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Petroleum regulator changes bid norms for CNG, PNG retail licence

The Petroleum and Natural Gas Regulatory Board (PNGRB), in the new regulations said future biddings would be conducted by asking companies to quote the number of CNG stations to be set up and number of domestic cooking gas connections to be given in the first eight years of operation. The tariff they will charge for transportation of PNG within the city and compression for CNG, which previously was a key criteria for winning a licence, has been given just 10% weightage. Number of CNG stations and PNG connections to be released command 70% of the bidding weightage. Besides, bidders will also have to quote how much pipeline they would lay on winning the licence. Entities having experience of at least one year in operation and maintenance of a city gas distribution (CGD) network and having "adequate" number of technically qualified personnel would be eligible for bidding. Companies having a net worth of no less than Rs 150 crore can bid for cities with population of 50 lakh and more while the same for cities with population of 20 lakh to 50 lakh has been proposed at Rs 100 crore. The net worth eligibility goes down with population, with a Rs 5 crore net worth firm being eligible to bid for cities that have less than 10 lakh population. PNGRB said any entity securing CGD licence would have to enter into a firm natural gas supply agreement with a gas producer or marketer in a transparent manner on the principle of 'at an arm's length' within 180 days of winning a license. The authorized entity has to achieve financial closure within 270 days from date of grant of licence. The winning company would have 8 years of marketing exclusivity in the given city. Current licences provide for 5 years of exclusivity.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/petroleum-regulator-changes-bid-norms-for-cng-png-retail-licence/63611644>

Ernakulam to have 50,000 piped gas homes

Indian Oil Adani Gas Pvt. Ltd., which is implementing the City Gas Project in Ernakulam district, expects to provide 50,000 piped natural gas connections to domestic units by the end of 2019. Work on the City Gas Project, launched in 2016, is moving along smoothly. The first piped

PM Modi's constituency Varanasi to go green with CNG, PNG services

PM Narendra Modi's constituency Varanasi is ready to go green with CNG and PNG services, harvesting the first fruits of PM's Rs 13,000-crore energy lifeline for reviving industrial activity in the region. About 5,700 homes have received PNG connection and two CNG stations have been constructed by state-run gas utility GAIL, while the crematorium at Harishchandra ghat too has been converted to run on clean-burning natural gas, people working on the project in the city told TOI. The CNG stations are located in the city's periphery and can service roughly 200 autos, they said. State-run gas utility GAIL, which is implementing the project, is making trial runs by filling the pipeline network with CNG to remove impurities such as moisture and sulphur etc. Commercial service will start this month. GAIL has laid a 27-km-long spur line to connect the network to the main trunk pipeline being laid under the energy lifeline project, known as 'Urja Ganga'. The project envisages laying a 2,655-Km trunk pipeline through UP, Bihar, Jharkhand, West Bengal and Odisha. The Centre has approved capital grant of Rs 5,176 crore to cover 40% of the project cost. The project is aimed at speeding up industrial activity in eastern region by supplying gas to help revive fertiliser and power plants, refineries, steel plants and other industries. It also aims at extending the convenience of PNG and CNG services to key eastern cities.

[Source: EnergyWorld, Economic Times](#)

gas connections were provided in Kalamassery in February 2016, and there are around 7,500 registered domestic users. Gas connections have already been provided in five wards in the Kalamassery municipal area, and work is progressing in six wards in the Thrikkakara municipal area comprising 33 km pipeline, company sources said. The 27-km Kundannoor-Aluva line has been charged, and four compressed natural gas stations are functional along the pipeline at Maradu, Container Road, Kalamassery, and Aluva. Pipelines in the municipal areas of Kalamassery, Thrikkakara, Maradu, Eloor, and Aluva will be charged by the end of 2019, company sources said. Pipe-laying work is in progress at the Cochin Special Economic Zone at Kakkanad too. The industrial sector is keenly looking at the use of gas, and it is expected that the work on gas connections for units at the industrial estate in South Kalamassery will get under way soon. Commercial customers like shopping malls too are looking to meet their energy requirements by utilizing natural gas availability. CNG sales too have raised great expectations with an average sale of 150 kg a day.

<http://www.thehindu.com/news/cities/Kochi/ernakulam-to-have-50000-piped-gas-homes/article23497069.ece>

IGL provides record 150,000 cooking gas connections

Indraprastha Gas Ltd, today said it provided a record 1.5 lakh new cooking gas connections in the financial year ended March 31. The company also laid 885-

km pipeline for transporting the gas to households in the national capital and adjoining cities of Noida, Greater Noida, Ghaziabad and Rewari, during 2017-18 financial year, up 53% over 578-km line laid in 2016-17, IGL said in a statement. IGL said it provided 1,50,103 domestic cooking gas connections in 2017-18 as compared to 1,05,888 piped natural gas connections in 2016-17. IGL Managing Director E S Ranganathan said the company would better its record in the current financial year(2018-19) by covering new colonies and increasing PNG penetration in the already covered localities. He reiterated the commitment of IGL towards maintaining the highest level of safety standards in its operations and appealed to the customers to strictly follow the safety precautions as disseminated by the company from time to time.

IGL had launched an integrated marketing and multimedia communication outreach campaign to spread awareness about PNG with an objective to increase the number of registrations. A large number of innovative customer-centric schemes have been launched to achieve the objective. IGL also introduced various structural and process innovations to reach out to partially feasible areas, while maintaining highest level of safety standards. IGL sells CNG to over 10.5 lakh vehicles through a network of 446 CNG dispensing stations. It also supplies PNG to nearly 9 lakh households in Delhi and NCR towns

[Source: EnergyWorld.](#)

IGL expects 20% jump in sales to industrial and commercial

Indraprastha Gas Ltd expects its sales volume to industrial and commercial clients rise 20% in 2018-19, after experiencing a similar gain last fiscal year, following a ban on using polluting pet coke and fuel oil in the National Capital Region on rising green concerns. Delhi has been one of the most polluted cities in the world for years now. IGL plans to use the restrictions on polluting fuel as an opportunity to add as many as 2,000 industrial and commercial customers in 2018-19 to its current base of 3,000. Since most of these clients are likely to be smaller, the sales volume addition is expected to be just 20% over the current volume of 500,000 standard cubic meters a day. IGL is also planning to rapidly expand sales of CNG, used by cars and buses. To tide over the scarcity of land in cities for setting up fuel stations, IGL has begun appointing dealers to set up CNG stations – so far the company owned and operated all its filling stations. Two dealer-owned, dealer-operated CNG stations have been launched while a dozen more are on the way, Ranganathan said. IGL expanded its piped gas connection to households by a record 150,000 in 2017-18. “We can surely cross 150,000 this year. We can even go past 200,000 if we get permission to lay pipeline in the cantonment area,” Ranganathan said. [Edited]

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

CNG, PNG prices to be revised

Consequent to a recent notification from the government increasing the prices of domestically produced natural gas, Indraprastha Gas Limited announced a revision in the selling prices of CNG and PNG. The new consumer price of Rs 40.61 per kg in Delhi and Rs 47.05 per kg in Noida, Greater Noida and Ghaziabad would be effective from midnight of April 1. The price of CNG being supplied in Rewari is being increased by 95 paise per kg from Rs 50.67 per kg to Rs 51.62 per kg. However, IGL will continue to offer a discount of Rs 1.50 per kg at the selling prices of CNG for filling between 12.30 am to 5.30 am at select outlets. The consumer price of PNG to the households in Delhi has been increased by Rs 1.15 per scm from Rs 25.99 per scm to Rs. 27.14 per scm, while the applicable price of domestic PNG to households in Noida, Greater Noida and Ghaziabad would be Rs 28.84 per scm, which has been increased by Rs 1.20 per scm from existing Rs 27.64 per scm. In Rewari, the applicable price of domes-

tic PNG would now be Rs 28.78 per scm, which has been increased by Rs 1.15 per scm. The IGL is supplying PNG to nearly six lakh households in Delhi and over 2.7 lakh households in Noida, Greater Noida, Ghaziabad and Rewari. With the revised price, CNG would still offer over 60% savings towards the running cost when compared to petrol driven vehicles at the current level of prices. When compared to diesel driven vehicles, the economics in favour of CNG at the revised price would be over 37%.

http://www.business-standard.com/article/news-ani/cng-png-prices-to-be-revised-118040100547_1.html

CNG filling stations are gathering dust as BMTC delays induction of buses

Three CNG filling stations that were set up by GAIL Gas at three Bangalore Metropolitan Transport Corporation (BMTC) depots in the city have remained unused over the past two years as BMTC is yet to induct CNG vehicles into its fleet. Gail has set up three filling stations at BMTC's Sumanahalli, Hennur and Peenya depots at a cost of Rs 20 crore each. The state government in its budget in 2014 had announced that BMTC will induct about 271 CNG buses. Much to GAIL's chagrin, BMTC has dropped the proposal as maintenance cost of such buses was going to be higher when compared to buses that run on diesel. According to BMTC sources, after the proposal for establishing a gas-based power plant at Bidadi was dropped, GAIL is said to be exerting pressure on BMTC to induct CNG-run buses. They laid a pipeline mainly for the power plant. V Ponnuraj, Managing Director, BMTC, told Bangalore Mirror that the corporation can't induct CNG buses as maintenance cost of such buses is higher than the diesel buses. Maintenance cost of CNG buses is around Rs 85 per kilometer while diesel buses cost Rs 50/KM. The corporation says it will have to double the fare if such buses are inducted.

