

NGS' NG/LNG SNAPSHOT

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30,000 more private CNG cars in Mumbai region in a year

The CNG car population in Mumbai region has increased by 12% in 2017-18, compared to 2016-17, with an addition of 30,000 cylinder-fitted cars, statistics released by Mahanagar Gas Ltd (MGL) revealed on Monday, October 29. MGL officials said it was a "good sign" that more people were opting for environment-friendly cars across the metropolitan region. On the flip side, the statistics showed a "poor" response to CNG two-wheelers. While 26 scooters/bikes were registered in 2016-17, the next year, the number increased to only 101. A senior MGL official said, "Two-wheelers are still being publicised, we expect a good number of registrations by 2019-end." The statistics showed the overall population of CNG vehicles (autos, taxis and buses) went up by 64,000 in a year, from 5.46 lakh (2016-17) to 6.1 lakh (till March 2018). Sources said the total may have gone up by 25,000 more till September, although the exact figure is not available. In case of CNG cars, the population stood at 2.41 lakh in 2016-17, which rose to 2.71 lakh in 2017-18. With government encouraging CNG cars, by giving tax concessions to buyers, several people prefer the duo variant (petrol with CNG fuel), especially for hatchbacks. Many have also got CNG kits retrofitted in their cars for Rs40,000-45,000 per kit, sources said. Autos witnessed a growth, from 2.33 lakh in 2016-17 to 2.65 lakh vehicles registered till March this year, the statistics showed. The number of taxis plying on the clean fuel also rose from 60,500 to 62,859. Sources in MGL said the CNG auto population in the region grew by around 60% in five years, compared to 20% for CNG taxis on roads, and the bus population had a slow growth rate. Transport experts suggested the region must have more CNG and electric vehicles to ensure reduction in emission levels. The state too has been promoting environment-friendly vehicles, giving huge tax concessions.

<https://timesofindia.indiatimes.com/city/mumbai/30k-more-pvt-cng-cars-in-mumbai-region-in-a-yr/articleshow/66421368.cms>

Adani Gas to be listed in November

Adani Gas Ltd, the gas sourcing and distribution business that was spun off from Adani Enterprises Ltd earlier this year, will be listed on the BSE and NSE in November,

according to bankers involved in the process. Earlier this month, the Adani Group signed an agreement with French oil and gas giant Total SA to set up a joint venture to develop multi-energy offerings such as LNG and fuel retailing. On September 9, the shareholders of Adani Enterprises were allotted one equity share of AGL (face Value of Re 1) for each share held in Adani Enterprises. Adani Gas Holdings Limited (AGHL) will merge with Adani Gas Limited, according to the scheme of arrangement approved by the National Company Law Tribunal in August. Post listing, the promoters will hold 74.92 per cent stake in Adani Gas with the balance held by the public. Adani Enterprises said in a presentation that the hive off and listing was meant to unlock the value of CGD business currently embedded in the value of AEL, enabling share-holders to get direct exposure to the high growth CGD business of Adani Gas by removing holding company discount.

<https://www.thehindubusinessline.com/companies/adani-gas-to-be-listed-in-november/article25325035.ece>

10th city gas distribution auction may start by December

The Petroleum and Natural Gas Regulatory Board (PNGRB) may start the process for the tenth round of city gas distribu-

tion auction for 30-40 geographical areas by December, Chairman Dinesh Kumar Sarraf said. "I think it could be even earlier than that," Sarraf said when asked when in December the regulator may start the auction process. Sarraf said the regulator is in the planning stage for the auction and some of the key policy decisions could affect the timing. Another official who did not want to be named said the regulator plans to wrap up the auction for 30-40 geographical areas in about three-four months. In the ninth round of auction, winners for which were announced in September, Adani Gas Ltd, Indian Oil Corp Ltd, and Bharat Petroleum Corp Ltd's arm Bharat Gas Resources Ltd had emerged as the successful bidders for licences for 84 geographical areas. Bharat Gas, which decided to go alone in the auction, succeeded in getting 11 geographical areas. Over 400 bids were received under this round of auction, which was held as per revised rules to generate more investor interest, given that the last few rounds were damp squibs.

<http://www.freepressjournal.in/business/10th-city-gas-distribution-auction-may-start-by-december/1377344>

Piped cooking gas supply in Patna likely from December

The supply of piped cooking gas to 50,000 households in the city is expected to start from December. As part of the Jagdishpur-Haldia gas pipeline project, the Centre had initially claimed to commence the piped gas supply in the state capital from Diwali. Officials said out of the 490km-long Allahabad-Barauni-Patna pipeline, the pipe laying works on 50km stretch is still incomplete and is expected to be done by December. K B Singh, executive director of GAIL, eastern region, said the work to connect the main pipeline with city gas stations is underway. "The supply of piped cooking gas in the state capital will start from December following completion of the work on the remaining 50km stretch," Singh said. He added: "The gas pipeline laying work slowed down due to monsoon season and festivals." Union minister of petroleum, natural gas and skill development Dharmendra Pradhan had said last year that works on the 204km town gas supply network in Bihar under the Jagdishpur-Haldia and Bokaro-Dhamra gas pipeline project will be completed by October 2018. Asked about setting up of city gas station for the monitoring of Piped Natural Gas (PNG) supply at Phulwarisharif, Singh said: "Negotiations are underway between GAIL and Bihar government to purchase land at Phulwarisharif to establish a city gas station. The state government has fixed Rs100 crore as land acquisition cost for the plot, which seems too high." He said the construction of a city gate station at Naubatpur for distributing PNG is in the completing stage. "The infrastructure for supplying PNG to households is being created in areas such as Jagdeo Path, Saguna Mor, Gandhi Maidan and Kankarbagh," Singh said. Officials said the estimated cost of gas pipeline network in Patna is around Rs2,500 crore and it will provide piped cooking gas to 50,000 households.

<https://timesofindia.indiatimes.com/city/patna/piped-cooking-gas-supply-in-patna-likely-from-december/articleshow/66307696.cms>

LNG buses to ply on Kochi roads soon

PLL, an energy industry company that has set up LNG terminals in Dahej, Gujarat and Kochi, has agreed to pledge Rs 1.5 lakh for each bus as gap funding for 100 buses. As the state maneuvers forward to accommodate e-vehicles and opt for friendlier fuels, the Kerala State Road Transport Corporation (KSRTC) with a fleet of 6,000 buses, has plans to launch LNG powered buses in Kochi with Petronet LNG Limited (PLL) underpinning the gap funding between a diesel and an LNG bus. PLL has agreed to pledge Rs 1.5 lakh for each bus as gap funding for 100 buses. Such an initiative would be a double-fuelled leap as it promotes the use of environmental-friendly fuels and simultaneously save expenses as LNG is cheaper than diesel. LNG-powered buses are also claimed to be lighter in comparison to buses powered by conventional fuel as it eliminates the need for many cylinders. However, as LNG engines are expensive, the KSRTC buses would have CNG engines albeit powered by LNG, said sources. Following the success of the CNG buses that were rolled up out in March, the KSRTC had approached PLL for the acquisition of 100 CNG buses. However, PLL said that it would support LNG buses and not CNG buses. The pilot run of the first LNG bus in India was launched in Thiruvananthapuram in 2016 by the Minister of Petroleum and Natural Gas, Dharmendra Pradhan in the presence of the Chief Minister, Pinarayi Vijayan. A joint effort of PLL, Indian Oil Corporation Ltd (IOCL) and Tata Motors Ltd, the resourceful project aimed to reduce carbon emissions and generate savings.

<http://www.newindianexpress.com/cities/kochi/2018/oct/15/lng-buses-to-ply-on-kochi-roads-soon-1885957.html>

NITI Aayog's draft concession agreement gives e-buses a sense of direction

In the absence of clear regulations, operators were going headfirst into the world of green vehicles. Much before winter pollution starts to choke Delhi's public discourse, Chief Minister Arvind Kejriwal in July announced that the state will induct 1,000 electric buses into its fleet. Two months earlier, in May, adjoining Gurugram announced a similar plan to add 200 e-buses to decongest the city's winter air. In Hyderabad, meanwhile, Goldstone BYD, now called Olectra-BYD,

Compac brings world class fast fill technology to India

Natural Gas Vehicles have to wait for a long time at India's CNG stations as growth in the number of vehicles running on CNG has outpaced the rate of expansion in the refuelling stations. The situation is further aggravated by paucity of land for putting up new CNG stations, all that is about to change with a new dispenser designed and manufactured by Compac Industries. Compac Industries India Ltd, working at the forefront of development in CNG industries in India, has addressed these long-present challenges with the introduction of a four arm fast fill dispenser. Fully compliant with global standards, it is designed in such a way that it still occupies the same space as that of a standard dual hose dispenser, thereby minimising the space requirements in the station forecourt. This is particularly important due to the high cost of land in India's major cities. Four vehicles can be filled simultaneously with this dispenser, at increased flow rates. The four arm dispensers ensure higher station efficiency, reducing actual filling time by as much as 25%. The solution is ideal for the 3.1 million natural gas vehicles (NGV) in India, the majority of which are small vehicles. The first dispenser was supplied to Indraprastha Gas Limited New Delhi and this dispenser has been successfully trialled for a period of one year. The product is now commercially available and is expected to be a game changer for the Indian CNG vehicle market.

[Source: NGV News](#)

entered the city with 30 e-buses as part of a consortium. Environment friendly electric buses in public transport was envisioned much before the push for electric mobility in private vehicles picked up steam. But operators of e-buses are jumping in headfirst as there are no guidelines on concession agreements in the country. The NITI Aayog, however, is now attempting to bring in some uniformity by framing a draft concession agreement for public-private partnership in operation and maintenance of electric buses in cities. The draft tries to give shape to the gross cost contract model, which is based on per kilometre fee to the operator. The cost is calculated on a gross basis and not for a particular route. To a large extent, the draft contract builds on the existing model of privately-run city buses in Delhi that bundle maintenance depots with running the bus service. Article 10 of the draft model agreement gives details of the land for depots which will be provided on lease by the transport or government authority to operators with a right of way on the property. The lease rights include development of real estate for commercial purposes. According to Singhvi, founder of Mytrah Mobility, there are currently open bids for over 1,000 electric buses and another 1,000 is in the pipeline. The biggest fleet of electric bus is currently operational in Himachal Pradesh, run by a consortium

of Mytrah NN4Energy, BYD and Goldstone. "Electric buses are more suitable and cost effective than CNG buses. There should be concerted focus on their successful induction in transport fleets," he adds. Though e-buses have attracted significant interest from the state transport undertakings as well as bus makers, the greening of city transport will depend on the workability of the public-private partnership model and its attractiveness in the long term.

https://www.business-standard.com/article/economy-policy/niti-aayog-s-draft-concession-agreement-gives-e-buses-a-sense-of-direction-118101701170_1.html [Edited]

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Oil regulator approves sale of Mukesh Ambani's pipeline to Brookfield

Billionaire Mukesh Ambani has won oil regulator PNGRB's approval for selling his loss-making east-west natural gas pipeline to Canadian investor Brookfield, a top official said. Ambani's Reliance Gas Transportation Infrastructure Ltd, which later changed the name to East West Pipeline Ltd (EWPL), a decade back built a 1,400-kilometer pipeline from Kakinada in Andhra Pradesh to Bharuch in Gujarat to transport natural gas discovered in a KG basin block operated by his flagship firm Reliance Industries. While the Competition Commission of India (CCI) had in September approved the transaction where Brookfield is sponsoring an Infrastructure Investment Trust (IIT) called India Infrastructure Trust as the acquisition vehicle, the Petroleum and Natural Gas Regulatory Board (PNGRB) gave its nod a few weeks back. "Yes, the approval has been accorded," PNGRB Chairman Dinesh K Sarraf said. This will be Brookfield's first investment in the energy sector in India. However, the acquisition price has not been disclosed. According to September 11 approval of the CCI, the pipeline housed under EWPL will be transferred to an entity called Pipeline Infrastructure Pvt Ltd (PIPL), a whollyowned subsidiary of Reliance Industries Holding Pvt Ltd (RIHPL). "RIHPL would sell its entire issued and paid up equity share capital of PIPL to IIT," the CCI order said. "Further, IIT will also subscribe to the non-convertible debentures to be issued by PIPL." Brookfield Asset Management Inc's affiliate Rapid Holdings Pte Ltd and PenBrook Capital Advisors Pvt Ltd (PCAPL) had executed a framework agreement to buy the pipeline on August 28. PCAPL is a joint venture between Peninsula Investment Management Co Ltd and rights of PIPL is proposed to be acquired by India Infrastructure Trust (IIT), a trust to be established/sponsored by Rapid and registered under the Indian Trusts Act, 1882 and the Securities and Exchange Board of India (Infrastructure Investment Trusts) Regulations, 2014," the CCI order said. PCAPL would be appointed as the investment manager of IIT.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/oil-regulator-approves-sale-of-mukesh-ambanis-pipeline-to-brookfield/66408358>

India to contribute the most to growth in global oil demand, OPEC says

India will contribute the most to the rise in global oil demand in the next two decades, according to OPEC, even as the world's fastest-growing nation looks to reduce its dependence on fossil fuels. "The world oil demand is expected to increase by 14.5 million barrels a day, from 97.2 mbd in 2017 to 111.7 mbd in 2040. India will account for a growth of 5.8 mbd, which represents an astonishing 40% of the overall increase," Mohammed Sanusi Barkindo, secretary general, Organisation of Petroleum Exporting Countries, said at the India Energy Forum in New Delhi today. Citing the World Oil Outlook, he said India is projected to see the largest additional oil demand, growing at the fastest pace of 3.7 percent a year, by 2040. That comes when Asia's third-largest economy is pushing the use of natural gas and wind and solar farms to lower imports of crude, the largest contributor to the nation's trade deficit, besides meeting emission targets under the Paris agreement. Still, that is unlikely to be enough to meet its growing energy

demand. OPEC forecasts that the primary energy demand globally is expected to increase 33%, or 91 million barrels of oil equivalent a day, between 2015 and 2040. About 24% of this anticipated increase will be from India, said Barkindo. "This impressive growth reflects the remarkable transformation of the Indian economy during the forecast period," he said. "We estimate that India will grow at an average annual rate of 6.5 percent for the period 2017-2040. Real GDP is expected to surpass OECD Europe by 2035, and OECD America by 2040." To meet the future needs of both India and the world by 2040, he said the oil sector would require estimated investments worth \$11 trillion. Barkindo said the oil market is adequately supplied but this situation is fragile. "Our current view is that the market is currently adequately supplied and well balanced. For 2019, there is the potential for an imbalance, due to larger growth in supply. Naturally, this prognosis is subject to the critical uncertainties," he added.

<https://www.hellenicshippingnews.com/india-to-contribute-the-most-to-growth-in-global-oil-demand-opec-says/>

India presents opportunities in oil and gas sector at Singapore roadshow

Fourteen blocks under the OLAP and 25 contract areas covering 59 discovered oil and gas fields under DSF Bid Round II are being offered. India presented a wide range of investment opportunities in the upstream oil and gas sector, citing strong interests in the ongoing \$2.86 billion investment underway to double gas production and drill more than 120 exploration wells over the next four-five years. A Directorate General of Hydrocarbons (DGH) delegation, led by Director General Dr V P Joy, highlighted in its presentation new improved oil recovery and enhanced oil recovery concepts, introduced earlier this month, which offers flexible terms for exploiting existing discoveries. "Investments in capital goods for hydrocarbon production is recoverable from earnings," said Dr Joy while listing out incentives under the new upstream sector policies. The \$2 billion investment will nearly double the natural gas production to 60 BCM a year by 2022 from the current 33 BCM a year. The presentation was for bid round II under the Discovered Small Field Policy (DSF) and Open Acreage Licensing Policy (OLAP). The DSF policy is aligned to Hydrocarbon Exploration and Licensing Policy (HELP), which adopts the revenue sharing model as a step towards improving the ease of doing business in Indian exploration and production (E&P) sector, the DGH said in a press statement here. It comes with attractive fiscal terms like reduced royalty rates and no cess, single license for all hydrocarbons, pricing and marketing freedom, freedom to exploration throughout contract period, no signature bonus and provision for sharing of common facilities, it said. Over 175 participants from E&P companies, service providers, investors and entrepreneur attended the Singapore roadshow. The Singapore roadshow was second after the October 4 Russia event and will continue in London and Abu Dhabi.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/india-presents-opportunities-in-oil-and-gas-sector-at-singapore-roadshow/66376981>

Adani Enterprises, Total SA reach agreement on retail network, LNG businesses

A day after Total SA's chairman and chief executive officer Patrick Pouyanne said the company is eyeing to enter various energy segments in India, the French hydrocarbon major on Wednesday, October 17, announced that it has tied up with Adani Enterprises for LNG and fuel retailing businesses. The combined force will develop various regassification terminals including Dhamra in the east coast of India, apart from setting up 1,500 fuel retail outlets over the next 10 years. While Total is the world's second-largest private LNG player, Adani is having large presence in India through infrastructure. The tie-up is expected to benefit as well as boost India's vision to increase the use of natural gas in the overall energy mix from the current 6.5% to 15% by 2030. Total will be re-entering the LNG segment as the company in August agreed to sell its 26% stake in Hazira LNG regasification terminal in Gujarat to Shell India through a binding letter of intent. Total has also signed an agreement to sell 0.5 MMT of LNG per year to Shell for the next five years on a delivery basis so that the latter could supply to Indian market as well as neighbouring countries. India already has

four LNG terminals, and at least 10 more LNG projects are coming up which will likely to take the total capacity of terminals in the country to around 72.5 million tonne per annum (MTPA). Adani earlier this year turned out to be the biggest winner under the 9th licensing round of city gas distribution. In the fuel retailing segment, the two companies will be opening outlets on highways and inter-city connections to take advantage of a market growing at 4% per year, driven by the development of road infrastructures and emergence of the middle class, the companies said in a joint statement.

<https://www.financialexpress.com/industry/adani-enterprises-total-sa-reach-agreement-on-retail-network-lng-businesses/1352982/>

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.

Centre reviews progress of Northeast Natural Gas Pipeline Grid Project

A Joint Venture, M/s Indradhanush Gas Grid Limited (IGGL) has been formed to execute the North East Natural Gas Pipeline Grid project connecting all the eight NE States through a 1656 KM-long gas pipeline network at an estimated investment of Rs. 9,500 crore. Five major Oil and Gas CPSEs namely Indian Oil Corporation Limited (IOCL), Oil and Natural Gas Commission (ONGC), Gas Authority of India Limited (GAIL), Oil India Limited (OIL) & Numaligarh Refinery Limited (NRL) have formed the Joint Venture company with equal equity contribution. Various pre-project activities for this pipeline grid have already been commenced and efforts are being made to commence the physical works at the earliest. Expansion of the North East Natural Gas grid through IGGL will promote employment opportunities in the region, providing the much needed boost to the economy and further increase the share of clean fuels in India's energy basket. The Gas Grid Project will connect all NE States to the National Gas Grid through Barauni-Guwahati Gas Pipeline being laid by GAIL. From Guwahati, the pipeline will extend to Numaligarh, Dimapur, Kohima and Imphal in one direction; Shillong, Silchar, Aizawl and Agartala in the second direction and to Itanagar in the third direction. Gangtok will be connected from Siliguri from the gas pipeline of GAIL coming from Barauni to Guwahati.

<https://www.sentinelassam.com/news/centre-reviews-progress-of-northeast-natural-gas-pipeline-grid-project/>

Emerson to offer complete portfolio for ONGC's KG-DWN 98/2

Global technology and engineering company Emerson will be offering its complete portfolio for ONGC's KG-DWN 98/2 project, said a top company official. "There is a lot of conversation here about developing some additional gas and oil resources. We are pursuing a project now with ONGC for major development there... We are offering our complete portfolio for ONGC's KG-DWN 98/2 project. This includes control systems, instruments, valves, the reservoir modelling software and some of the additional, what we call, applied web capabilities. It's our version of a digital ecosystem," Mike Train, President of Emerson, told BusinessLine. "Technip will typically be a contractor. We will be a provider through them. So they or others are going to engineer large portions of the project. These companies (like Technip) become a customer in the sense of how we transact, even though it all ends up in ONGC's hands," he said. Commenting on growth plans from India business, Train said, "The Indian economy annually grows at roughly 7-8 per cent. So, from our point of view, if an economy is growing like that, we think that we should be growing potentially at 8-12 per cent per annum, depending on where the capital expenditures are moving around." "We have announced a grassroots (green field) manufacturing centre for a number of our products in Pune. It will take around two years to complete and we are in the midst of that. We already have nearly 7,000 employees in India with 4,000 engineers. We use India for producing goods, equipment, and control systems software for India. On top of that, we use India as a global engineering centre for R&D of products and also for working on global projects," he said. "The capital expenditure for the initial phase of the Pune facility is \$100 million. There will be at least two phases and we will set it up to expand over time. We would expect some initial phases operating in 2020," he added.

<https://www.thehindubusinessline.com/news/emerson-to-offer-complete-portfolio-for-ongcs-kg-dwn-982/article25279467.ece>

No commercial permit for vehicles plying on ethanol

Electric-battery operated vehicles and the ones running on 100% ethanol or methanol will now not require commercial permits from the state transport departments. The transport ministry has exempted these categories of vehicles running on clean and alternative fuel from the purview of permit conditions. This move will not only reduce corruption at regional transport offices (RTOs) but also end the restrictive practices which different states have put in place. Such restrictions often force people to get the permits after paying high charges. Union transport minister Nitin Gadkari had been pushing the proposal to give this exemption to such environment-friendly vehicles. Officials said increase in number of vehicles running on alternative fuel will be a big game-changer as it will help reduce India's dependence on imported crude. Officials said the exemption from permit does not mean the vehicles won't comply with other conditions - valid registration, fitness, passenger insurance cover and pollution under control (PUC) certificate in the case of ethanol and methanol vehicles. While non-commercial electric vehicles have been assigned distinct "green registration plate" with letters and numbers in white, in the case of commercial electric vehicles the numbers and letters will be in yellow. Currently, there is no vehicle in India which runs on 100% ethanol or methanol. Officials said they would consider assigning a specific colour of number plate for such vehicles when they are available in the market.

<https://timesofindia.indiatimes.com/india/no-commercial-permit-for-vehicles-running-on-alternative-fuel/article-show/66338141.cms>

Government looks to relax norms for setting up petrol pumps

The government is mulling relaxing norms for setting up petrol pumps as it is keen on getting more private players into fuel retailing so as to increase competition. The Oil Ministry has set up an expert committee to recommend easing of fuel retailing licensing rules, the ministry order said. At present, to obtain a fuel retailing licence in India, a company needs to invest Rs 2,000 crore in either hydrocarbon exploration and production, refining, pipelines or liquefied natural gas (LNG) terminals. The expert committee will "look at various issues related to the implementation of existing guidelines for grant of marketing authorisation of market fuels - petrol, diesel and aviation turbine fuel (ATF)," it said. The panel would include renowned economist Kirit Parikh, former oil secretary G C Chaturvedi, former Indian Oil Corp (IOC) chairman and IIM Ahmedabad Director M A Pathan. It

has been asked to furnish its report within 60 days after due consultations with stakeholders. It will "identify entry barriers, if any, for expansion of retail outlets for private marketing companies." State-owned oil marketing companies - Indian Oil Corp (IOC), Bharat Petroleum Corp Ltd (BPCL) and Hindustan Petroleum Corp Ltd (HPCL), currently own most of 63,498 petrol pumps in the country. Reliance, which operates the world's largest oil refining complex, has less than 1,400 outlets. Nayara has 4,833 while Shell has just 114 pumps. BP plc of UK had a couple of years back secured a licence to set up 3,500 pumps but hasn't yet started doing so. Last week, French energy giant Total in a joint venture with Adani Group announced plans to set up 1,500 petrol pumps in the next 10 years. The expert group would make specific recommendations on the nature of amendments required to the existing guidelines for grant of a license to private retailers.

[Source: ET Energyworld \[edited\]](#)

Gas migration dispute may have slowed down BP's investments in India: Bob Dudley

BP's group CEO Bob Dudley says issues such as gas migration dispute have probably slowed down its investments in India. BP's group chief executive officer Bob Dudley expressed confidence that there won't be a return of state control on fuel pricing in India and said that issues such as gas migration dispute "probably slowed down" its investments here. This comes in the backdrop of the Indian government's plan to challenge the decision of an international tribunal that has ruled in favour of Mukesh Ambani-controlled Reliance Industries Ltd (RIL), and its partners BP Plc and Niko Resources Ltd, in a gas migration dispute. The tribunal also awarded costs of \$8.3 million to be paid by the government to the consortium. "I think the speed of decision making does and will be faster in the future in India. But the speed of decision making is something that is not good for Brand India. I am very open about my views on this," Dudley said at a press conference at the India Energy Forum by CERWeek. "So, we have to one, continue to have confidence in the country and what we do and our investments. And we also have to go through processes like these. And its probably slowed down our investments. Our investments probably would have been faster. But I am confident. I am confident otherwise we wouldn't be investing this much money," added Dudley whose firm has made a \$12 billion investment commitment in India. Dudley added that regulatory slow-downs are not specific to India. "Regulatory slow-downs happen in many places. It has happened to us in the United States on a massive scale.

Moody's Investors Service in a recent report said that the government's decision is credit negative for IOCL, BPCL and HPCL and will impact its earnings by Rs 6,500 crore. The effective reversal of fuel price deregulation will also constrain future private sector investments in the sector.

<https://www.livemint.com/Companies/aVN8Sq1tkpH3vSA7tEzEpN/Gas-migration-dispute-may-have-slowed-down-investments-in-In.html> [Edited]

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India has to continuously engage with the global energy community to steer its own course of a new energy future: Dharmendra Pradhan

Union Minister of Petroleum and Natural Gas & Skill Development and Entrepreneurship Shri Dharmendra Pradhan has said that Energy is a global industry and oil is truly a global commodity, and hence our engagement with the global energy community has to be continuous. Speaking at CERA Week conference here today, he said that India cannot work in isolation, as from a global perspective, global market shifts, technological disruptions, financial markets & paper trading, and possible disruption in the form of energy transition are shaping the future of energy security. He said that any action on energy must take into account the global consensus achieved by the United Nations 2030 Agenda for Sustainable Development, the “Paris Agreement” of 2015 and decisions of the G20 Leaders’ meeting in Hamburg in 2017 that regard energy security as one of the guiding principles for energy transition. Shri Pradhan said that India has taken a lead in International Solar Alliance (ISA) with 60 solar-rich countries. Two weeks back as part of the International Solar Alliance gathering in New Delhi, Hon’ble Prime Minister Shri Narendra Modi mentioned that ISA can potentially replace OPEC as the key block of supplier of energy in the world. With the falling prices of solar, we can easily achieve his idea of “One World, One Sun, One Grid”. He said that We are trying to accomplish Hon’ble PM’s vision of the energy sector – of ensuring energy access, energy security, energy affordability and energy sustainability. As the third largest consumer of energy and one of the fastest growing – in a volatile global environment, we cannot just rely on one source of energy. As Hon’ble Prime Minister had mentioned last year, like horses in Sun God’s chariot, India will harness all sources of available energy -solar, wind, hydro, coal, oil, gas, nuclear, bio-fuels etc. The Minister said that the upstream licensing round under Discovered Small Field and the Open Acreage Licensing Policy has been successfully completed. OLAP under HELP is now a continuous process backed by a transparent data repository. Cabinet has also approved the policy to incentivize enhanced oil recovery which will further help boost upstream activity in India. He said that in a big boost to the City Gas Distribution (CGD) network expansion, in the 9th round of bidding, 86 licenses have been offered and bid out. 50% of country’s population will soon have access to local gas network, which will boost our efforts toward providing clean air in our cities and towns. India has leapfrogged from the use of BS IV to the launch of BS VI grade fuel. Even though the original target for BS VI roll-out was 2024, we advanced that to 2020 and have now rolled it out in the NCT in 2018 itself. Shri Pradhan said that we also have been giving a big push towards harnessing bio fuel with the launch of National Bio Fuel Policy of 2018. Shri Pradhan said that in past one year, severe head winds have been faced by way of rising oil prices. Since the last CERA week in New Delhi, crude prices have gone up 50% in US Dollar terms and 70% in Indian Rupee terms. Much of it is to do with geo-political events imposed on the world. He solicited the suggestions towards further improving the investment climate in the oil and gas sector. He said our industry and research institutes need to come together to develop technology for CO2 Capture, Hydrogen Fuel cells, Gas Hydrates, Hydrogen-Injected CNG, Coal to gas etc. He expressed the hope that the conference on “India’s Energy Transition: Evolution or Revolution?” to have stimulating and productive deliberations, which will help India drawing from the rich international expertise and experience.

<http://www.5dariyanews.com/news/249108-India-has-to-continuously-engage-with-the-global-energy-community-to-steer-its-own-course-of-a-new-energy-future-Dharmendra-Pradhan>

Exchange in the works to discover local gas price

Introduction of marketing freedom for difficult fields two years ago has encouraged investment of billions of dollars in gas production by state and private players. The government is planning a major gas-pricing reform by permitting trading of all domestic supply on a local exchange, slated for year-end opening, a move that would help discover the market price for gas locally and render current gas price formula and ceiling redundant. The oil ministry has prepared a proposal to allow trading of all gas produced in the country on the proposed exchange, sources familiar with the matter said, adding that the Prime Minister’s Office (PMO) will take a final call on this. “The exchange will be a parallel platform for local price discovery of domestic gas. So, instead of having a formula based on prices from different parts of the world, we would have our own price discovery,” a source familiar with the matter said. “All producers would get the option to use this platform although no one would be forced to use this.” Producers bound by contractual obligations to supply can start selling their gas on the exchange after their agreement has expired, sources said. “If we are ultimately going to have this would be a political call,” a source said. “Most of our domestic gas is allocated by the government for various purposes such as city gas, fertiliser plants or energy. So, the government will have to decide if it can fully stop allocating or reduce it to a large extent so that proportionate gas is available for trading at exchange,” the source said. Ensuring market rates for gas was the only way to attract more investment in the sector, sources said, adding that it was going to be a tough call for the government since it also has other interests to balance such as making available cheaper fertiliser or energy to people. Introduction of marketing freedom for difficult fields two years ago has encouraged investment of billions of dollars in gas production by state and private players.

<https://economictimes.indiatimes.com/industry/energy/oil-gas/exchange-in-the-works-to-discover-local-gas-price/article-show/66340538.cms>

India's BPCL to invest \$800m in Mozambique LNG project

Indian oil and gas firm Bharat Petroleum (BPCL) is reportedly set to invest \$800m as equity in the Mozambique Rovuma Offshore Area 1 liquefied natural gas (LNG) project. The investment represents BPCL's largest investment in an upstream project overseas, thehindubusinessline.com reported. The company holds a 10% interest in the Rovuma Offshore Area 1 concession, which is located within the Rovuma Basin. BPCL acquired the 10% stake for \$703m. Anadarko Petroleum is the field operator with an ownership of 26.5%. The partners expect to make a final investment decision (FID) during the first half of next year. Approximately 75 TCF of natural gas has already been discovered in the project area, which comprises the Prosperidade and Golfinho/Atum complexes, as well as onshore LNG infrastructure in the Cabo Delgado province in northern Mozambique. The consortium partners are developing an initial onshore LNG project comprising two LNG trains with an aggregate nameplate capacity of 12.88 MMTA. An unnamed BPCL executive told the publication: "Assuming that the project cost is going to be somewhere around \$20bn, we are anticipating that 33%-37% will be equity and the balance would be debt. "Once

that is finalised, we are good to reach the FID stage. We are hoping that the FID will happen sometime next year in the first half or second half." To make the FID, the partners need to achieve certain milestones, including signing long-term LNG sale and purchase agreements (SPA) for at least 9MMTPA. Earlier this month, Japan's Tohoku Electric reached an agreement to purchase up to 0.28MMTPA of LNG from the project. Construction of the project is anticipated to begin by the end of next year, while the first LNG is expected by 2023.

<https://www.offshore-technology.com/news/indias-bpcl-invest-800m-mozambique-lng-project/>

Government drafting policy on FSRU-based LNG import facility

The government is working on a policy for setting up floating storage and regasification unit (FSRU)-based liquefied natural gas (LNG) import terminal at major ports in the country, a top Shipping Ministry official said. The policy will spell out how such deals will be structured. "An FSRU is just taking some waterfront to set up the LNG import facility," Shipping Secretary Gopal Krishna told BusinessLine. "It should be taken as land lease nothing else. Earlier, we were thinking it's a public private partnership (PPP). It's not a

PPP; it's a pure land lease," he added. In many countries, FSRU-based LNG project is the fastest and most cost-effective way to secure energy supply while bolstering the fight against climate change and air pollution. FSRU-based LNG projects costs half that of an on-shore import terminal. LNG import terminal capacity is expected to double to 47.5MMTPA by 2022. FSRU-based LNG projects have been set up or are in the process of being developed at ports outside the control of the Central government. H-Energy Gateway Private Ltd (H-Energy), the energy unit of India's real estate firm Hiranandani Group, has opened an FSRU-based LNG import terminal at Jaigarh port in Maharashtra. H-Energy is also building a FSRU LNG project in West Bengal. Swan LNG Private Ltd is setting up an FSRU-based LNG import facility off the Jafrabad coast in Gujarat's Amreli district. Two FSRU-based LNG import terminals are planned on the east coast — on each at Kakinada and Krishnapatnam ports, both in Andhra Pradesh. Centre-owned Mumbai Port Trust had floated a tender to set up a FSRU-based LNG project, but the tender was scrapped in the absence of a policy framework to award the tender.

<https://www.thehindubusinessline.com/economy/govt-drafting-policy-on-fsru-based-lng-import-facility/article25252215.ece>

Talks to pick up stake in Qatar's upstream sector have slowed down: Prabhat Singh, Petronet LNG

The company had in a consortium planned to invest in Qatar's upstream sector, are the plans still on? There are some discussions still going on. We wanted to get the molecule at the well-head price while they want it at the market price. They are looking at a much larger plan.. so we need to create a market link with India. I think all the Indian companies together must make a case for it. We are still at the phase where we have access to the data and we have analysed it. Nothing substantial has progressed apart from that. It is still under consideration. We have not written it off.

We have identified some 27 locations on the 4,000 Km highway and applications have been sent to PESO for clearances and this is all being done in association with the Oil Marketing Companies (OMCs) because their outlets will be the locations. We are going to float the tender to set up these LNG stations soon. We have reached a point where only the tender needs to be floated. The first segment will be between Delhi and Mumbai where we have identified five locations on the route clearly. If there is a requirement to split up the tenders, we will do that. Tata Motors has already made four LNG buses for us. Type approval is pending and they are being tested right now. They are supposed to be delivered between October and December this year. Activity in the LNG fuel retail sector is picking up. The Hiranandani group is doing something. GAIL has certain plans. Petronet's core work is increasing the use of LNG in various segments. Slowly OMCs are also picking up interest.

Could you give an update on the upcoming Bangladesh LNG terminal ?

The Bangladesh LNG (project) is a bit slow as the country has gone in an election mode, we have submitted all the necessary documents for the project, an internal meeting at their end is pending. We have identified the Kutubdia island for the LNG project but other locations like Maheshkhali are also being considered.

What is the status of the plans for setting up LNG terminal in Sri Lanka?

The Sri Lanka LNG project is moving significantly faster than the Bangladesh LNG project. We have submitted all the commercial details. I cannot commit on any timelines. However, we will be able to give some more details after one more quarter.

The company was also looking at setting-up a LNG terminal in Andaman. *What is the update?*

There is some progress on that front. Andaman will soon sign a PPA with NTPC and after that things will kick-off. The capacity of the LNG terminal is around 150 thousand tonnes.

<https://energy.economicstimes.indiatimes.com/news/oil-and-gas/talks-to-pick-up-stake-in-qatars-upstream-sector-have-slowed-down-prabhat-singh-petronet-lng/66226274> (Edited excerpts..)

China natural gas imports up 28.3 pct in September

China's imports of natural gas continued fast growth in September while domestic production increased steadily, official data shows. Imports of natural gas surged 28.3 percent year on year to 7.62 million tonnes last month, data from the National Bureau of Statistics (NBS) shows. The pace was 9.7 percentage points slower than the increase recorded in August. In the first nine months of this year, imported natural gas totaled 64.78 million tonnes, up 34 percent year on year. China's imports of natural gas have seen steady growth to meet increasing domestic consumption, partly driven by government initiatives of using clean energy for winter heating instead of coal. Natural gas output increased by 8.5 percent in September, 1.2 percentage points slower than in August, the NBS data shows.

<https://www.hellenicshippingnews.com/china-natural-gas-imports-up-28-3-pct-in-september/>

Peru suspends natural gas exports, imposes fuel rationing

Peru has suspended exports of natural gas and will impose fuel rationing due to technical issues at Argentine energy company, Pluspetrol's operations in the

country, it said. Peru, one of South America's largest producers of natural gas, declared an emergency to direct all natural gas supplies for domestic consumption, citing a drop in production at Pluspetrol's Las Malvinas plant in the Camisea gas fields in southern Peru. The Camisea consortium, which Pluspetrol controls, said it partially suspended operations after detecting a "potentially atypical condition" at its installations on Tuesday, October 16. Camisea added in a statement that it would process enough natural gas to meet domestic fuel needs in coming days. The emergency declaration will remain in place through Saturday, the energy and mines ministry said. It added that natural gas supplies are sufficient to meet all domestic needs, including for industry and commerce. "Domestic consumers ... will have priority over supplies," the energy and mines ministry said in a statement. "Exports are suspended."

<https://www.hellenicshippingnews.com/peru-suspends-natural-gas-exports-imposes-fuel-rationing/>

Azerbaijan's gas exports from Shah Deniz I rise 7.4 percent yr/yr in Jan-September

Exports from the first stage of Azerbaijan's giant Shah Deniz gasfield rose 7.4%

in January-September from a year earlier to 5.786 billion cubic metres (bcm), the State Statistics Committee said. Gas from Shah Deniz I is exported through the South Caucasus pipeline. Export volumes from Shah Deniz I, operated by an international consortium led by BP, totaled 7.314 BCM in 2017. Azerbaijan's gas exports through all pipelines totalled 16.806 BCM in January-September this year. A BP-led international consortium started its first commercial deliveries of natural gas to Turkey from the second stage of Shah Deniz field in July. 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. 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.

<https://www.hellenicshippingnews.com/azerbaijans-gas-exports-from-shah-deniz-i-rise-7-4-pct-yr-yr-in-jan-september/>

INTERNATIONAL: LNG DEVELOPMENT

Nigeria may become 3rd largest gas exporter soon – Experts

Nigeria has huge gas potential and could become the third largest LNG exporter in the world with the coming on board of the \$7 billion Nigeria Liquefied Natural Gas Limited (NLNG) train seven project, the International Gas Union (IGU) said. Speaking at the 11th Nigerian Gas Association (NGA) international conference and exhibition in Abuja the Secretary General of the IGU, Luis Bertrán Rafecas said global demand and consumption for natural gas are rising just as new gas projects are coming on stream from regions that did not previously have gas potentials adding that gas would remain the fastest growing fuel in the world. He, however, said the ability of the country to bring to life the NLNG Train 7 project could put the country in good stead over other upcoming projects elsewhere. NLNG which is a private limited liability company owned by the Federal Government, represented by the Nigerian National Petroleum Corporation (NNPC) with 49% stake; Shell (25.6%); Total (15%) and Eni (10.4%) last month announced that it was shopping for \$7bn to construct an extra gas processing train called Train 7. Also speaking, President of NGA, Dada Thomas noted that there was need for the west Africa region to collaborate on building gas infrastructure and developing robust regional gas master plan that will lead to the development of the sector.

<https://www.dailytrust.com.ng/nigeria-may-become-3rd-largest-gas-exporter-soon-experts.html>

Egypt gives up Hoegh's floating terminal as LNG imports wind down

Egypt is to give up one of its two floating liquefied natural gas (LNG) terminals as it winds down imports of the super-chilled fuel, agreeing to pay a fee to Norway's Hoegh LNG for ending the charter early. Hoegh said on Monday Egypt Natural Gas Holding (EGAS) has agreed to pay the difference between its contract for the terminal, called a floating storage and regasification unit (FSRU), and a new contract with a third party. Egypt began importing LNG in 2015 when its own diminishing gas output failed to keep up with soaring domestic demand. It hired the Hoegh Gallant from Hoegh LNG and the BW Singapore from the BW Group in 2015, with both deals due to run until 2020. But the FSRUs were always meant to be a stop-gap solution while major gas discoveries were developed, including the giant Zohr field, which began production last December. Egypt said last month it would no longer import LNG. Both the Hoegh Gallant and BW Singapore remain moored close to each other at the Ain Sukhna port in the Gulf of Suez, according to Refinitiv Eikon data. Hoegh said the Hoegh Gallant will begin operating as a normal LNG carrier. "The amended contract is expected to become effective in October 2018 and will run to April 2020, the termination date of the original five-year FSRU contract," Hoegh LNG said.

<https://www.hellenicshippingnews.com/egypt-gives-up-hoeghs-floating-terminal-as-lng-imports-wind-down/>

Asian spot prices fall for 4th week on new Australian supply

Asian spot prices for liquefied natural gas dropped for a fourth week in a row, trading at their lowest in two months, amid increased supply courtesy of a new project in Australia and expectations of more from the United States. December spot LNG LNG-AS fell to \$10.40 per MMBtu, the lowest since mid-August. November cargoes were valued at below \$10 per MMBtu, trade sources said. Oil prices are set for a second weekly drop amid high inventory, weighing on LNG prices as many contracts are oil-linked. Japan's Inpex offered four spot cargoes over the second half of October through November from its giant Ichthys project in northwestern Australia, in a sign that it may be ramping up production, two industry sources said. It was not immediately clear if the cargoes were sold by Friday, but Inpex was due to load its first LNG cargo from the long-delayed project this week after earlier selling its first condensate cargoes, sources have said. Angola LNG and Sakhalin LNG each offered a cargo for November though details of the buyers were not immediately known. Australia's Woodside Petroleum has also resold some of its U.S. term cargoes, an industry source said. Woodside has an agreement to buy LNG from Cheniere's planned Corpus Christi export plant on the U.S. Gulf Coast. China eyes long term deals.

[Source: LNG Global](#)

Japan's Inpex to load 1st LNG cargo from Australian Ichthys project this week -sources

Japanese energy explorer Inpex Corp is this week set to load the first liquefied natural gas (LNG) cargo from its long-delayed Ichthys project in northwestern Australia, sources familiar with the matter said. The shipment would be an important milestone for Inpex, the operator of Japan's biggest overseas investment and the first major project where it is the lead operator. The \$40 billion project has seen multiple delays and significant cost overruns. An Inpex spokesman in Tokyo said that production had been going smoothly and that shipments of LNG and liquefied petroleum gas (LPG) were set to begin, but he declined to comment on commercial matters including the schedule for shipments. The LNG vessel Pacific Breeze was located close to the Ichthys LNG Ter-

minal near Darwin with a departure date of Oct. 17, according to Refinitiv data. After the first shipment, three LNG cargoes are scheduled to load next month, according to one of the sources. It was not clear where the cargo was heading, but some sources said in May that the commissioning LNG cargo from Ichthys would be exported to Inpex's Naoetsu LNG receiving terminal in Japan. In a statement last year announcing the ship's name, Inpex said Pacific Breeze would supply 1.75 MMT of LNG annually from Ichthys to Taiwan's CPC Corp. The move comes about two weeks after the first condensate shipment from Ichthys' floating production, storage and offloading (FPSO) facility. At full operation, Ichthys is expected to produce 8.9 million tonnes of LNG a year, along with about 1.7 million tonnes of LPG and about 100,000 barrels per day of condensate, an ultra-light form of crude oil. The company expects to take two to three years to reach full production. Inpex in August said Ichthys would help add net profit of 10 billion yen (\$89 million) in the second-half of 2018/19, down from a May outlook of 24 billion yen, due to the delays. Inpex holds 62.245% of Ichthys, France's Total 30%, with the rest spread amongst CPC and Japanese utilities Tokyo Gas, Osaka Gas, Kansai Electric, JERA Corp and Toho Gas.

<https://www.hellenicshippingnews.com/japans-inpex-to-load-1st-lng-cargo-from-ichthys-project-this-week-sources/>

Small Canadian LNG project set to go ahead in early 2019

A small liquefied natural gas project north of Vancouver is poised to move to construction in the first quarter of 2019, adding momentum to Canada's efforts to become a significant exporter of the supercooled fuel. The C\$1.6 billion (\$1.2 billion) Woodfibre LNG project, backed by Indonesian billionaire Sukanto Tanoto's RGE Group, would be Canada's second LNG project to go ahead, following the approval of the massive LNG Canada project earlier this month. "We're hoping to move to a notice to proceed to construction in Q1 (of 2019)," Woodfibre LNG President David Keane told Reuters. "It will be sometime in February or March." Woodfibre LNG is a relatively small project at 2.1 MMTPA, but was long touted as the front runner to get Canadian natural gas to Asian markets, where demand for the fuel is booming. It was given the go-ahead in 2016, but then delayed as the company worked through a number

of issues. Keane said the project is nearly there - the company is just working with engineering contractor KBR Inc on reducing costs and awaiting a November decision on import tariffs on fabricated steel components, used for LNG liquefaction units. Once a construction decision is made, the project will be completed in roughly four years, ensuring first shipments of the supercooled fuel by 2023. LNG Canada, which will produce some 14 MMTPA further north in the town of Kitimat, British Columbia, has said it expects to be shipping fuel before 2025. Woodfibre has sold 100 percent of its first phase output and financing for the build is in place, said Keane. The project has also secured its gas supply and is working with utility FortisBC on a 47 kilometer (29 mile) pipeline connection.

[Source: LNG Global](#)[\[Edited\]](#)

Argentina plans to close LNG facility as shale output ramps up

Argentina plans to close a facility for importing LNG, according to people with direct knowledge of the matter, after booming production from shale deposits in the Vaca Muerta region turned the country into a seasonal exporter. A contract with Accelerate Energy, which has a regasification ship moored at the Atlantic port of Bahia Blanca, won't be renewed when it expires at the end of the month, said the people, who asked not to be named because the decision isn't yet public. Argentina will continue to import LNG at another facility in Escobar, on the River Plate estuary, the people said. YPF SA, the state-run oil company that manages the contract, declined to comment on the decision. A spokeswoman for Accelerate didn't immediately comment.

The decision not to renew the decade-old contract comes as output from Vaca Muerta, the nation's answer to the Permian Basin, has created an oversupply of gas during the summer. Shale gas production soared to 205 million cubic meters a day in August, more than triple the level seen a year earlier. The government has negotiated exports to Chile to help solve the problem. It has also initiated talks to receive less gas from neighboring Bolivia, with which it has a contract through 2026. Three Cheniere Energy Inc. tankers were set to unload at Bahia Blanca this year through May, according to the latest official import schedule.

[Source: LNG Global](#)[/Bloomberg](#)

Total and CNOOC strengthen their long-term cooperation in LNG

Total and CNOOC1 have signed an amendment to their existing sale and purchase agreement (SPA) for LNG supply to further strengthen their cooperation in the LNG business. The partners have increased the contract volume from 1 MMTPA to 1.5 MMTPA of LNG, sourced from Total's global LNG portfolio, and have extended the term of contract to 20 years. The initial long-term LNG SPA was signed in 2008, with an annual contract volume of 1 MMTPA for a period of 15 years. "We are delighted to strengthen our partnership with CNOOC to expand our presence in the Chinese LNG market, which grew by 50% over the first half of 2018 and will continue to drive the increase of LNG demand over the next decade," commented Philippe Sauquet, President Gas, Renewables and Power. With a portfolio of 15.6 MMT managed

in 2017, Total is one of the world's leading players in the sector, with solid and diversified positions across the LNG value chain. Through its stakes in liquefaction plants located in Qatar, Nigeria, Russia, Norway, Oman, the United Arab Emirates, the United States, Australia, Angola and Yemen, the Group sells LNG in all global markets. Following the acquisition of Engie's LNG business, Total became the second-largest Private global LNG player among the majors, with an overall LNG portfolio of around 40 MMTPA by 2020 and a worldwide market share of 10%. LNG development is a key element of the Group strategy, which is strengthening its upstream positions in the major production regions with projects in Russia, the Middle East, the U.S. and Australasia, as well as its downstream positions in all markets.

<https://www.hellenicshippingnews.com/total-and-cnooc-strengthen-their-long-term-cooperation-in-lng/>

China private group GCL hires CNOOC execs to fast-track gas business – sources

China's privately owned GCL Group Holding has hired senior officials from state oil and gas major CNOOC to fast-track its burgeoning natural gas business, three senior company officials said. GCL is planning a LNG export project in the African country of Djibouti and a LNG receiving terminal in east China. Earlier this month GCL hired Ye Yishu, formerly general manager of CNOOC's global LNG trading, to lead gas trading under its overseas umbrella Poly-GCL Petroleum Group Holdings Ltd, which has trading operations in Beijing and Singapore, the officials said. Ye confirmed his move when contacted by Reuters. Li Feilong, previously executive vice president with China Oilfield Services Ltd (COSL), a subsidiary of CNOOC, also joined Poly-GCL earlier this year as its chief financial officer, the officials said. GCL also hired Wang Jianwen, previously a vice president at CNOOC's gas and power group, to lead domestic infrastructure investment and gas marketing. To meet the new LNG demand, GCL plans to build a 3 MMTPA LNG receiving terminal in Rudong county in east China's Jiangsu province, next to a similar-sized facility operated by PetroChina. The Rudong terminal, set to start up as early as 2022, will be the second sizeable investment in gas infrastructure led by a private company in China, according to consultancy SIA Energy. In August, piped gas distributor ENN started China's first private-led import terminal in Zhoushan. Poly-GCL, the group's majority-owned joint venture with state defence conglomerate Poly Group, last November signed a preliminary pact with the Djibouti government to build a 3 MMTPA LNG export facility that using gas that the company is exploring for in southeast Ethiopia. The firm is tapping potential investors and aims for first gas shipment in 2022, said senior industry executives with knowledge of the project. GCL operates three power plants in China which burn around 5.5 billion cubic metres a year of natural gas, supplied by the country's state energy producers.

<https://www.hellenicshippingnews.com/china-private-group-gcl-hires-cnooc-execs-to-fast-track-gas-business-sources/>

Qatar needs strategy shift to maintain global LNG title

With major changes happening in the global LNG space, both on the supply and demand sides, Qatar needs to readjust its strategy in order to maintain its leading position as global LNG supplier. Delivering Carnegie Mellon University-Qatar Dean's Lecture Series here yesterday, Dr Ibrahim Ibrahim, Economic Advisor at Amiri Diwan said on the supply side major challenges are coming from the development of shale Gas in the US and tremendous expansion of LNG supply from Australia. The expected ascendance of LNG positions of Russia and countries in Africa are another major challenge. Speaking on the demand side, Dr Ibrahim said the real change is coming from the expected expansion of gas consumption in giant economies such as China, India, and Brazil; and from a many smaller and less developed economies. These changes would have impact not only on the level of LNG price; but also on the conditions of sales such as fixed destination, price indexation, the duration and the prevalence of fixed contracts, and the role of the spot market. In future, Qatar should adhere to the pillars of its already developed LNG strategy which are: fully integrated model, Cost optimisation, Brand name based on reliability, flexibility, loyalty, and strict compliance to its contractual obligations. Dr Ibrahim wanted Qatar to further intensify the development of its Gas resource. Qatar has recently lifted the moratorium on expanding the production from the North Field, and announced its intention to increase its LNG production capacity by 32 million tons. This decision was based on detailed technical assessment of the Field reserve during which a long-term moratorium on expansion was imposed. Qatar needs to invest to support small developing countries to import LNG in the needed infrastructure such as floating terminal (FSRU) and pipelines Gas. It should also concentrate on strengthening relations with the rising LNG importers in Asia and Latin America. Qatar also needs to intensify investment and participation in research to push the LNG demand into a new high, through the transformation of shipping fuel from heavy oil products to LNG, and enhance the use of LNG in land transportation.

<https://www.thepeninsulaqatar.com/article/17/10/2018/Qatar-needs-strategy-shift-to-maintain-global-LNG-title>

Government of Pakistan to review LNG terminal agreements

The government has decided to review agreements linked to liquefied natural gas (LNG) terminals established during the previous PML-N administration following accusations of a higher rate of return for investors. The issue was deliberated upon in a recent meeting of the Economic Coordination Committee (ECC) of the cabinet, officials told, reports Express Tribune. Those in attendance at the ECC meeting were told by the officials of the Ministry of Energy (Petroleum Division) that the rate of equity and investment for the 1st LNG terminal was 15%, while the rate of investment for the second terminal was 15.4%. According to the observation of economic managers, the LNG terminal operators were receiving a higher rate of return on their investments and said it was important to evaluate the agreements to see the chance of an amendment and revision. The ECC instructed the Petroleum Division to ask for the legal opinion of Law and Justice Division regarding the LNG terminal agreements and know if the government had any recourse to revisit the terms and conditions. It instructed the Oil and Gas Regulatory Authority (OGRA) and the Petroleum Division to submit details of equity and rate of return on equity and investment linked to both the LNG terminals for further deliberation of the ECC. Petroleum Division officials apprised the ECC that the first LNG terminal was a brownfield project. However, the government via Inter State Gas Systems (ISGS) had floated open tenders for this terminal in August 2013. Whilst sharing details about the second LNG terminal, the Petroleum Division told the ECC that it was a greenfield project and the government via Pakistan LNG Terminal Limited (PLTL) had floated a competitive and open tender for its setting up in 2015. The ECC was told the 2nd LNG terminal was awarded on a build, own, operate (BOO) basis and was founded on the commodity/tariff bidding model instead of the IPP cost-plus model.

<https://tribune.com.pk/story/1826529/2-govt-decides-amend-lng-terminal-agreements/>

Poland's PGNiG finalises LNG deal with U.S.' Venture Global

Poland's dominant gas firm PGNiG has finalised the terms of a deal to buy LNG

from U.S. company Venture Global LNG, part of a move to cut reliance on Russian supply. According to the company, PGNiG struck an agreement with Venture Global in June to acquire 2 MMT of LNG a year for 20 years, equivalent to 2.7 BCM of natural gas after regasification. It has now signed contracts with two Venture Global subsidiaries running from 2022 and 2023 respectively, under which it will buy the LNG under the Free on Board (FoB) formula, meaning the seller pays for loading and the buyer pays other costs to destination. "Thanks to the FOB formula, we will be able to decide, independently and based on our needs at a given time, whether the purchased LNG load should be directed to Poland or be used for further trading through our London office," PGNiG Chief Executive Piotr Wozniak said. Poland consumes around 17 BCM of gas annually, more than half of which comes from Russia's Gazprom under a long-term deal that expires in 2022. PGNiG does not intend to extend the agreement, it said, and is taking steps to secure supplies after that date. "Our predecessors wanted to sign a contract with Gazprom binding until 2037," Poland's Prime Minister Mateusz Morawiecki told a press conference. "This would be like putting handcuffs on Poland and making us reliant on Russia for many years." Polish officials have repeatedly said that Warsaw pays too much for Gazprom's gas and have opposed a Russian plan to build a new gas pipeline across the Baltic Sea, saying it is aimed at strengthening its dominant market position in the region.

[Source: LNG Global](https://tribune.com.pk/story/1826529/2-govt-decides-amend-lng-terminal-agreements/)

Exxon Mobil signs framework agreement to supply LNG to Zhejiang Energy for 20 years

Exxon Mobil Corp announced signing of a framework agreement for a LNG supply deal with Zhejiang Provincial Energy Group, the Chinese company's first long-term supply deal. Peter Clarke, the president of Exxon Mobil gas and power marketing, inked the 20-year supply deal in a signing ceremony during the International Petroleum and Natural Gas Enterprise conference at Zhoushan, in Zhejiang province, the company said in a statement. The Chinese company will receive 1 million tonnes of LNG per year from Exxon Mobil under the agreement, Zhejiang Energy President Tong Yahui told Reuters on the sidelines of the event. Exxon Mobil said in the statement it will deliver

the LNG starting in the early 2020s. Exxon Mobil is stepping up its efforts to meet soaring LNG demand, coupling multi-billion dollar production projects around the world with its first mainland storage and distribution outlet. LNG supplies to China would come from a combination of Exxon Mobil's global portfolio - not necessarily from the United States - as the company boosts output from Papua New Guinea and Mozambique, Clarke said on the sidelines of the meeting. State-owned Zhejiang Energy is a coal producer and utilities operator, and formed a joint venture earlier this year with commodities trader Glencore to trade energy products including LNG. Zhejiang Energy is teaming up with state-owned Sinopec Corp to build a LNG receiving terminal near the city of Wenzhou in Zhejiang with a capacity of 3 MMTA. The plant is planned for start-up by the end of 2021.

[Source: LNG Global](https://tribune.com.pk/story/1826529/2-govt-decides-amend-lng-terminal-agreements/)

NATIONAL: LNG DEVELOPMENT/ SHIPPING

India's H-Energy seeks LNG cargoes ahead of new terminal start-up

Offers are due by October 26 and the deal is expected to be awarded by October 31, one of the sources said

India's H-Energy is seeking 17 cargoes of liquefied natural gas (LNG) for delivery over 2019 to 2022, three industry sources said. Offers are due by October 26 and the deal is expected to be awarded by October 31, one of the sources said. The company is seeking the cargoes ahead of the start-up of its LNG terminal in the west of the country. The terminal at the port of Jaigarh, with a capacity of 4 MMTA, is expected to start operation in the first quarter of next year after an initial delay.

<https://energy.economictimes.india-times.com/news/oil-and-gas/indias-h-energy-seeks-lng-cargoes-ahead-of-new-terminal-start-up/66347755>

An IVECO Stralis NP travels from London to Madrid without refueling

An IVECO Stralis NP 460hp truck from the UK has completed what is believed to be the longest ever journey by road on a single fill of LNG to demonstrate the suitability of natural gas vehicles for domestic and European road transport. Setting off from London, the Stralis NP 4x2 tractor unit was pulling a tri-axle box van trailer and running at a gross vehicle weight of 30 tons. After a short ferry crossing from Dover to Calais the truck completed the 1,728km road journey without needing to refuel – exceeding the vehicle's official range of 1,600km to set a new distance record. This equates to an impressive LNG fuel cost saving of circa £200 for the outward journey, or 40%, vs. diesel. Despite the heavy traffic on the UK side of the English Channel, a strong head wind in France and the hilly Spanish section of the route, the Stralis NP recorded an impressive average fuel consumption of 22.6 kg per 100 km. Prior to the trip, IVECO carefully planned the journey using MyBestRoute: a web-based application developed by Michelin for Stralis NP customers. It allows drivers and fleet managers to select the optimum route for any European journey, including plotting LNG refueling stations and estimating the total cost of the trip for diesel and natural gas-powered trucks. IVECO was using the journey to demonstrate that natural gas – including CNG, LNG and biomethane – are all viable, realistic, safe and cost-effective alternatives to diesel, available from a growing network of fuel providers in the UK and across the continent.

<http://www.ngvjournals.com/s1-news/c3-veicles/iveco-stralis-np-travels-from-london-to-madrid-without-refueling/>

New toll exemption for heavy-duty NGVs in German motorways

The German Federal Parliament approved the resolution to exempt natural gas powered vehicles above 7.5 tons from the air pollution component of motorway tolls from January 1 2019 for an initial period of 2 years. This means that natural gas fleets will enjoy the same benefits as electric vehicles and will only have to pay tolls for the infrastructure costs and noise components of the toll fees. This exemption, together with the subsidies on the purchase of natural gas vehicles announced in July (€12,000 for LNG and

Connecting Europe to grant 13 million euros to e-mobility project

An e-mobility project between Croatia, Slovenia, Slovakia and Italy will receive 12.9 million euros under the Connecting Europe Facility (CEF). The MULTI-E (Multiple Urban and Long-distance Transport Initiatives – Electric and CNG) project is aimed at electrifying urban and regional bus routes and is worth a total of 64.5 million euros. It is one of 49 projects that the European Commission is proposing for 695.1 million euros in investments in sustainable and innovative transport infrastructure in Europe. The CEF is a key EU funding instrument developed specifically to direct investment into European transport, energy and digital infrastructures to address identified missing links and bottlenecks. Other projects involve deploying hydrogen-fuelled transportation infrastructure in Denmark, Latvia and the UK. According to Balkan Green Energy News, Slovenia's energy company Petrol is the coordinating applicant of MULTI-E. The project is to deploy publicly accessible electric and CNG (compressed natural gas) recharging networks for a variety of urban and corridor travel needs with 16 CNG stations, 24 Ultra Chargers, 349 AC chargers, five charging hubs and six e-bus charging stations, for a total of roughly 1,000 supply points. CNG is a fuel which can be used in place of petrol, diesel fuel and propane/LPG and its combustion produces fewer undesirable gases. The project focuses on the Baltic-Adriatic corridor, with an extension to Zagreb along the Mediterranean Corridor, and the Rhine-Danube in Slovakia. The European Commission stated that the project is aligned with the core TEN-T priorities, specifically cohesion, decarbonisation, interoperability, and multimodality. The project is to be completed by December 2023. Croatia has received 424.4 million euros for 32 selected projects, while Slovenia was granted 318.1 million euros for 31 projects.

<https://emerging-europe.com/news/connecting-europe-to-grant-13-million-euros-to-e-mobility-project/>

€8,000 for CNG vehicles), further increases the financial benefits of these sustainable trucks for German logistics operators. Pierre Lahutte, IVECO Brand President, welcomed this resolution and said: "Less than one month after IVECO made history at the Hannover IAA 2018 show with its zero-diesel stand, the German Parliament approved the motorway toll exemption for CNG and LNG trucks. The impact will be massive. And today we are in Bolzano for the inauguration of a new LNG station on the Brennero route linking Italy, Austria and Germany, where we are delivering to FERCAM, a leading logistics company operating in Italy and Germany, their first LNG truck!" LNG and CNG vehicles deliver the full environmental benefits of natural gas: they generate 90% less NO₂; 99% less PM; and, with biomethane, 95% less CO₂ than their diesel equivalent. In addition, natural gas opens the possibility for a seamless transition to a circular economy approach based on the generation of energy from organic or agricultural waste, which is capable of achieving even negative GHG emissions and carbon sequestration, as it relies on the natural carbon/organic cycle.

<http://www.ngvjournals.com/s1-news/c1-markets/germany-toll-exemption-for-ngvs-expected-to-speed-up-switch-to-green-logistics/>

Chile: new CNG buses will service largest urban park in Latin America

The Minister of Housing and Urban Planning Cristián Monckeberg presented the new environmentally-friendly, convertible buses that will serve as public transport in the Metropolitan Park, bringing visitors to the main attractions of the site. The Metropolitan Park is a public urban park located in the city of Santiago and has approximately 737 hectares, making it the largest urban park in Latin America. The buses, which began operations on October 14, use CNG as fuel to reduce environmental impact and have capacity for 26 people. The vehicles are equipped with an electric lift platform for wheelchair access, and have bike racks and safety bars. In addition, although the buses are convertible, the roof can be closed in rainy season. Experiencia de Turistik is the company that will have the tender of the transport service. "The desire of our public is to have a family space, to travel, to walk, to ride a bicycle, and I think that this initiative will help leave the private vehicle outside and start using this type of transport," said the director of the Metropolitan Park Hernán Merino.

<http://www.ngvjournals.com/s1-news/c3-veicles/chile-minister-of-urban-planning-unveils-cng-buses-for-metropolitan-park/>

Omnitek's new 420HP 13-liter natural gas engine exceeds Euro 6 standard

Omnitek Engineering Corp. has finalized the development of a 420 hp 13-liter heavy-duty natural gas engine for a European customer, which can be used for truck and bus applications. The engine, equipped with Omnitek's patented engine management system components and a highly efficient catalytic converter, exceeded Euro 6 emissions requirements and will be utilized to power Euro 6 certified trucks and buses. Omnitek will be the exclusive OE supplier of key natural gas engine management system components required for the engine to meet the Euro 6 emissions standard. "The ability of Omnitek's technology to achieve Euro 6 emissions certification standards, which is a competitive advantage and not easily achieved, represents an important milestone for the company. The availability of a Euro 6 heavy-duty 13-liter natural gas engine, coupled with the rapidly emerging build-out of the natural gas fueling

infrastructure, should further accelerate the deployment of natural gas heavy-duty vehicles in Europe, as well as other world regions," said Werner Funk, president and CEO of Omnitek Engineering Corp.

<http://www.ngvjournal.com/s1-news/omniteks-new-420hp-13-liter-natural-gas-engine-exceeds-euro-6-standard/>

Positive outcomes for NGV safety from UNECE meeting

Under the umbrella of the UNECE's Group of Experts on General Safety, which met in Geneva on 8-12th October 2018, a busy agenda of NGV activities across a wide variety of topics has been attended by NGV Global. The agenda included provisions for the testing of CNG cylinders (with mirror provisions for LNG tanks) and several new CNG/LNG technologies introduced to legitimize their use on vehicles. NGV Global has been participating in an adhoc task force on CNG cylinders led by Germany and involving Italy and a host of CNG cylinder companies and

auto manufacturers concerning test procedures for CNG cylinders. Two meetings held in 2018 in Cologne resulted in new provisions (under UN Regulation No. 110 (CNG and LNG vehicles)) related to inspection of CNG cylinders, with points of difference being largely resolved at the Geneva meeting. The nature and purpose of testing, cylinder certification, and support for in-country procedures was addressed. For the next meeting (GRSG-116), NGV Global will be working with the International Auto Manufacturer's Association (OICA) to provide clarifying definitions to distinguish between 'periodic technical inspection' and 'requalification.' New technologies relating to the storage and delivery of gas on board natural gas vehicles (NGVs) were presented for consideration and inclusion. Additionally, appropriate language was approved to include the use of natural gas as a power source for onboard ancillary equipment.

<http://www.ngvglobal.com/blog/positive-outcomes-for-ngv-safety-from-unece-meeting-1016>

INTERNATIONAL: LNG AS A MARINE FUEL/BUNKERING/ LNG SHIPPING

Netherlands: AIDAnova cruise ship refuels natural gas for the first time

The new AIDAnova became the first cruise ship in the world to be fueled with LNG. In Eemshaven in the Netherlands, the tanker "Cardissa" filled the three special tanks with a total of around 3,500 cubic meters of LNG. Two of the tanks have a length of about 35 meters, a diameter of 8 meters, and a capacity volume of 1,500 cubic meters each. A third, small tank with a diameter of 5 meters is 28 meters long and has a capacity volume of 520 cubic meters. With one LNG tank filling, AIDAnova can operate for up to two weeks. AIDAnova is setting sail as the first cruise ship in the world that can be operated with low-emission LNG at port and at sea. