing the Stack and Scoop formations, two oil- and gas-rich fields. The combined gas production from Ohio, West Virginia and Pennsylvania — three states that represent the Marcellus and Utica shales — dropped in April to 27.1 Bcf/d, down by 0.7% from March. Production there will likely increase in subsequent reports because new pipelines such as Energy Transfer Partners 3.25 Bcf/d Rover pipeline have expanded service to the area.

<https://www.hellenicshippingnews.com/us-gross-gas-output-hit-record-in-april-eia/>

## Gazprom plans to start Turkstream gas pipeline

Gazprom expects record high gas sales this year in Europe, CEO Alexei Miller said that Gazprom plans to start supplying Bulgaria, Serbia and Hungary via a new gas link after it finishes the second line of the Turkstream gas pipeline, which will run from the Russian Black Sea coast. Turkstream is a part of Moscow's efforts to bypass Ukraine as a gas transit route to Europe, which receives about a third of its gas needs from Gazprom, which is building the Turkstream in two lines, with capacity of 15.75 BCM of gas a year each, the first of which will supply Turkey and the second southern Europe. The second line of the Turkstream will be directed to Bulgaria, that country's Prime Minister Boyko Borissov said last month after talks with Russian President Vladimir Putin. Said Miller on Friday: "Gas via the Turkstream, at the start of 2020 ... could run via the gas transmission systems of Bulgaria, Serbia and Hungary ... The first and the second lines of Turkstream will be operational by the end of 2019."

<https://www.businesslive.co.za/bd/companies/2018-06-29-gazprom-expects-record-ing-sales-in-europe-and-poo-poos-us-competition/>

## BP starts first gas deliveries to Turkey from Azerbaijan's Shah Deniz II

A BP-led international consortium started its first commercial deliveries of natural gas to Turkey from Azerbaijan's giant Shah Deniz field from Saturday, June 30, BP said, part of efforts aimed at cutting

Europe's dependence on Russian energy supplies. The European Union is trying to cut its reliance on Russian gas by developing the so-called Southern Gas Corridor, which is expected to bring about 16 BCM of gas a year to Europe by 2020. Russian gas has become increasingly politicised since 2014 when Moscow annexed the Crimea peninsula and rebellion flared in eastern regions of Ukraine. Russian gas giant Gazprom caters for 34% of Europe's gas market. The gas would come from the Shah Deniz II field in Azerbaijan via the 1,850 km the Trans-Anatolian Natural Gas Pipeline (TANAP) through Turkey, the 487-km South Caucasus pipeline extension through Azerbaijan and Georgia and the 878 km Trans-Adriatic Pipeline (TAP) across Greece, Albania and Italy.

BP said with an investment of some \$28 billion, the project had a planned total of at least 26 subsea wells, two bridge-linked platforms, 500-km of subsea pipelines and flowlines, a major expansion at the Sangachal Terminal near the Azeri capital Baku and an expansion of the South Caucasus Pipeline. The Shah Deniz I field, which has been pumping gas since 2006, produces more than 10 BCM of gas per year, and output from Shah Deniz II is expected to reach an annual 16 bcm of natural gas, with 10 BCM earmarked for Europe and 6 bcm for Turkey. Total production from the Shah Deniz fields will be up to 26 BCM of gas and up to 120,000 barrels of condensate a day, BP said.

[Source: LNG Global/Reuters](https://www.reuters.com/article/energy-lng-global/bp-starts-first-gas-deliveries-to-turkey-from-azerbaijans-shah-deniz-ii-idKCN1M00001)

## Energean asks Cyprus for approval to import Israeli gas via new pipeline

Energean, is an independent E&P company focused on developing resources in the Eastern Mediterranean, is seeking approval from Cyprus for the Greek oil and gas firm to build a pipeline from its Israeli offshore gas fields and import 0.5 to 1 billion cubic metres of gas a year to the island according to Energean's chief executive. Energean, which listed on London's main stock exchange this year, has committed \$1.6 billion to the Karish and Tanin fields which have potential reserves of 2.4 trillion cubic feet of natural gas and 32.8 million barrels of light oil and condensate. It estimates the five blocs it owns around Karish and Tanin contain an additional 5 trillion cubic feet of gas. It expects an external assessment over the coming weeks. The company has signed gas supply agreements in Israel for about 4.2 billion cubic metres of gas a year. Energean is positioning itself in the eastern Mediterranean with a newly built FPSO facility with capacity of 800 million cubic feet a day and liquids capacity of 800,000 barrels. It wants to build a 200 km (124 miles) pipeline from the FPSO to Cyprus. Cyprus' Energy Minister was not immediately available for comment. Energean will also bid for further supply contracts in Israel, which is privatising a gas-run power plant in Alon Tavor, and additional contracts once the country switches from coal to gas plants by 2022, Rigas said.

<https://www.hellenicshippingnews.com/energean-asks-cyprus-for-approval-to-import-israeli-gas-via-new-pipeline/>

## Mozambique ready for next LNG phase

Exxon Mobil and Eni announce they've submitted the development plans for a liquefied natural gas facility to the Mozambique government for approval. Liquefied natural gas will start processing from a field off the coast of Mozambique by 2024 now that the government has the development plans, partners said. Exxon Mobil and Italian energy company Eni lead the Rovuma liquefied natural gas joint venture in Mozambique. The partners said the government now has the development plans for the first phase of the project that will draw natural gas from the Mamba fields off the country's coast. Each train could process as much as 55 million barrels of oil equivalent per day. "The size of the project makes it not only an important investment in the country, but also supports economic growth and opens new opportunities for Mozambicans," Stefano Maione, Eni's executive vice-president for the Mozambique program, said in a statement. East African basins, led by reservoirs in Mozambique and Tanzania, are home to more than 25% of the natural gas discoveries made worldwide between 2010 and 2013. Eni last year started the implementation phase for its Coral South LNG project, a floating facility drawing in the gas reserves discovered by the company off the coast of Mozambique in deep

waters. GE Oil & Gas signed two five-year contracts with Eni to provide equipment for offshore developments tied to Mozambique's gas assets. For its joint venture with Exxon, the Italian company will steer construction and operation of the offshore gas production facilities, while Exxon will handle the liquefaction aspects. China National Petroleum Corp. is another joint venture partner. Exxon and Eni plan to submit a final investment decision by next year. LNG production would then begin by 2024.

[Source: LNG Global](#)

## Gazprom expects record LNG sales in Europe and poo-poos US competition

Russia's Gazprom expects record high gas sales this year in Europe, CEO Alexei Miller said, downplaying the threat posed by imports of US liquefied natural gas (LNG). Gazprom has managed to gradually increase its market share in Europe, its main market, to about 34%, despite the general aversion to Russian energy supplies, which became increasingly politicised following Moscow's annexation of Crimea in 2014. Miller said that the Russian gas exports to Turkey and Europe outside of the former Soviet Union may exceed 20 BCM this year, up from 194.4 BCM last year, also a record-high. Analysts say sea-borne LNG supplies from the US may undermine Gazprom's po-

sition on the European gas market. The US exported its first cargo of LNG gas last year. Some European nations, including Lithuania and Poland, started to reduce their dependence on Russian pipeline gas by importing LNG from the US. However, Miller said that due to high production and transportation costs, LNG from the US will not be competitive in Europe, noting that US LNG consumption in Europe last year was a mere 2 MMT.

<https://www.businesslive.co.za/bd/companies/2018-06-29-gazprom-expects-record-lng-sales-in-europe-and-poo-poos-us-competition/>

## Taiwan agrees preliminary LNG purchase deal with U.S. producer

Taiwan's CPC Corp on Monday announced a preliminary deal to buy liquefied natural gas (LNG) from U.S. producer Cheniere Energy for 25-years, according to a statement. CPC, a major importer of LNG, signed a Heads of Agreement to purchase 2 MMT of LNG annually from Cheniere, which is gearing up to start exports from its second U.S. export plant at Corpus Christi, Texas. Cheniere started exporting LNG from its Sabine Pass plant in Louisiana in 2016.

[Source: LNG Global/Reuters](#)

## Global LNG-New spot supply, tender cancellation saps spot price

Asian spot liquefied natural gas (LNG) prices declined for a third week on producers from Australia to Nigeria boosting spot supply, strong European LNG inventories and Pakistan's cancellation of a six-cargo tender. Spot prices for August LNG-AS delivery in Asia fell to \$10.10 per MMBtu, down 20 cents from the previous week, trade sources said. Prices continued reversing from a 20-percent rally last month, driven by large concurrent global production outages and big-ticket tenders seeking more than 40 cargoes for July-September. The market was not fully out of the woods as Malaysia's giant Bintulu complex may have shut in some production for planned maintenance, traders said. The 30 MMTPA, nine-train facility spent last month troubleshooting unexpected electrical faults that impeded output. Angola LNG planned to shut this month ahead of an early August restart. Australia's Ichthys project, meanwhile, fell further behind schedule, delaying first LNG as developer Inpex patched what it called "minor issues". On a more positive note, Cheniere Energy's Corpus Christi project in Texas got the green light this week to introduce gas into the facility, raising the prospect of test LNG exports later this year. The second train from Yamal LNG in Russia's Arctic should start pumping in September. The fifth train from Cheniere's Sabine Pass plant in Louisiana starts the following month. A spell of hot weather in Japan led Kansai Electric to buy this week but demand for August and September was still limited there, though Chinese consumption was brisk, in part driven by new government policy mandating that domestic importers boost storage capacity. New rules ask gas suppliers to hold at least 5% of imports in storage by 2020, a policy that may be hastening buying demand at Chinese terminals, a trader said. Still, burgeoning supply proved decisive. Nigeria LNG offered three July cargoes as its fifth production unit resumes this month, AP LNG in Australia, Abu Dhabi and Angola had spare July shipments, plus Pakistan's decision to scrap its tender was also expected to release Egyptian supply into spot markets. In its tender, Pakistan LNG received offers from Vitol and Gunvor in the 15.7-17.1 percent of Brent range, but a sharp downturn in prices subsequently means spot prices are now closer to 13% in Brent terms. In Europe, LNG terminal inventories saw a minor decline in aggregate but remained robust, and in certain markets such as Britain, the Netherlands and parts of France stocks had risen. It suggests further supply availability, for potential reloads, a further bearish factor.

<https://www.hellenicshippingnews.com/global-lng-new-spot-supply-tender-cancellation-saps-spot-price/>



## CME Group and Cheniere Energy, Inc. reach agreement to develop first-ever physically deliverable LNG futures Contract at Sabine Pass

CME Group, the world's leading and most diverse derivatives marketplace, and Cheniere Energy, Inc., a pioneer in the liquefaction and export of U.S. LNG, reached an agreement through which CME Group will develop an LNG futures contract with physical delivery to Cheniere's Sabine Pass terminal on the U.S. Gulf Coast. "In recent years, the shale revolution has unlocked abundant supplies of natural gas here in the U.S., creating new risks and opportunities for producers, processors, consumers and traders," said Peter Keavey, CME Group Global Head of Energy. "Through its Sabine Pass liquefaction facility, Cheniere is delivering Henry Hub-indexed natural gas to the world in the form of LNG. This agreement with Cheniere is significant because it will be the foundation for developing a new LNG risk management tool for producers, consumers and traders around the globe, while further cementing the role of Henry Hub Natural Gas futures as the global gas pricing benchmark." Cheniere's Sabine Pass LNG terminal first started exports in February 2016, and currently operates four trains capable of producing 18 million metric tons of LNG per year. A fifth train is under construction and a sixth is fully permitted and shovel-ready, representing up to 27 million metric tons per year of LNG capacity at the site. Cheniere is also constructing a separate LNG export facility outside of Corpus Christi, Texas. As U.S. Gulf Coast LNG is increasingly exported to Asia, South America and Europe, there will be an increased need for producers, processors and end users to hedge their price risk. CME Group's robust suite of natural gas futures and options are already helping customers manage risk around this shift away from regional benchmarks to an increasingly interconnected global gas market. In addition to its deeply liquid and established global benchmark Henry Hub Natural Gas futures and options contracts, a physically deliverable LNG futures contract from CME Group is expected to help the industry manage price risk more effectively and efficiently.

<https://www.hellenicshippingnews.com/cme-group-and-cheniere-energy-inc-reach-agreement-to-develop-first-ever-physically-deliverable-lng-futures-contract-at-sabine-pass/>

## Total closes \$1.5 billion deal for Engie's upstream LNG business

French oil and gas major Total said on Friday that it has completed a \$1.5 billion deal to acquire Engie's upstream Liquefied Natural Gas (LNG) business to become the second-largest player in the global LNG market. Under the deal, Total said it would make additional payments of up to \$550 million to Engie if there was an improvement in the oil markets in the

coming year. Total Chief Executive Patrick Pouyanne said in a statement that the deal will give the company a worldwide market share of 10 percent. The deal will see the group manage an overall LNG portfolio of around 40 million tonnes per year by 2020 and increase its share in the U.S. market, with a 16.6 percent stake in Engie's Cameron LNG project, he said.

<https://www.hellenicshippingnews.com/total-closes-1-5-billion-deal-for-engies-upstream-lng-business/>

## China will need more U.S. natural gas

China will stay the largest incremental natural gas user for as far as we model. To help clear hazy skies and cut CO2 emissions, China must expand the role of cleaner gas in its energy demand portfolio, now at just 6-7% of total supply, versus nearly 30% for the richest economies. Last year alone, China's gas demand boomed by over 15%, with imports rising by 30%. China just passed Japan to become the largest natural gas importer in the world, although Japan still imports more than twice as much liquefied natural gas (LNG). Key arteries bringing in foreign supplies, such as the China-Myanmar pipeline, however, often sees utilization rates of just 50-60%, due to numerous economical, political, technological, and weather problems.

To be sure, many of China's LNG sources have issue that open the door for U.S. LNG. For example, Australia has had major domestic gas shortages, Qatar has had an LNG production moratorium and surging domestic demand, and Indonesia needs to keep more of its gas to support a very energy-deprived poor nation. Indeed, it's quite telling that China's retaliatory measures against possible U.S. tariffs on its goods will NOT include LNG: leadership knows full well the unique value that U.S. LNG brings to the table. US sales have very flexible contracts (having no rigid destination clauses that restrict resales), short-term contracts, and prices not linked to oil but based on the transparent fundamentals of gas supply and demand. Started in 2016, U.S. LNG has had 60% of its LNG sold on the spot market. Most other suppliers will still need to use less convenient long-term deals to satisfy lenders and fund high cost projects. And we know that we will continue to have plenty of gas to export. In the decades ahead, for every 100 units that U.S. gas demand increases, U.S. gas production will increase 175 units, a 75% surplus for us to export. By 2020, we could control 20-25% of global LNG supply, up from just 8% now. "U.S. Liquefied Natural Gas To China Is A Game-Changer," with China ranked third in 2017 taking in 15% of U.S. LNG exports.

Let's be clear: there's room for all gas (and oil) exporters in China, the need for imports is surging that fast. After all, supplying China with energy is like trying to fill an olympic size swimming pool with a hose. Don't worry about somebody else putting another hose on the other side of the pool. Yes, Russia will be a key supplier, but pipeline supplies from Gazprom simply won't be enough to dim the bright future for U.S. LNG in China. China's own domestic gas production will continue to increase, but the import necessity can only continue to grow, especially the imported LNG that makes perfect sense in fueling the high demand centers along China's eastern coast. China's shale gas production potential is solid but will be limited by a variety of factors, namely a lack of pipelines, difficult geology, remote resources, water shortages, state-controlled prices, and technological barriers (coming from the hesitancy of U.S. shale experts to work with China's overbearing state-owned enterprises, as well as China's poor history of protecting intellectual property rights). Today, shale accounts for just 6-8% of China's total gas production, compared to 85% in the U.S. Looking out to just 2030, about 65% of China's gas demand could need to be met by imports.

<https://www.forbes.com/sites/judeclemente/2018/07/01/china-will-need-more-u-s-natural-gas/#535162003c16>

## Booming LNG market steps out of the dark as transparency push grows

Long dominated by deals struck in secret, the \$230 billion LNG industry is slowly seeing light as global traders push for more transparency in the booming market. Over the past two months, commodity price agency S&P Global Platts and Australia-headquartered LNG trading marketplace Global LNG Exchange (GLX) facilitated the first transparent physical trades in their platforms. It was the first time in nearly a decade since Platts kicked off its Asian LNG derivative price assessment that it disclosed trading parties of a physical trade on its platform.

Pricing transparency is critical to boost liquidity in commodity markets but is often tough to do particularly in cash contracts with participants wary about exposing trading positions. LNG producers also prefer fixed, long-term contracts because they provide steady revenues needed to fund multi-billion dollar projects. But the LNG trading landscape is slowly changing, as more market participants push for transparency and Japan's JERA, the world's biggest LNG buyer, and leading merchants like Vitol expand their trading desks. Platts started publishing a daily Asian LNG price assessment in 2009. But it was only in 2016 that volumes picked up, then more than tripled in 2017. Volumes in January-May this year have already surpassed last year's, according to Platts data. And for the first time, Platts last week published the counterparties of one LNG trade for its pricing process, three weeks after receiving its first transparent bid from commodity trader Trafigura. Platts has approved six other entities in the transparent bidding process including Britain's BP, Japan's Itochu, Swiss Vitol, Singapore's Pavilion Gas and Diamond Gas International, a subsidiary of Japan's Mitsubishi Corp. Perth-headquartered Global LNG Exchange (GLX), an online platform for physical cargoes launched in April 2017, saw its first trade done in May this year as its members more than doubled to 44 from last December, most of them from Asia, which imports over 70 percent of the world's LNG. GLX Chief Executive Damien Criddle said the platform has received four tenders since its launch. Petronas LNG, a subsidiary of Malaysia's state-owned Petronas and a major producer of the fuel, completed the first GLX deal in late May. CME Group Inc said it will develop the first physically deliverable U.S. LNG futures contract on its New York Mercantile Exchange. Still, LNG has a long way to go before reaching the level of liquidity and transparency in oil - by far the world's most traded commodity - but which only came after many years. Steelmaking raw material iron ore only shifted to transparent spot pricing after four decades of yearly-set contracts. Majority of LNG in Asia remains under opaque long-term contracts linked to the price of oil, as producers opt for steady revenues to fund LNG export projects, some of which have cost \$50 billion to develop, said FGE's Siau. "Until providers of project debt and equity are comfortable with the risks and rewards of using a spot LNG index, we expect the proportion of spot LNG available will be limited," he said.

[Source: LNG Global/ Reuters By Jessica Jaganathan \[Edited\]](#)

## NG/LNG UTILISATION- ROADWAYS

### EU adopts HDV CO2 emissions regulation with room for improvement

The first ever EU legislation on CO2 emissions of new heavy-duty vehicles (HDVs) registered in the EU, formally adopted Jun 25, requires emissions for Categories N2 and N3 and certain other vehicle types to be monitored and reported from 1 January 2019. The VECTO tool is adopted as the measurement tool but does it go far enough? The Regulation is part of a series of measures to implement the 2016 European strategy on low-emission mobility. It has been broadly welcomed. Lorries, buses and coaches produce about 25% of CO2 emissions from road transport in the EU and around 6% of the EU's total CO2 emissions. The adopted legislation sets in motion monitoring and reporting on HDVs from the start of 2019, and will later commence same procedures for smaller lorries, buses, coaches and trailers. Monitoring and reporting measures will provide, as of 2020, the necessary data to set and implement new mandatory CO2 emission reduction targets for manufacturers of heavy duty vehicles. Failure of manufacturers to comply will result in fines being imposed. The Commission will make the reported data publicly available in an online register managed by the European Environment Agency (EEA) The intention is to increase transparency on the market and will allow transport companies – mostly SMEs – to make significant savings thanks to lower fuel consumption, estimated at €25,000 (USD 29,250) over five years. It will also help to stimulate innovation among manufacturers.

<http://www.ngvglobal.com/blog/eu-adopts-hdv-co2-emissions-regulation-with-room-for-improvement-0709>

### China: increasing conversions of heavy duty engines to natural gas

Omnitek Engineering Corp. has commenced shipments of the company's natural gas engine components to its exclusive distributor in China, Omnitek Beijing. The system components will be utilized to convert large marine engines, mining-trucks and power generators from diesel to natural gas. New natural gas engine production will prioritize engines for marine and on-road applications. The LNG to operate the mining trucks and river barges will be supplied by SINOPEC, which also plays a supporting role in the projects. Omnitek Beijing is a partner in a new manufacturing facility being built in Shandong Province with capacity for 40,000 natural gas engines annually. Upon completion, the complex will include two factories with engine assembly lines, an office building, engine testing capabilities, a truck assembly line and showroom. The Chinese company has received government authorization to manufacture and apply natural gas engines for inland waterways, and on-road and off-road applications. "Omnitek Beijing is well situated to take advantage of the large-scale shift to natural gas in China, and we are excited to participate in the development of this market," said Werner Funk, president and chief executive officer of Omnitek Engineering Corp. "Considerable time and resources have been invested over the past few years to demonstrate the performance and the positive economic impact of diesel-to-natural gas engine conversions and to launch this sizable project; and, we are gratified that our technology has been recognized as an important solution to water and air pollution caused by diesel engines," Funk added.

<http://www.ngvjournal.com/s1-news/c1-markets/increasing-conversions-of-heavy-duty-engines-to-natural-gas-in-china/>

## 100th Belgian CNG station opens

DATS 24, the Belgian leader in CNG and a pioneer of automated fueling stations and fuel supplier of Colruyt Group, has opened Belgium's 100th Compressed Natural Gas filling station, which is also the company's 60th under its own brand. The refuelling network continues to expand with CNG now the third fuel behind petrol and diesel and by far the leading



alternative fuel, DATS 24 reports. Most of the CNG stations are located in Flanders. In the meantime, you can fill up natural gas in more than 1 in 4 municipalities. Under the impetus of DATS 24, the gas federation and distribution system operators such as Ores Wallonia has started to catch up. Belgium is aiming at 170 CNG stations by 2019. DATS 24 will open another 15 additional locations this year. Wetteren, Basecles, Eupen, Erpe-Mere, Ypres, Sint-Truiden, Hechtel-Eksel, Wommelgem and Knokke are still under planning. The network in Wallonia will also be expanded further. CNG is also on a steep rise in Europe, with ambitious expansion plans in countries such as France, Spain, the Netherlands, Germany and Italy. "The air quality deteriorates sharply in Belgium, especially in Flanders," says Raf Flebus, Business Unit Manager at DATS 24. "CNG cars offer the great advantage of being cheaper and can be used anywhere and make a substantial contribution to a healthier living environment."

At the end of April 2018, according to the FPS Mobility, there were about 10,960 CNG vehicles on Belgian roads. Driving on natural gas is clearly on the rise. For example, the number of orders for CNG vehicles so far this year already exceeds the number of registrations in the whole of 2017.

[Source: NGV Global](#)

## Largest British logistics company trials Volvo natural gas truck

Wincanton, the largest British logistics company, is trialing an LNG powered vehicle as part of its general haulage fleet. The gas-powered Volvo FH LNG 460 is being trialed as part of Wincanton's ongoing commitment to exploring alternative fuels. Data from the trial, collected through an in-cab telematics system, will be scrutinized by the Wincanton technical team and also fed back to Volvo as part of the ongoing development of the vehicle. "As a business, we are constantly reviewing new technologies which come on to the market. Alongside investing in electric vehicles, which we are trying out for our home delivery services, we are also reviewing the merits of gas-powered trucks," said Carl Hanson, Wincanton's Group Fleet Director. "This trial will give us an insight into the performance, cost and suitability of the Volvo vehicle and inform our future investment options," he added.

<http://www.ngvjournals.com/s1-news/c3-vehicles/largest-british-logistics-company-trials-volvo-natural-gas-truck/>

## 2018 Global Gas Report published

Snam, the International Gas Union (IGU) and The Boston Consulting Group (BCG) have released the 2018 Global Gas Report which states more than 90% of global gas' consumption growth to 2040 will come from cities. Gas for transportation is part of the urban energy mix. The report highlights the key trends in the global natural gas market and examines how these speak to the sector's future growth prospects. The Report was launched at the World Gas Conference in Washington D.C. In this second edition, the report considers how 2017 was an impressive year for gas demand growth, supported by increased LNG market liquidity and the growing role that gas is playing to meet more sustainable energy supply. To continue this growth trajectory, the report calls on industry and policymakers to cooperate on ensuring the competitiveness, availability and sustainability of gas, and to focus on the special role that gas can play in cities.

This year's report includes a special feature on the role and opportunities for gas in cities, given it provides specific advantages for air pollution, GHG emissions, heat intensity and scalability. More than

90% of projected global gas consumption growth to 2040 is likely to come from cities. This will require significant infrastructure investment in developing countries, estimated between \$35-55 billion per year according to the report. The report calls for collaboration and conversation across the entire gas value chain, policymakers, and other key stakeholders, to properly recognize and address the opportunities – and challenges – facing the industry.

"The transport sector in North America and Global marine bunkering [...] offer high growth opportunities," the Executive Summary states. The fight to reduce air pollution is driving the transition to natural gas, in cities, regions and countries. "In China and India, for example, gas consumption in transport is rapidly growing given public programs to incentivize and fuel switching as a means of improving air quality."

[Source: NGV Global/IGU/Snam](#)

**All news and features carried in this NGS NG/LNG Update are compiled from various sources - print and web editions, and have been duly acknowledged.**

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## Continuing investment in LNG as a marine fuel critical To meeting air quality & GHG emissions targets

SEA\LNG, the multi-sector industry coalition aiming to accelerate the widespread adoption of LNG as a marine fuel, today reiterated how critical continuing investment in LNG as a marine fuel is to meeting both air quality and greenhouse gas (GHG) emissions targets. In an effort to ensure that industry and governments make a pragmatic and balanced analysis of the future of maritime fuels, SEA\LNG has issued the following statement: Assessing the case for LNG must include the full benefits from both an air quality and GHG perspective. Assessing it purely from a GHG point of view is not responsible – we must consider the significant public health benefits LNG can and is delivering now through significant local emissions reductions in markets where it is being utilized. As regards GHG in the maritime sector, realistic reductions of up to 20% are achievable now with LNG. As technology continues to develop, these reductions will increase. Furthermore, LNG, in combination with efficiency measures being developed for new ships in response to the IMO's Energy Efficiency Design Index (EEDI), will provide a way of meeting the IMO's decarbonisation target of a 40% decrease by 2030 for international shipping. Current technologies are well ahead of where we were just a short time ago and there are clear technology pathways which will allow further emissions savings to be realised, for example advancements in dual fuel technology and propulsion, enhanced control systems, and future use of gas turbine technologies. Today, LNG is the only scalable and economic alternative fuel available for the vast majority of deep sea ocean shipping. Alternative fuels such as hydrogen and ammonia are not economic, not available at scale, and unproven for shipping operations. They are called future fuels for a reason! Electrification, batteries and hybrid solutions on the other hand may be viable for certain specific short sea, harbour or ferry type operations but this represents an almost infinitesimal portion of the world's vessel fuel consumption. These future fuels will require huge investments by industry and governments over decades to realise their potential. SEA\LNG encourages and supports industry and government initiatives which would assist with the

development of future technologies. LNG offers a commercially viable long-term bridging solution to a zero-emissions shipping industry. It should also be noted that the infrastructure for LNG supply is already there; the focus is on investments in the 'last mile' – getting the LNG from the bulk LNG terminals to the ship. LNG is the only creditable alternative to meet national and international regulatory targets.

<https://www.hellenicshippingnews.com/continuing-investment-in-lng-as-a-marine-fuel-critical-to-meeting-air-quality-ghg-emissions-targets/>

## ABS classes next generation LNG carrier

American Bureau of Shipping (ABS) continues to be at the leading edge of LNG technology, having classed a new generation of LNG carriers which it claims will boost capacity as well as fuel efficiency. Diamond Gas Orchid, the world's first "Saryingo STaGE" next generation LNG carrier, was delivered to Diamond LNG Shipping, a joint venture between Mitsubishi Corporation and Nippon Yusen Kaisha (NYK) recently, ABS said in a press release. Ordered by Diamond LNG Shipping through MI LNG, constructed by Nagasaki-based Mitsubishi Heavy Industries Marine Structure and delivered by Mitsubishi Shipbuilding, the innovative carrier introduces significant improve-

ments in both LNG-carrying capacity and fuel performance by incorporating a more efficient hull structure and an innovative hybrid propulsion system. The vessel is intended for operation in Louisiana, transporting LNG for the Cameron LNG project. "The Diamond Gas Orchid features the latest in marine innovation with its optimized transport capacity, fuel efficiency and environmental performance," said ABS vice president for Japan, Akira Akiyama. "Working closely with all of the stakeholders throughout the project, we were able to help Diamond LNG Shipping demonstrate the viability of the concept and develop a highly efficient and innovative vessel." Recognizing the changing landscape and increased industry focus on gas, ABS launched its Global Gas Solutions team in 2013 to support industry in developing gas-related projects. The ABS Global Gas Solutions team provides industry leadership, offering guidance in liquefied natural gas (LNG) floating structures and systems, gas fuel systems and equipment, gas carriers, and regulatory and statutory requirements. ABS has extensive experience with the full scope of gas-related assets and has been the classification society of choice for some of the most advanced gas carriers in service. <http://www.seatrade-maritime.com/news/asia/abs-classes-next-generation-lng-carrier.html>

## MSC Cruises orders another LNG-powered ship from STX France

During the launch of the second of four LNG powered Meraviglia class cruise ships in mid-June by Geneva-based MSC Cruises at Chantiers de l'Atlantique, the STX France shipyard in Saint-Nazaire, it was announced that a fifth vessel of the same class has been ordered. Delivery of this latest LNG vessel is planned for 2023. "Our fifth Meraviglia class cruise ship will bring a new generation of cutting edge environmental technology to the market, benefiting from a new generation of LNG-powered engines. This will help us further reduce our environmental footprint and advance in our journey of constant improvement. She will be joined at sea by up to four World Class LNG-powered ships as part of our overall commitment to environmental stewardship through this and other next-generation technologies and solutions deployed fleet-wide," said Pierfrancesco Vago, MSC Cruises' Executive Chairman. With a design identical to MSC Grandiosa and MSC Virtuosa, (length = 331 metres, width = 43 metres, passenger cabins = 2400), this new unit sets itself apart from other ships in that it is propelled by natural gas stored in liquefied form. This technology was developed by the shipyard that was one of the pioneers at the start of this century, implementing it on LNG tankers.

Source: NGV Global



## SoCalGas, Énergir, GRDF & GRTgaz join to promote biogas development

Southern California Gas Co. (SoCalGas), Canadian natural gas utility Énergir, and French utilities GRDF and GRTgaz announced a new collaboration aimed at advancing the research and development of renewable natural gas and technologies such as power-to-gas. The collaboration will focus on research and development, public policy, and outreach. The American, French and Canadian utilities share a common goal of advancing policies to combat climate change while providing customers with reliable and affordable energy solutions. “Advances in natural gas technologies have helped clean our air and helped reduce emissions linked to climate change,” said Sharon Tomkins, vice president of customer solutions and strategy for SoCalGas, during the World Gas Conference in Washington D.C. “We are excited to collaborate with our French and Canadian counterparts to speed up the development of the next generation of innovations including renewable natural gas, solar-powered hydrogen generation, fuel cells, power-to-gas and other technologies. Together the work we’re doing today will help provide reliable and affordable natural gas service to millions of families and businesses for decades to come.” “The development of renewable gas is a real challenge for the energy transition and has a key role to play in the context of the low carbon strategy. The signing of this partnership agreement reflects our shared desire to develop green gas and associated technologies and facilitate its production and injection into natural gas networks,” said Christophe Wagner, International Director for GRDF. “This sharing of knowledge and experience at the international level aims to effectively meet the need for anaerobic digestion in line with the ambition we are carrying in France: 30% of biomethane injected into the networks in 2030.”

<http://www.ngvjournal.com/s1-news/c1-markets/socalgas-energir-grdf-grtgaz-join-to-promote-biomethane-development/>

## More RNG flowing into California pipelines and fueling refuse trucks

Southern California Gas Co. (SoCalGas) and waste management company CR&R Environmental (CR&R) are now injecting renewable natural gas produced at CR&R’s anaerobic digestion facility in Perris, Calif., into SoCalGas pipelines. This is the first renewable natural gas produced within California to be introduced into SoCalGas’ pipeline system. Renewable natural gas can be used in trucks and buses, to generate electricity, fuel heating systems in home and businesses, and for cooking. The renewable natural gas from CR&R’s facility is used to fuel about 400 of its waste hauling trucks. “California is transitioning to low-carbon transportation fuels and zero emission vehicles in order to meet our climate change goals, clean air standards, and petroleum reduction goals,” said California Energy Commissioner Janea A. Scott. “There are multiple pathways to reduce and eliminate pollution from our transportation sector. The Energy Commission is pleased to invest in projects like CR&R’s anaerobic digestion facility to help demonstrate one of these pathways and to grow in-state production of low-carbon transportation fuels.” CR&R is producing renewable natural gas using organic waste collected in Southern California cities’ green waste bins and processed in an anaerobic digester believed to be the largest and most automated in the world. This biogas is upgraded to the same standards and specifications of traditionally-sourced natural gas and then put into a new 1.4-mile section of SoCalGas pipeline.

<http://www.ngvjournal.com/s1-news/c1-markets/more-rng-flowing-into-california-pipelines-and-fueling-refuse-trucks/>

### NATURAL GAS/ TRANSNATIONAL PIPELINES/COMPANIES/ OTHERS

#### Malaysia’s gas, LNG demand to remain soft over next 5 yrs Woodmac

Malaysia’s demand for gas and liquefied natural gas (LNG) will be soft over the next five years, energy consultancy Wood Mackenzie said in a note. Gas demand growth in Malaysia will be limited due to the share of gas in the country’s power generation declining to 27% in 2020, from 39% currently, losing out to coal, said Woodmac. Progress on the so-called RAPID downstream projects in Pengerang, comprising new gas-fired combined cycle gas turbines (CCGT), an oil refinery and a petrochemical complex will maintain overall gas demand at between 2,500 MMSCFD and 2,800 MMSCFD over the next 5 years, according to Woodmac. LNG demand will remain below 3 MMTPA until 2020, the consultancy said. From 2023 onwards, as piped gas supply declines, LNG demand is expected to outstrip existing import contracts, creating space for more LNG to supply the market.

<https://www.hellenicshippingnews.com/malysias-gas-lng-demand-to-remain-soft-over-next-5-yrs-woodmac/>

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