<http://bangaloremirror.indiatimes.com/bangalore/others/cng-filling-stations-are-gathering-dust-as-bmtc-delays-induction-of-buses/articleshow/63570955.cms>

Is your CNG cab travel safe?

Sources reveal taxi and auto drivers don't get their kit tested by authorized centers. The black and yellow cabs and auto rickshaws plying on the road might not be as safe as it looks. Sources have revealed that the public vehicles are operating without a proper check-up of the CNG

tanks which risk the safety of passengers. According to sources, the vehicle drivers avoid testing as the price for it has gone up from Rs 1500 to Rs 4000 in private testing centres. These private centres install plates on these tanks which are a determinant of fitness of the CNG tanks. Without the plates, the CNG pumps don't provide gas to the taxis and autos in the city. “It is no doubt dangerous. But the drivers don't have such a huge sum of money to spend on testing their taxis and autos. The government should do something about it,” said AL Quadros, union leader of Mumbai's Taximens Union. In case of any leakage which goes undetected, there is a risk of the vehicle catching fire. In most of the cases, the entire vehicle gets charred. Sources in the Regional Transport Office have said that they can do very little about the cost testing the CNG tanks as it does not fall under their jurisdiction. To add to the trouble, the price of CNG has also been increased with effect from April 1.

<http://epaper2.dnaindia.com/index.php?mod=1&pgnum=1&edcode=820009&page-date=2018-04-03#>

CNG supply plan hits a roadblock in Kolkata

The supply of CNG or coal-bed methane (CBM) to greater Kolkata has hit a major roadblock. The West Bengal government has said that supply of green fuel will only be permitted in the Kolkata Municipal Corporation (KMC) area. This, at a time when GAIL (India) has finalized a joint venture agreement (JVA) with the Greater Calcutta Gas Supply Corporation Ltd (GCGSCL) for supply of green fuel to greater Kolkata. GAIL had decided to set up 40 charged areas (CAs) but only 10 will be possible now. GAIL has called this a major deviation from the agreed position and sought a meeting to review the agreement. GAIL, in a letter written to the state on April 5, has sought an explanation and pointed out that viability of the project may be at stake due to this. The Petroleum and Natural Gas Regulatory Board may also impose a penalty, GAIL believes. “I think that the state is under some sort of pressure and doesn't want green fuel to be used here. The cabinet has said that supply to other areas won't be possible taking into account legal and technical aspects. I wonder who the experts are. This is nothing short of treachery with the people of the state and the environment,” Datta added.

<https://timesofindia.indiatimes.com/city/kolkata/cng-supply-plan-hits-a-roadblock/articleshow/63704897.cms>

EV: Ola falls way short of 200-fleet target in Nagpur

About a year ago, it was told that a fleet of 200 e-vehicles was being introduced by a collaborative partnership of Ola Cabs and Mahindra Group along with the Government of India. Cab aggregator Ola has failed to fulfill its promise of raising a fleet of 200 e-vehicles in Nagpur, including cars, rickshaws and bus, within a month of its pilot launch in the city in May last year. About a year later, only 67 cars and 16 rickshaws have been registered in the city so far. At the launch, in the presence of Road Transport, Highways and Shipping Minister Nitin Gadkari, Ola had also promised to establish 50 charging points in different parts of the city but so far, only 20 have come up at 5 charging stations. Nagpur's Regional Transport Officer, Sharad Jichkar told The Indian Express: "We have asked them (Ola) to pay Rs 1 lakh as aggregator licence fee for registering 100 app-based vehicles. But they haven't yet paid it. They say they are a leasing company not the aggregator. We have also told them that if they want to register over 100 vehicles in same name, they will have to seek Transport Department permit." Jichkar said, "So far, we have registered 67 e-cars and 16 e-rickshaws under the City Cab scheme launched last year." In June last year, drivers of Uber challenged the city taxi scheme in the Bombay High Court. Uber claims that state lacks legislative competence to regulate app-based cab services as Center regulates app-based cab services through the Motor Vehicles Act.

<http://indianexpress.com/article/business/companies/ev-ola-falls-way-short-of-200-fleet-target-in-nagpur-5126856/>

NATIONAL: NATURAL GAS/PIPELINES/COMPANY IN THE NEWS

ONGC and Reliance in talks with customers to sell east coast gas

India's Oil and Natural Gas Corp Ltd and Reliance Industries Ltd have started discussions with buyers to sell natural gas from their fields in the Bay of Bengal that are expected to start production over the next three years. The plan is to transport the gas from the east coast to the industrial heart belt of western India, an ONGC executive told Reuters. ONGC plans to use Reliance Industries' 1,375 km pipeline connecting Kakinada on the east coast to Bharuch in Gujarat in the west. Shankar said ONGC is committed to bring east coast gas on-stream by 2019 onwards and ramp up production to around 15 MMSCMD. Billionaire Mukesh Ambani-controlled Reliance Industries and partner BP PLC, which together own three natural gas fields next to ONGC's in the east coast, has also started discussions with customers to market the natural gas, Sashi Mukundan, BP's country head and regional president for India, told Reuters last week. The RIL-BP joint venture is offering customers contracts ranging from a 10-year tenure, to 5- and 3-year, Mukundan said. The government in February approved a plan by Reliance Industries and its partner BP to develop two new fields in the Krishna-Godavari basin. This approval followed an earlier clearance to develop another field called R-Series in the basin. "At peak, 2022, we will produce 35 MMSCMD and would contribute almost 10 percent to country's demand," Mukundan said. "If we cannot deliver from our field, we will import and deliver," he said. Between 2021 and 2023, India would be hitting at

a level which will be 50 MMSCMD incremental. So India would be producing in the range of 140 MMSCMD per day, said Atanu Chakraborty, the head of Directorate General of Hydrocarbons (DGH), India's upstream regulator. India's current total consumption of natural gas at end of March 2018 stood at 145 MMSCMD.

[Source: Reuters/Indian Oil & Gas](http://www.reuters.com/article/indian-oil-gas)

Ball set rolling for gas trading hub

The country has moved a step closer to setting up a natural gas trading hub which would help in a better price discovery for domestic as well as imported gas. India also aims to become Asia's pricing hub by competing with Singapore, Shanghai or Tokyo. The trading exchange, or a hub, will enable a better price discovery and be on the lines of the existing online platforms in the country that trade in power. It will be similar to global hubs such as Henry Hub of the US and National Balancing Point of the UK. The Petroleum and Natural Gas Regulatory Board has called for bids to hire consultants for the "regulatory framework to develop and operationalize a gas trading hub/exchange (GTHE) in India". The Petroleum Ministry has focused on increasing the availability of natural gas by enhancing domestic production, encouraging the import of LNG, improving the gas infrastructure including pipelines and CGD networks. Officials said both RLNG and gas produced domestically will be traded at the hub. This will help to determine the market price of gas in the country.

<https://www.telegraphindia.com/business/ball-set-rolling-for-gas-trading-hub-221990>

Shell says India business won't be impacted after arm BG reduced stake on Mahanagar Gas

Energy major Shell's subsidiary BG Asia Pacific Holdings has sold part of its shareholding in Mahanagar Gas as part of its strategy to simplify its business, but remains optimistic about its ventures in India, the company said in a statement. BG Asia reduced its stake in Mahanagar Gas to 24% from 32.50% through deals on the bourses. ET had reported that BG Asia will pare its holding in Mahanagar Gas through secondary market transactions. Shares of Mahanagar Gas fell 3% to close at Rs 917 at the Bombay Stock Exchange on Wednesday, April 11. This is part of Shell's ongoing portfolio optimization to transform Shell into a simpler company, delivering stronger returns. We believe in the key role that gas will play in India and continue to seek opportunities in that arena," Shell said in a statement. Shell said that the transaction would not have any impact on its other businesses in India. "Our investment in the Hazira LNG receiving terminal in Gujarat and the recent creation of Shell Energy India, our gas marketing and trading business, prove our commitment to grow in India and to increase gas penetration in the country," the company said.

<https://economictimes.indiatimes.com/industry/energy/oil-gas/shell-says-india-business-wont-be-impacted-after-arm-bg-reduced-stake-on-mahanagar-gas/article-show/63716509.cms>

ONGC begins work on \$5 bn KG Basin project; targets first gas in 2019

State-owned ONGC kick-started its USD 5.07 billion KG oil and gas project by spudding the first of the 34 wells, targeting first gas by end of 2019. "The well #KDG-A is one of the 34 wells planned under this mega project. The deep-water well has a target depth of 2,346 meters, under a water depth of 518 meters. The well is expected to produce around 5,000 barrels of oil per day when put to production," it said. The project will cumulatively produce around 25 MMT of oil and 45 BCM of gas with peak production of 78,000 barrels per day of oil and 15 MMSCMD of gas. After successfully commissioning of its first deep-water project S1 Vasishtha in eastern offshore in March 2018 (which would be yielding about 4.3 MMSCMD of gas), ONGC's flagship project from NELP block KG-DWN-98/2 in the deep-water of eastern offshore is now being readied for development. Associated natural gas from Cluster 2A of this project will have a peak production of 3 MMSCMD of gas and 78,000 bopd of oil with a 15 year profile; non-associated natural gas from Cluster 2B will have a peak free gas production of 12.25 MMSCMD with a 16 year profile. There will be an Offshore Process Platform for processing & evacuating 6.5 MMSCMD of gas. Balance 5.75 MMSCMD gas will be transported through ONGC's existing sub-sea infrastructure and facilities, created at onshore terminal of Odalarevu at Andhra coast. The project envisages a CAPEX of 5.07 billion US Dollars and OPEX of 5.12 billion US dollars over field life of 16 years.

Source: [Energyworld, Economic Times](#)

The impact of the gas price hike for producers

Gas producers such as Oil and Natural Gas Corp., and Oil India will gain, but the gains will hardly move the needle for both the stocks. Domestic gas prices were increased by nearly 6% for April-September 2018 on a gross calorific value basis to \$3.06 per MMBtu. What are the implications of this rise for producers? Sure, gas producers such as Oil and Natural Gas Corp. Ltd (ONGC) and Oil India Ltd (OIL) will gain. But the gains will hardly move the needle for either of them. For instance, IIFL Institutional Equities estimates 2% and 1.5% earnings per share increase for ONGC and OIL,

respectively, for fiscal year 2019 (FY19). Revenue contribution from the gas business is relatively small. On a stand-alone basis, both companies earned about 17-18% of their FY17 revenue from the gas business. Note that prices were at \$5.05 per MMBtu at their peak in November 2014-March 2015. "Gas production remains either a break-even or a loss-making proposition for most fields for the upstream producers notwithstanding some decline in oil field services/equipment cost," pointed out K. Ravichandran, senior vice president at Icrta Ltd. Reliance Industries Ltd (RIL) too is expected to benefit. However, considering that its oil and gas segment contributed below 1% of FY17 stand-alone gross revenue, there will hardly be any impact on overall earnings. Meanwhile, India continues to need more gas for consumption than it produces and the critical issue of incentivizing domestic production remains. As Icrta's Ravichandran says, "The absence of a floor and sustained low prices as has been seen in the past few years post implementation of the modified Rangarajan formula, make exploration and production unviable even for benign geologies and would act as a deterrent in achieving a higher share of gas in the energy consumption of the country targeted by the GoI."

<https://www.livemint.com/Money/9bK-3Fqo5ylo2jx2rR3czM/The-impact-of-the-gas-price-hike-for-producers.html>

Ratnagiri gas firm to be split

While one part will operate the gas terminal which will be under GAIL India, the other one will generate power under the NTPC. The cash-strapped Ratnagiri Gas and Power Private Limited, which has been operating the controversial Dabhol power project, will be split, and GAIL India will run the gas terminal at Dabhol in Ratnagiri district. The first liquefied natural gas (LNG) shipment from the US arrived at the Dabhol terminal on Friday, March 30. The Dabhol terminal will serve industrial and residential customers in Karnataka, Maharashtra and Gujarat, said Union oil minister Dharmendra Pradhan. Ratnagiri Gas and Power generates 500 MW of power for Railways at Rs 5.50 per unit hence the government had decided to split the company. Receiving the first-ever shipment of 1.2 lakh tonne LNG under the long-term contract of 20 years, Mr Pradhan announced Rs 700-crore investment by the GAIL arm, Konkan LNG. The company will be getting 22-24 ship-

ments per annum till the breakwater is built after which it will receive 80-90 shipments, sources said.

<http://www.asianage.com/metros/mumbai/010418/ratnagiri-gas-firm-to-be-split.html>

SDPI drive against GAIL pipeline in Kerala

The Social Democratic Party of India (SDPI) is launching a 20-day campaign against what it calls the "betrayal of the people by the ruling and Opposition parties in the State and at the Centre" on the laying of the gas pipeline by Gas Authority of India Limited (GAIL). SDPI district general secretary Najeeb Atholi told the media here that documentaries would be screened and a vehicle jatha would be taken out in all grama panchayats in the Malappuram and Kozhikode districts through which the pipeline passed. Marches would be taken out to the offices of the MPs and MLAs in these districts. He claimed that both the Left Democratic Front and the United Democratic Front had not paid attention to the demand to lay the pipeline through the sea to link it to Mangaluru. Sections 7A, 7B, and 7C of the Petroleum and Minerals Pipelines Act, 1962, barred the laying of pipelines through thickly populated areas and public places frequented by people for religious and social gatherings. Mr. Najeeb said efforts were on to sideline the security aspects and confine the issue to a dispute over the compensation of land being acquired for the project.

<http://www.thehindu.com/news/cities/kozhikode/sdpi-drive-against-gail-pipeline/article23496731.ece>

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Coal India awaits CCEA clearance to start extraction of CBM gas

To expedite gas production from coal seams, however, the government had earlier permitted Coal India to mine CBM through a notification. The Cabinet may soon take a call on whether a fresh lease is required by state-owned Coal India for extracting CBM which remains untapped in want of clarity, a top official today said. To expedite gas production from coal seams, however, the government had earlier permitted Coal India to mine CBM through a notification. "Both the Coal Ministry and Ministry of Petroleum and Natural Gas sat along with the others....It has been sorted out that there is no need for a separate lease and that CCEA note is still pending. So, once the CCEA decides then we will go ahead," Coal Secretary Susheel Kumar told in an interview. "The CCEA note is about just to say that there is no need for a separate lease," the secretary explained. On the question that when will the CCEA take a call on this, he said "I think anytime. There was some clarification needed why only for the Coal India. The coal ministry, he said, has identified CBM as priority area. The initial activities include assessment of CBM potentiality in subsidiaries of Coal India Ltd to delineate CBM blocks in Damodar Valley Basin. Accordingly one block each has been delineated in Jharia coalfields and Raniganj coalfields.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/coal-india-awaits-ccca-clearance-to-start-extraction-of-cbm-gas/63671169>

Oil Ministry asks Regulator to resolve conflict of interest in GAIL

The oil ministry has asked sector regulator Petroleum and Natural Gas Regulatory Board (PNGRB) to look at unbundling of companies like GAIL India Ltd. to resolve the conflict of interest in being both the transporter and marketer of natural gas. The reference to the PNGRB follows a revival of a plan to split GAIL by hiving off gas marketing business into a separate firm, leaving just pipeline transportation with GAIL. Over a period of time more players have come into gas marketing. Gujarat government entity GSPC is a major player in gas marketing and gas transportation. "So, we have asked the PNGRB to look into this issue of how to resolve this conflict and come up with some suggestion,"

the official said. The government had in 2006 issued the Policy for Development of Natural Gas Pipelines and City for Local Natural Gas Distribution Networks which envisaged that in the long run and with the maturing of gas markets, the authorized entities will have transportation of natural gas as their sole business activity and will not have any business interest in the gas marketing or city or local gas distribution networks. GAIL had in the past resisted the split on grounds that its gas marketing and transmission businesses operate at arm's length, and hence do not need to be separated.

[Source: Bloomberg](#)

Double whammy for fuel consumers: Petrol costliest in 4 years, diesel at all-time high in Delhi

Rising global oil and gas prices on Sunday pinched fuel consumers hard as motor fuel prices hit record levels and CNG as well as PNG became substantially costlier

in Delhi. Petrol price hit a four-year high of Rs 73.73 a litre and diesel touched an all-time high of Rs 64.58 a litre in Delhi as benchmark Brent crude hovered at \$70 per barrel on Friday, the last trading day of the week gone by. Simultaneously, Indraprastha Gas Ltd (IGL), the sole supplier of natural gas as fuel in Delhi and its neighbourhood, raised CNG price by 90 paise per kg in Delhi as a result of the Centre raising price of gas from domestic fields by 6% for the April-September period in line with the new pricing formula. Even after the revision, CNG will still retain its price advantage over petrol and diesel because of their record retail prices. Running a vehicle on CNG would still be 60% cheaper than petrol and 37% compared to diesel.

<https://timesofindia.indiatimes.com/business/india-business/double-whammy-for-fuel-consumers-petrol-costliest-in-4-years-diesel-at-all-time-high-in-delhi/articleshow/63571122.cms>

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.

GAIL (India) to be split

A splitting of GAIL (India) into pipeline and gas-marketing entities seems imminent as the government has come to the view that it is necessary to create a gas-trading hub in the country and bring in transparency in price determination through an exchange. According to two government officials involved in the discussions, for making infrastructure available to customers in an unrestricted and fair manner, it is required that pipeline infrastructure and gas marketing are separately owned. This is also a global norm. Earlier this year, petroleum minister Dharmendra Pradhan had said that GAIL should focus on pipelines as "marketing can be done by anyone". The Section 21 of the Petroleum and Natural Gas Regulatory Board (PNGRB) Act provides the downstream regulator with the responsibility that infrastructure and marketing arms of state-run utilities should be separated and this can be implemented through regulations. However, since the industry needs to mature, the Act provides for stage-wise separation of such entities. While the first stage stipulates separation of accounting for pipeline and marketing, the second is to make the marketing company a subsidiary. The third stage is ownership unbundling which means ownership has to be separated. Once the hub comes, then the issue of unified tariff will come in and unbundling is the basic building block of all reforms, according to the official quoted above. If the unbundling rule comes, it will apply to all state-owned companies in the market.

<http://www.financialexpress.com/industry/gail-india-to-be-split/1120560/>

LNG terminals will have to register with PNGRB

Oil regulator PNGRB has proposed that new LNG import terminals in the country should reserve a fifth of the capacity for third-party access on common carrier principle. The Petroleum and Natural Gas Regulatory Board (PNGRB) issued draft regulations for setting up and operation of liquefied natural gas (LNG) terminals in the country. Comments on the regulations have been invited from stakeholders by month end. Energy companies wishing to set up LNG terminals in India will have to first apply for a registration to the Board in a scheduled format. The firm will have to “offer at all times, after registration, 20% of its short-term (less than 5 years contract) uncommitted re-gasification capacity or 0.5 MMTPA, whichever is higher, as common carrier capacity,” it said. This capacity can be booked by a third party to import their own LNG. Besides adhering to its technical standards and specifications of the Board, the company setting up the LNG terminal would have to “furnish a bank guarantee for an amount equal to 1% of the estimated project cost of the LNG terminal or `25 crore whichever is less.” “An entity desirous of establishing or operating more than one LNG terminal shall make separate applications for each of such LNG terminals,” it said. Some other terminals such as Adani-GSPC’s Mundra facility in Gujarat are under construction while a few others have been proposed. The Board, the regulations said, shall issue a certification of registration valid for 25 years to an entity making an application for registration along with the bank guarantee and application fee.

<http://www.orissapost.com/lng-terminals-will-have-to-register-with-pngrb/>

Petronet LNG to partner with ONGC Videsh to pick stake in Qatar project

India’s Petronet LNG Ltd wants to partner with ONGC Videsh Ltd (OVL), the overseas arm of India’s biggest explorer Oil and Natural Gas Corp Ltd, to pick up a stake in an upcoming exploration and liquefied natural gas (LNG) project in Qatar, a company official said. The project would be Petronet’s maiden venture into the natural gas exploration and production business and overseas LNG terminals. A non-confidentiality agreement would allow QatarGas to speak with other interested parties about the project in addition to Petronet. CEO of Petronet, Singh said Qatar Gas would give Petronet LNG access to its data rooms for evaluation of the project within a month’s time. The upstream project will feed into a 23 MMTPA LNG terminal, Singh said. Singh did not say how large of a stake Petronet and OVL would jointly pick up and when the deal would be signed. Petronet currently runs a 15 MMTPA LNG regasification site at Dahej in the western state of Gujarat and a 5 MMTPA facility at Kochi in southern India.

<https://www.reuters.com/article/india-ief-petronet-lng/update-1-indias-petronet-lng-aims-to-partner-with-ongc-videsh-in-qatar-project-idUSL3N1R0266>

Mundra Port to start LNG terminal services ‘soon’

Adani’s Mundra Port, the largest commercial port in the country, is likely to commission its Liquefied Natural Gas (LNG) import terminal soon, said a top official. “The erection and physical construction of the LNG terminal with an annual capacity of 5 MMTPA is completed.

Commissioning is expected in the short run,” said an official, who did not want to be named. The terminal will have receiving, storage and re-gasification facilities for LNG and will be connected to Gujarat State Petronet’s existing pipeline network at Anjaar, Gujarat. “Besides, we are constructing a Liquefied Petroleum Gas (LPG) terminal with an annual capacity of 3.6 million tonnes. It would become operational by the year end,” he said.

<http://www.thehindu.com/todays-paper/tp-business/mundra-port-to-start-lng-terminal-services-soon/article23469702.ece>

Renegotiated LNG deal with Russia’s Gazprom to kick-in from May: Pradhan

State-run GAIL India’s renegotiated LNG import deal with Russian supplier Gazprom will kick-in from May, with volumes gradually ramping up to fully contracted quantity of 2.5 MMT in 5-6 year, Oil Minister Dharmendra Pradhan said today. GAIL had in January renegotiated terms of its 20-year deal to import 2.5 MMTPA of LNG from Gazprom. Without giving details of price reduction, Pradhan said commencement of LNG supplies has been agreed from May 2018. The contracted volume has been lowered from 2.5 MMT to 0.5 MMT in the first year 2018-19, 0.75 MMT in 2019-20, and 1.5 MMT in the third year 2020-21. Also, the price indexation has been changed from the Japan Customs-cleared Crude to Brent, and the oil-linked slope of the contract formula lowered, and therefore the final price. Also, the renegotiated contract provides for diverting a part of the volume, originally contracted on a delivered ex-ship basis, to other markets. The deferral will allow GAIL more time

to find customers for the imported gas. Gazprom will supply LNG from Yamal LNG project in the Arctic peninsula.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/renegotiated-lng-deal-with-russias-gazprom-to-kick-in-from-may-pradhan/63621279>

GAIL arm to invest Rs 3,000 Cr in Dabhol Terminal to double capacity to 10 MMTPA

The newly-created arm of state-run gas major Gail India, Konkan LNG, will pump in around Rs 3,000 crore to double the capacity at its LNG terminal at Dabhol in the Konkan region of Maharashtra to 10 MMTPA over the next three years. Konkan LNG, a 100% subsidiary of GAIL, had on March 30 received the first 1.2 lakh tonne shipment of the 5.8 MMT LNG contracted from the first-ever long-term agreement with the US signed way back in 2011 and 2013. “So, to make the Dabhol terminal an all-season facility, first we will invest around Rs 700 crore to complete the abandoned and semi-finished breakwater. Rest of the investment will go into capacity expansion,” Gail chairman and managing director BC Tripathi said. Gail created Konkan LNG recently after demerging it from Ratnagiri Gas & Power, which is a three-way joint venture it has with NTPC and Maharashtra SEB. The entire project will take around three years to complete, and will be executed by Konkan LNG, Tripathi said, adding that work on the breakwater should be begin shortly. Currently the terminal can operate only about eight months in a year due to not having a breakwater.

<http://energyinfra.com/gail-arm-invest-rs-3000-cr-dabhol-terminal-double-capacity-10-mt/>

Trump administration says India key partner in promoting strategic energy security goals

A day after India received its first LNG cargo from the US under a long-term supply deal, the Trump administration has said that New Delhi is a key partner in promoting its strategic energy security goals. GAIL India has contracted 3.5 MMTPA of LNG from US energy firm Cheniere Energy's Sabine Pass liquefaction facility in Louisiana. The first cargo from the project arrived at Dabhol in Maharashtra on Friday, March 30. "The US views India as a key partner in promoting our shared strategic energy security goals regionally and globally, and we are working closely with India to find policy and regulatory solutions to scale up investment for a diversified energy economy," said Tom Vajda, the Acting Deputy Assistant Secretary of State for South Asia. "Our partnership with India on energy is a great example of the US' 'all of the above' approach to energy, which includes traditional sources like coal, oil, and gas, as well as renewables and nuclear," Vajda wrote in a State department blog post. "This LNG delivery is the first of many that will ship from Cove Point in Maryland and Sabine Pass in Louisiana as part of two 20-year contracts with India's Gail Limited," he said. Vajda said American energy is central to its National Security Strategy, which notes that "exports of our energy resources, technologies, and services help our allies and partners diversify their energy sources and brings economic gains back home." "In other words, by leveraging the US' abundant energy resources, we stimulate our own economy while also helping key countries become more stable, prosperous, and energy secure," Vajda added.

<http://www.financialexpress.com/india-news/trump-administration-says-india-key-partner-in-promoting-strategic-energy-security-goals/1117369/>

INTERNATIONAL: NATURAL GAS/ TRANSNATIONAL PIPELINES/ COMPANIES/ OTHERS

U.S. saw record natural gas production in 2017

US natural gas production reached record levels last year, according to the U.S. Department of Energy, an increase that substantially boosted exports even as Texas, the largest gas producing state lost some of its momentum. Gross withdrawals reached 90.9 billion cubic feet per day (BCFD) in 2017, the agency's highest volume on record. Marketed natural gas production, which does not include gas vented, flared, used for re-pressuring or removed during processing, also reached record levels. Louisiana's gross withdrawals increased from 4.8 BCFD to 5.8 BCFD, marking the largest annual gain of any state. And the Appalachian region, which includes the Marcellus and Utica shale fields in Ohio, West Virginia and Pennsylvania, also saw substantial volume growth. Nationally, gross withdrawals increased for five consecutive months starting in July and reached a record monthly high of 96.7 BCFD in December, the Energy Department reported. Marketed natural gas production set an annual record at 78.9 BCFD. Natural gas exports increased 36% amid the surge in production, making the nation a net natural gas exporter for the first time in nearly 60 years.

<https://www.energyvoice.com/oilandgas/americas/168510/u-s-saw-record-natural-gas-production-in-2017/>

Exxon, Qatar in talks for potential U.S. shale

Exxon Mobil is in talks with Qatar over a possible deal that could see the country investing in the company's U.S. gas resources, the Wall Street Journal reported on Tuesday, April 10, citing people familiar with the matter. The deal could take the shape of a joint venture in which Qatar, through state-owned Qatar Petroleum, could partner or invest in future wells with Exxon's unit XTO Energy, the paper said. WSJ also said that no deal had been finalized yet. The report did not say how much Qatar was planning to invest in XTO Energy. Exxon, which is targeting the Middle Eastern nation for an investment in LNG projects, already partners Qatar Petroleum in places like Cyprus and Brazil. Exxon had said it is aiming a production in the Permian basin to triple to 600,000 barrels a day of oil and natural gas by 2025. For Qatar, which is locked in a dispute with Saudi Arabia, along with the United Arab Emirates, Bahrain and Egypt, the move could help broaden its investment outside Middle East. Qatar is one of the smallest OPEC oil producers and yet the most influential player in the global LNG market due to its annual production of 77 MMT, cementing its position as the world's largest LNG supplier. Qatar Petroleum's investment will be crucial for Exxon, which needs it to go ahead with a \$10 billion natural gas-export project in East Texas, the Journal said. The Golden Pass gas export terminal is chiefly owned by Qatar Petroleum and co-owned Exxon and ConocoPhillips. Qatar Petroleum has held off from agreeing to develop it with Exxon until it owns U.S. natural gas supplies.

[Source: LNG Global](#)

New Delhi set to present \$3-4b development plan for Iranian gas filed

India is going to present a \$3-4 billion plan for developing Farzad B gas field to Iran next week after Tehran reduced the scope of the project, Reuters reported on Friday quoting two sources familiar with the matter. Iran reduced the scope of the development plan for its Farzad B gas field in the Persian Gulf at a meeting in New Delhi in February, and asked India to submit a revised proposal, said the two sources, who did not wish to be identified due to the sensitivity of the matter. India and Iran will discuss the revised development plan for the field next week, during Iranian Oil Minister Bijan Namdar Zanganeh's visit to New Delhi. According to the sources, the new bid would be between \$3 billion and \$4 billion and would not include gas processing and development of downstream projects. The new terms confine Indian companies to just production of gas and development of the field. The two countries have been trying to narrow differences over Farzad B development rights since its discovery by Indian firms led by ONGC Videsh, the foreign investment arm of Oil and Natural Gas Corp, in 2008.

"As the negotiations are still ongoing, we would not like to comment at this stage," ONGC Videsh said in response to a Reuter's email seeking comments.

<http://www.tehrantimes.com/news/422386/New-Delhi-set-to-present-3-4b-development-plan-for-iranian-gas>

Pavilion Energy imports first LNG cargo for use in Singapore

Singapore's state-owned natural gas importer brought in its first cargo of a super-chilled form of the fuel for domestic use. Pavilion Energy Pte, owned by Singapore's Temasek Holdings Pte, unloaded the liquefied natural gas cargo from the tanker Al Oraiq on Saturday, April 7. The vessel carried the fuel from Qatar, the world's largest LNG exporter. Pavilion last year became one of two companies, along with Royal Dutch Shell Plc, to be granted a license to import LNG into Singapore. The Asian nation sees imports of the seaborne form of the fuel as necessary to supplement possibly declining supplies via pipeline from Malaysia and Indonesia. About 95% of Singapore's electricity is generated by gas-burning power plants. Pavilion has brought in LNG cargoes to Singapore LNG Corp.'s Jurong Island terminal before, but they've been reloaded and shipped back out instead of being warmed into gas and fed into the local energy system.

[Source: LNG Global](#)

Yamal ships first contracted LNG cargoes

Russian energy firm Novatek has shipped its first contracted cargoes of LNG from its Yamal plant in the Russian Arctic. The shipments began on April 1, according to state-owned news outlet TASS. The first 18 commercial cargoes were sold on spot contracts and were shipped to terminals in Western Europe. In the first quarter of the year, Yamal exported about 1.25 MMT of LNG on the spot market. Going forward, most of Yamal's cargoes will go to CNPC, TOTAL, Engie, Shell and Gazprom under long-term contracts. In all, Novatek expects to complete 75 loadings at Yamal this year, including both spot- and contracted cargoes. Yamal LNG is served by the world's first fleet of ice-breaking LNG tankers. The Arc7 ice-class vessels are capable of carrying LNG westbound to Europe year-round, and in the summer, they can transit the Northern Sea Route eastbound to Asia, shaving weeks off the travel time between the Kara Sea and core markets in China and Japan. All cargoes to date are from Yamal's first production train. The plant's second train is due to come online later this year, and a third unit will enter service in 2019. At full capacity, Yamal will produce 16.5 MMT of LNG, and Novatek is already working on ambitious

plans to build a second plant on the other side of the Gulf of Ob.

<https://maritime-executive.com/article/yamal-ships-first-contracted-lng-cargoes#gs.HLtiEMY>

S.Korea sees natural gas demand growing to over 40 MMT by 2031

South Korea expects its natural gas demand to rise to over 40 million tonnes in 2031, driven by higher household and industrial consumption of the fuel, the energy ministry said on Thursday, April 5. The world's third-largest LNG importer had previously forecast natural gas demand falling to 34.65 MMT of LNG equivalent in 2029 from 36.49 MMT in 2014 due to lower power generation demand. The increased demand forecast of 40.49 MMT of LNG in 2031 from estimated 36.46 MMT in 2018 comes as South Korea shifts away from coal and nuclear fuel. The country has long been reliant on coal and nuclear power to produce electricity. The share of gas-fired power generation made up about 17% of the country's total electricity needs in 2017 and is estimated

to increase to 18.8% by 2030. Reflecting the country's growing gas demand over the next 13 years, South Korea also plans to spend about 5.8 trillion Korean won (\$5.48 billion) by 2031 on expanding its gas supply infrastructure including storage tanks and pipelines. Household and industrial consumption of LNG is expected to grow by 1.24% annually to 23.40 MMT in 2031 from 19.94 MMT in 2018. For power generation, it is expected to increase to 17.09 MMT of LNG in 2031 from 16.52 MMT in 2018. To ensure gas supply security, South Korea also seeks to diversify gas supplies and have more flexible LNG contracts. "We plan to have more flexibility in mid-and-long term contracts through cooperation with major LNG buyers," the ministry said in its long-term natural gas supply-demand report for 2018-2031. South Korea imports most of its LNG through the country's sole LNG wholesaler Korea Gas Corp. Last year, South Korea imported 37.55 MMT of LNG, mainly from Qatar and Australia. <https://energy.economictimes.indiatimes.com/news/oil-and-gas/s-korea-sees-natural-gas-demand-growing-to-over-40-mtn-t-by-2031/63636814>

Global LNG-Prices edge up as oil surges amid Syria crisis, but low demand caps market

Asian spot LNG prices rose this week, pushed up as crude oil surged amid the escalating Syria crisis. LNG prices LNG-AS rose by 25 cents from last week to \$7.25 per MMBtu, despite falling demand due to the onset of spring in the northern hemisphere. Traders said the gain was due to rising oil prices, with Brent crude futures this week hitting their highest since late-2014 due to the threat of more conflict in Syria. "Oil is by far the world's biggest energy market. It dictates the direction for most other commodities," said one trader. "It is particularly important for gas and LNG as many supply contracts are priced off crude." Despite the tense oil markets, LNG is in plentiful supply, especially as demand is tapering off in North Asia and Europe due to warmer spring weather. LNG prices are still down by almost 40% from their winter peaks in January. Weather data in Eikon shows temperatures in the Asian demand centres of Tokyo and Beijing are expected to be slightly above seasonal norms in coming weeks. Seoul is also expected to see mild spring weather. In Europe, temperatures are forecast to be above the seasonal norm as well, after a long, cold winter came to an end in late March. Overall, analysts said the LNG market was in good health, with demand rising.

In physical markets, Asia saw decent activity this week. China National Offshore Oil Corp (CNOOC) was seeking LNG cargoes for delivery up to 2022, trade sources said. The company has given options for four different delivery time periods. Delivery of the first LNG cargo under the tender would start from the second half of November this year, with the last supply options running to December 2022. In Japan, Nippon Steel and Sumitomo Metal Corp was seeking an LNG cargo for June 1, with the tender closing date set for April 17, according to trading sources. Nippon Steel only tenders for LNG cargoes a few times a year, the sources said. In South Korea, utility KOMIPO was seeking a cargo for delivery between May 23 and 27 at the Boryeong terminal, with the tender open from April 12 to 13.

<https://www.hellenicshippingnews.com/global-lng-prices-edge-up-as-oil-surges-amid-syria-crisis-but-low-demand-caps-market/>

China's Sinopec to more than double LNG capacity, boost shale gas output

China's Sinopec group, parent of Sinopec Corp, aims to more than double its receiving capacity of LNG over the next six years and lift domestic shale gas production by two thirds by 2020. The plans are part of the state energy firm's efforts for clean fuel production to account for half of its total energy supply by 2023. Sinopec will have 60 BCM of natural gas supply capacity, which includes both imports and domestic production, by 2023 according to the group. It produced 27 BCM of gas in 2017. The group plans to add new receiving facilities for imported LNG along China's east coast to a total of 26 MMTA by 2023, up from the current 9 MMTA including the recently launched terminal in Tianjin. "We are going to expand (Qingdao) Dongjiakou terminal to 8 MMT and then 10 to 12 MMT by phases, same with Tianjin," Dai Zhaoming, the group's head of development and planning, told reporters, adding that expansion projects will only need local authorities' approval. Sinopec will soon formally approve a plan to build a new terminal in eastern Zhejiang province, Dai said. Sinopec operates China's largest commercial shale gas field, Fuling in Chongqing in the southwest, and produced just above 6 BCM last year. The company also said that it plans to build 1,000 natural gas filling stations by 2023. The company has also made new advances in its shale gas business, with a new discovery in the Weirong block in southwestern Sichuan province which should contribute to the group's target of 10 BCM of shale gas production by 2020.

[Source: LNG Global](#)

Santos receives \$13.5b takeover bid from US energy player

The big Adelaide-based second biggest independent oil and gas producer Santos has received a \$13.5 billion takeover offer from the US-owned, private-equity backed Harbour Energy. The \$6.50 bid represents a 30% premium above Santos's last closing price. The highly conditional bid is made up of a \$6.13 per share cash and a 37% per share dividend. Harbour has made three offers for Santos since August last year, the last pitched at \$6.37 last month. "In a statement to the ASX, Santos said: "based on the indicative offer price of \$6.50 per share, it is in the interests of shareholders to engage further with Harbour." However, the board advised shareholders to take no further action in relation until it had time to assess the bid. Any bid would be subject to Foreign Investment Review Board scrutiny. Another complication may well be the 15% stake held by the allied Chinese investors ENN and Hony Group. However, Harbour has attempted to appease the Chinese with an offer to any shareholders with between 15 and 20% interests in Santos to roll their shares into a new unlisted holding company. Harbour's chief executive Linda Cook said Santos's investments in three big LNG projects — two in Australia and one in PNG — were valuable assets that fitted her company's global vision and

strategy. The previous Santos board had knocked back a number of other takeover offers, including one from the Brunei and UAE backed Sceptre partners for \$6.88 a share. Mr Wilson said the new board, chaired by Keith Spence, was more likely to entertain a bid than its predecessor. Santos has struggled under the burden of a heavy debt racked up with its 30% investment in the \$19 billion GLNG export terminal joint venture at Gladstone. That investment has already incurred more than \$2 billion in post-tax write-offs in recent years and has been a drag on the company's share price and investor returns. "A new owner of the assets represents a clean break as well as a healthy premium for recent equity investors," Mr Wilson said.

[Source: LNG Global](#)

Japan sees opportunity in Southeast Asia's energy markets

China's ambitious Belt and Road Initiative is changing the landscape of emerging countries by pouring money into infrastructure and energy, leaving regional rivals seemingly in the dust. But Japanese companies see opportunity in an important industry in China's backyard: liquefied natural gas. Facing of an excess of natural gas at home, Japanese firms are selling LNG overseas, and Japan is making an effort to shape the gas market in many emerging Asian countries. In October, Ja-

pan's trade minister said the country will offer \$10 billion in support to supply LNG or build gas infrastructure in Asia. That's a move that will "kill several birds with one stone," according to Jane Nakano, a senior fellow in the Energy and National Security Program at the Center for Strategic and International Studies. Not only will the investment help Japan slash its stocks of LNG, but it will also boost its alliance with the United States, Nakano said in a recent podcast: The development of infrastructure for natural gas around the world will help drive demand for America's own exports. Southeast Asia is a fierce battleground for energy firms, as Japanese companies, armed with vast experience in the LNG field, build new plants and infrastructure to supply the region. Japanese companies that are making the foray into Southeast Asia include Tokyo Gas, Osaka Gas and Jera. Asia's second-largest economy has been a top importer of LNG after the shutdown of the country's nuclear power plants following the 2011 Fukushima disaster. Japan imported 70 MMT of LNG in 2010, but its imports hit about 84 MMT in 2017, according to Thomson Reuters data. That growth rate is slowing as nuclear reactors restart, however, and it's also resulted in too much supply. Browne explained that Japanese companies tend to sign up for long-term contracts, because of the security they provide. Despite the slowing changes in Japanese gas consumption, BMI Research nevertheless predicts gentle growth through 2022.

<https://www.cnbc.com/2018/04/02/natural-gas-japan-sees-opportunity-in-foreign-energy-markets.html>

Qatargas signs draft LNG deal with Thailand's EGAT

Qatargas said on Monday it signed a memorandum of understanding (MoU) with the Electricity Generating Authority of Thailand (EGAT) to explore joint opportunities in the liquefied natural gas (LNG) business. The parties would "jointly identify and evaluate best practices in the LNG industry, particularly in the sharing of knowledge and expertise in procurement of LNG, LNG transportation, and floating storage and regasification units (FSRU)," Qatargas said in a statement. The MoU also includes the possibility of supplying LNG to Thailand, Qatargas said. Qatar is the world's biggest supplier of LNG.

<https://www.hellenicshippingnews.com/qatargas-signs-draft-lng-deal-with-thailands-egat/>

Chinese entities eyeing \$43 billion Alaska LNG send large delegation to study project

A large delegation representing the three China-owned entities that might invest in Alaska's \$43 billion gas line project visited Prudhoe Bay and other key project sites this week in what state officials called a sign of China's strong interest. The 38-person group represented the Bank of China, oil company Sinopec and sovereign wealth fund China Investment Corp., said Keith Meyer, president of Alaska Gasline Development Corp. "This was their first opportunity to send a large technical team to (study the project)," said Meyer. "We were pleasantly surprised at how large the group grew." Li Yang, vice chief engineer for Sinopec, was a top official in the group. The state signed a preliminary deal with the Chinese entities in November, during President Donald Trump's trade mission to China at a ceremony attended by Chinese President Xi Jinping and Trump. The gas

line corporation hopes to sign firm commitments by the end of this year. Sinopec would buy some of the project's LNG, Bank of China would lend money, and China Investment Corp. could invest, AGDC officials have said. The state gasline agency announced that Bank of China, along with Goldman Sachs, will help solicit investors for the project. That deal with Bank of China was signed during the delegation's visit to Alaska, Meyer said. China, trying to reduce carbon emissions and other pollution, seeks to boost the use of natural gas while taking steps to reduce coal-fired power plants. Meyer, who spent the week with the group, said the visit included a meeting in Anchorage with Alaska Native corporations providing services to the oil and gas industry, as well as the Alaska Support Industry Alliance, representing many contractors working in the industry. "It was to show them Alaska has local companies that can do the work," Meyer said.

[Source: LNG Global](#)

ExxonMobil resumes LNG production in Papua New Guinea

ExxonMobil said today that production of liquefied natural gas (LNG) has safely resumed at the PNG LNG project in Papua New Guinea following a temporary shutdown of operations after a severe earthquake occurred in the region on Feb. 26. LNG exports are expected to resume soon. One train is currently operating at the LNG plant near Port Moresby. The plant's second train is expected to restart as production is increased over time.

<https://www.hellenicshippingnews.com/exxonmobil-resumes-liquefied-natural-gas-production-in-papua-new-guinea/>

US FHWA clarifies weight allowance for natural gas trucks

The U.S. Department of Transportation Federal Highway Administration (FHWA) has issued a Memorandum in Q&A format to publish revised guidance notes on weight provision for natural gas powered trucks. The Memo's subject is Information: Fixing America's Surface Transportation Act (FAST Act) Truck Size and Weight Provisions and it was updated on April 6th. The Memorandum includes several clarifications of importance for the natural gas fueled transportation sector, two of which are listed below:

A Natural Gas Vehicle, if operated by an engine fueled primarily by natural gas, may exceed any vehicle weight limit (up to a maximum gross vehicle weight of 82,000 pounds) under 23 U.S.C. 127 by an amount that is equal to the difference between (1) the weight of the vehicle attributable to the natural gas tank and fueling system carried by that vehicle and (2) the weight of a comparable diesel tank and fueling system. Every State must allow up to 2,000 additional pounds for any legal Natural Gas Vehicle traveling on the Interstate Highway System and with-in reasonable access to the Interstate. Welcoming the amendments, Jeff Clarke, General Counsel & Director, Regulatory

Affairs for NGV America says "the revised guidance is an important step in providing assurances to truckers that they will be able to legally operate natural gas trucks without a reduction in payload, an important consideration for fleets that operate near or at full load. It also should assist efforts in getting more states to open up all their roads, not just the interstate roads, to natural gas trucks."

<http://www.ngvglobal.com/blog/us-fhwa-clarifies-weight-allowance-for-natural-gas-trucks-0413>

World's only biarticulated CNG bus was launched in Colombia

Transmilenio, Ecopetrol, TGI, Gas Natural Fenosa and Scania launched the first biarticulated Euro 6 natural gas bus in the world, after a series of tests that proved that besides complying with the Euro 6 standard, its emissions of particulate matter and nitrogen oxides are almost nonexistent. Biarticulated bus is a type of high-capacity articulated bus with an extra axle and a second articulation joint that allows it to carry three passenger compartments instead of two. The

positive effects of this bus, in addition to the results of three other CNG standard buses with more than three years of operation in the country's capital, are evidence that this technology must be part of the new fleet that will be launched by the Mayor of Bogotá and Transmilenio. Emissions from this type of vehicle are 70% less polluting than what is required by Euro 6. In addition, the bus helps to clean the air, thus starting a new era for transport in the city. The bus exceeded the most demanding topographical and operational conditions of the Transmilenio system, demonstrating that this technology is prepared for the geography of Bogotá. Moreover, the performance of



this type of vehicles is the same as those that operate with other fuels. The biarticulated bus has a capacity of up to 250 passengers, equivalent to 125 cars with two passengers. It offers high performance and savings, both in fuel consumption and optimized maintenance.

<http://www.ngvjournal.com/s1-news/c3-vehicles/worlds-only-biarticulated-cng-powered-bus-was-launched-in-colombia/>

Dollar deal for Renewable Natural Gas in California

Clean Energy Fuels Corp. has introduced ZERO NOW, a fueling solution that combines the world's cleanest engine technology with the cleanest fuel at a price of \$1 per gallon for one year. Heavy duty trucks that are powered by the new ultra clean Cummins Westport engine purchased this year will be eligible for Clean Energy's Redeem™ renewable natural gas (RNG) at its California stations for the low price of \$1 per gallon for an entire year. Heavy duty truck fleets are under pressure to meet stricter emissions standards and Clean Energy's ZERO NOW solution does that – today. The new CWI natural gas engine achieves the lowest emissions levels in North America, yet delivers diesel caliber performance with reliability and durability. "By pairing the cleanest fuel available with the cleanest engine technology, ZERO NOW provides heavy duty truck fleets with a true zero-emissions solution that can be easily and economically adopted today," said Andrew Littlefair, president and CEO of Clean Energy Fuels. "At a time when the price of dirty diesel is bumping up to \$3.75 a gallon in California, paying only \$1 a gallon for a year for clean Redeem can go a long way to recouping the cost of a new truck. Add in the grants available in California for new clean trucks, the ZERO NOW special offer makes it a no-brainer to switch to renewable natural gas." The Redeem Dollar Deal program is available on a first come, first served basis to the first 250 qualifying trucks. These trucks are able to fuel with Redeem RNG at Clean Energy's extensive network of 23 stations throughout California. Also, Clean Energy has dedicated professionals that will help customers navigate through the application process for grants.

[Source: NGV Global](#)

MAN and Hyundai will build facility to test and boost dual fuel engines

MAN Diesel & Turbo will build a new test-engine facility in collaboration with its two-stroke licensee, HHI-EMD, the engine and machinery division of Hyundai Heavy Industries. The new venture aims to expand MAN Diesel & Turbo's R&D test capacity, in the process strengthening its development of dual-fuel natural gas engines. The center will be located in Ulsan, Korea at HHI-EMD's works and is scheduled to begin operation in early 2019. The test and gas facility will be the first

test engine with online remote control, supporting MAN's digitization strategy. In this respect, the test engine will also be connected to MAN Diesel & Turbo research and control center in Copenhagen, enabling the company's research engineers to closely follow and enhance the testing of future engine technologies. The new test engine set-up will also feature MAN Diesel & Turbo's own ME-GI Pump Vaporizer Unit (ME-GI PVU), an innovative cost-efficient high-pressure LNG supply unit that makes fuel gas supply system (FGSS) installations significantly more compact reducing both cost and weight. The ME-GI PVU is designed to pressurize and vaporize the LNG fuel to the exact pressure and temperature required by ME-GI engines.

<http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/man-and-hyundai-will-build-facility-to-test-and-promote-dual-fuel-engines/>

Spanish Food Company bets on natural gas trucks to cut emissions

Europastry has introduced three natural gas vehicles into its fleet. The IVECO AS 440 T/P NG trucks feature 400 horsepower and a load capacity of 18,000 kg, which along with the trailer can transport up to 40,000 GKG. It has a capacity of 460 liters of CNG distributed in four cylinders and a tank with capacity for 564 liters of LNG. This type of vehicle guarantees a sustainable transport, since it improves air quality, eliminating practically all the atmospheric pollutants that a conventional truck can emit (70% less NOx and 99% less particles in suspension); it mitigates global warming, by reducing about 15% CO2 emissions and 95% if it uses biomethane, and drastically reduces noise pollution in urban centers. Last year, Europastry announced the integration of two IVECO Schmitz Cargobull mega-trucks into its fleet. These vehicles will also help make logistics more efficient and reduce CO2 emissions by up to 20%.

<http://www.ngvjournals.com/s1-news/c3-vehicles/spanish-food-company-bets-on-natural-gas-trucks-to-cut-emissions/>

First Transit moves Philadelphia International bus fleet to full CNG

North American public transportation company First Transit, a leader in airport shuttle transportation solutions, has had its contract with Philadelphia International Airport renewed for operations and maintenance of the entire airport passenger shuttle operation. This year,

First Transit will change its entire bus fleet at the Philadelphia International Airport to run on compressed natural gas (CNG). First Transit will continue to provide maintenance, operations, and staffing for 46 buses, offering more than 3.5 million trips annually for the employee and economy parking lots. "We are proud to be a transportation partner for more than 20 years with the Philadelphia International Airport," said Paul O'Brien, regional vice president of First Transit. "New technology and an entirely green fleet will provide an enhanced passenger experience."

First Transit provides transportation shuttle solutions for 13 airports across North America.

[Source: First Transit/NGV Global](#)

LNG fueling station market intelligence with competitive landscape 2025

Demand for clean fuel vehicles running on natural gas is gaining momentum due to the rise in concern about environment protection. Governments across the world are promoting the usage of natural gas vehicles owing to the increase in greenhouse gas emissions. Currently, CNG is the primarily used form of natural gas in vehicles worldwide. About 5 liters of CNG is equivalent to 1 liter of diesel. This makes it useless for long distance heavy duty trucks owing to the high volume and the weight of CNG. This paves the way for LNG for usage in vehicles. LNG fueling stations are gradually gaining popularity as they possess higher energy density than CNG, higher volume of natural gas, and their storage requires highly insulated tank owing to low temperatures. Hence, LNG is suited for long distance heavy duty vehicles. In terms of type of station, the LNG fueling station market can be bifurcated into permanent station and mobile station. Based on application, the LNG fueling station market can be classified into vehicles and ship. The vehicles application segment consists of automobiles running on LNG. The ship application segment comprises ships and barges running on LNG. Key companies operating in the LNG fueling station market include Cryostar, Clean Energy Fuels, ENN Energy Holding, Kunlun Energy Company Limited, FortisBC, ENGIE, Sinopec, CNOOC, and Natural Gas Vehicles for America.

<http://www.editiontruth.com/lng-fueling-station-market-intelligence-competitive-landscape-2025/>

America's gas exports keep booming but a dearth of tankers looms

More new tankers were ordered in the first quarter of 2018 to carry liquefied natural gas than in all of 2017. Still, the build out won't come fast enough to meet growing global demand. That's the message from GasLog Ltd, a Monaco-based tanker owner and manager that's predicting a 30- to 40-vessel gap by 2020 as the number of export terminals worldwide continues to rise. In the US alone by that point, there's expected to be four export terminals operating, compared with just one now, and other countries are also expanding in the field. The immediate result of the tanker gap: Shipping costs could rise, and it may be tougher to get the product to foreign markets, said Jefferson Clarke, an industry analyst at London-based Poten & Partners Inc. Most LNG tankers take two-and-a-half years to build. The largest carriers have a capacity of more than 250,000 cubic metres, enough cargo to power all of South Korea's households for almost two days. In 2016, six new vessels were ordered to be built and there were 10 orders for new tankers last year. Since January 1 this year, a dozen more tankers have been ordered. But even that may not be enough to keep up with rising demand and an expanding set of export terminals. Next year, meanwhile, could see three more US terminals start up, and there are ongoing projects in the works in Australia, Africa, Russia and Asia, according to Bloomberg New Energy Finance. There are already about 500 ships serving the market, almost all of which are operating under long-term contracts,

according to Bloomberg Intelligence analysts Mark Rossano and Michael Filatov. "You'll read headlines of someone not being able to get a delivery or someone not getting a cargo, and it will happen," Clarke said. "But it's not to say that the global LNG trade will shut down."

<https://www.hellenicshippingnews.com/americas-gas-exports-keep-booming-but-a-dearth-of-tankers-looms/>

NW Shelf puts out-dated carrier fleet on market

The Woodside Petroleum-led North West Shelf LNG project wants to sell its ageing fleet of seven export carriers, a report says. Shipping news website TradeWinds reported that shipbrokers had invited expressions of interest for the vessels, which were nearing the end of long-term contracts. Up for sale were six Japanese-made, Moss-type carriers featuring spherical LNG tanks and built between 1989 and 1994, the report said. The seventh is a 14-year-old South Korean-built membrane-type vessel. The value of the Japanese-made carriers was estimated at less than \$30 million each. The website said the ships were seen as undersize, less efficient and underpowered compared with newer counterparts. Industry players say it is rare to see a whole LNG fleet put up for grabs in what has been a traditionally illiquid market on asset sales," TradeWinds said. Shipbrokers Braemar ACM and Fearnleys said there was potential for the buyers to charter the carriers back to the project. The sales are complicated by a different shareholding structure for each vessel. Bidders have been asked to submit initial expres-

sions of interest by tomorrow. A formal tender is due early next month.

<https://thewest.com.au/business/oil-gas/nw-shelf-puts-out-dated-carrier-fleet-on-market-ng-b88792882z>

Growing demand for LNG vessel conversions in North America

Seaspan Shipyards' Victoria Shipyards (VSL) was selected by TOTE Maritime Alaska to carry out the yard production work and docking necessary for the conversion of their two TOTE Orca class vessels to dual-fuel systems, a process which is being carried out in four phases and will enable the two ships to use LNG. The 'North Star', the first of the two 839-foot-long roll-on, roll-off cargo ships which carry cargo between Anchorage, Alaska, and Tacoma, Washington, arrived at VSL in December, 2017 kicking off the process of converting the diesel engines to dual-fuel systems. The 'North Star,' has now completed a 60-day visit to the shipyard, which along with 'Midnight Sun' will provide employment for 300 to 400 people working six days a week. Following her recent stay, she returned to Alaska, marking the first voyage outfitted with two new LNG tanks. Over the next four years, three more conversion periods will be required to finalize the transition of TOTE Maritime Alaska's vessels to LNG. Each of these conversion periods will take place in the winter to minimize the impact to customers and consumers alike. The conversion of both ships is scheduled to be complete in Q1 of 2021.

<http://www.ngvjournal.com/s1-news/c7-lng-h2-blends/growing-demand-for-lng-vessel-engine-conversions-in-north-america/>

LNG-fuelled 'Fure Vinga' joins Furetank fleet

Swedish shipping company Furetank Rederi AB has taken delivery of its latest vessel, Fure Vinga, the first in a series of six 17,999 DWT product tankers with LNG operation. Following successful sea trials, the vessel has this week been transferred to Furetank and started its trip from the shipyard of Avic Dingheng Shipbuilding in China, sailing to Europe. The first of the six sister vessels that Gothia Tanker Alliance has ordered at Avic Dingheng was launched in October last year. These vessels are built for Ice class 1A and are Dual-Fuel categorized, with LNG as their main fuel. Due to this, they have a very low EEDI to show. Sea trials were conducted at the end of January. Swedish-flagged Fure Vinga and her sister vessels have a cargo volume of 20 200 m³ with the main particulars LxWxD 149,9 x 22,8 x 9,36 m. These vessels are built for Ice class 1A and are Dual-Fuel categorized, with LNG as their main fuel. Due to this, they have a very low Energy Efficiency Design Index (EEDI). FKAB, together with Furetank, developed the concept and FKAB is responsible for basic design, which focuses largely on energy efficiency. Together with Marin, in the Netherlands, the hull lines have been optimized for the design speed. Later this year, three more ships will be delivered in the same series: one to Älvtank in July, followed by a sister ship to Thuntank in October and to Furetank towards the end of the year. There remains two sister vessels for delivery to Furetank and Älvtank.

<http://www.ngvglobal.com/blog/lng-fuelled-fure-vinga-joins-furetank-fleet-0406>



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MarineTraffic.com

One of the largest hydrogen filling stations in China will open in 2018

Air Products has signed an agreement with state-owned Shenhua New Energy Co. Ltd., a subsidiary of China's energy conglomerate China Energy Investment Group Co., Ltd., to provide two hydrogen dispensers to China Energy's first commercial hydrogen fueling station project in Rugao City of Jiangsu Province, eastern China. The fueling station is expected to be one of the largest in China in terms of fueling capacity when it becomes operational in mid-2018. Air Products' proprietary SmartFuel® hydrogen dispenser will be supplied for the project for fueling the hydrogen fuel cell powered vehicles. Air Products has participated in several of China's demonstration projects, such as powering the official shuttle buses for the 2008 Beijing Olympic Games, 2010 Asian Games and 2011 Shenzhen Universiade. The hydrogen fueling station in Beijing has continued to serve local vehicles since the events concluded. As part of its efforts to support China's hydrogen energy industry, Air Products also announced it has joined the National Alliance of Hydrogen and Fuel Cell (NAHFC) organization, which was co-initiated by China Energy and officially established in Beijing in February. The alliance is a government-backed national platform to develop the hydrogen and fuel cell industry by consolidating resources and innovative technologies from key industry players and institutes. It also serves as a

think-tank to form the national hydrogen energy strategy and development road-map.

<http://www.ngvjournals.com/s1-news/c4-stations/one-of-the-largest-hydrogen-refueling-stations-in-china-will-open-in-2018/>

My Eco Energy eyes 10% of Telangana's diesel market

Santosh Verma, co-founder, My Eco Energy, told Telangana Today, "Indizel has an edge over other diesel brands as it is made from the biodegradable products. This fuel will address environmental concerns. Mumbai-based bio-diesel company, My Eco Energy, which has rolled out its latest Indizel outlet in Patancheru and has established five more outlets on the outskirts of Hyderabad, is planning to add 50 more outlets in Telangana by the end of the current fiscal and about 500 outlets, nationally. The company plans to have 150 outlets in Telangana and Andhra Pradesh in the short-term. The biofuel developed by the company based on renewable vegetable oils, is an automotive diesel fuel from a bio-source, which conforms to Euro VI, EN 590 norms delivering quality standards, giving petrol-like engine performance. The company's product is 100 per cent equivalent to fuel for a diesel engine. The fuel can be used for trucks, buses, mines and factories. Our product is a non-petroleum based fuel that will not only result in low-emission but will also go a long way in ensuring sustainable energy. The product conforms to automotive fuel quality standards and is compatible with existing

fuel infrastructure, distribution systems and engines," he added. When asked about manufacturing and the core product differentiator, Verma said, "The product is currently produced in Singapore. We should be in a position to explore our options to manufacture it in India by 2021-22. The product uses raw material that is based on palm-derivatives. Ours is a non-fossil fuel, which is superior to other diesel forms and products. It is cleaner than compressed natural gas (CNG)."

<https://telanganatoday.com/eco-energy-eyes-10-of-telanganas-diesel-market>

Toyota plans to deploy over 100 hydrogen buses in Japan by 2020

Toyota Motor Corporation announces that sales began on March 7 of the "Sora," the first hydrogen fuel cell bus to receive vehicle type certification in Japan. Toyota expects to introduce over 100 fuel cell buses, mainly within the Tokyo metropolitan area, ahead of the Olympic and Paralympic Games Tokyo 2020. As the number of hydrogen powered buses in operation within the metropolitan area increases, Toyota anticipates greater awareness of the vehicle among the general public. Last year, Toyota launched the "Start Your Impossible" global corporate initiative to transform the company from an automobile company to a mobility service company. This was guided by the company's desire to contribute to the improvement and enhancement of customers' lives and society as a whole through support of the creation of a more inclusive and sustainable society in which everyone feels inspired to challenge his or her impossible. In developing the Sora, Toyota has sought to design buses that provide customers with freedom of mobility and become enduring town icons. Toyota aims to create a bus that works for and supports society, so the Toyota Fuel Cell System (TFCS) has been leveraged in the Sora for its environmental friendliness and ability to serve as a power source in the event of a disaster. The Sora features human-centric universal design and functions, reflecting Toyota's desire that when riding the Sora, mobility no longer presents an impediment to customers challenging the impossible, which helps enable them to achieve their dreams. Among other features, the Sora offers high environmental performance and the joy that is derived from fuel cell technology:

<http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/toyota-plans-to-deploy-over-100-hydrogen-powered-buses-in-japan-by-2020/>

Grass-fed cars move from science fiction to reality in \$15 billion market

Modi is trying for a 10% reduction in India's energy imports by 2022. As a result, the biofuels industry is set to explode into a \$15 billion market by 2020. An oil refinery in a region in India that's more famous for its tea plantations is hoping to put its abundant greenery to new use. A \$200 million joint venture between Numaligarh Refinery Ltd. and Finnish technology firm Chempolis Oy will crush bamboo, the longest of the grass family, to produce 60 million liters of ethanol every year in the tea producing state of Assam. That's enough to meet mandatory requirements for blending with gasoline in the entire northeastern region. The eight states that lie at the foot of the Himalayas together make up about two-thirds of India's total bamboo production. Record growth in Indian oil consumption means Prime Minister Narendra Modi is turning to everything from sewage water to crop residues to blend with diesel and gasoline. Apart from keeping up with the country's surging demand for fuel, Modi is also trying to fulfill his pledge to meet a 10% reduction in the nation's energy imports by 2022. As a result, the biofuels industry is set to explode into a \$15 billion market by 2020 with government backing. Indian oil companies are investing in biofuel refineries to boost ethanol production from non-molasses sources such as agricultural residues and even petrochemicals. But usage of the contemporary fuel has been slow to catch on. Just 2.1% of gasoline is being blended with ethanol, while very little biodiesel is mixed with diesel. The goal this year is 5 per cent blending for both.

Source: EnergyWorld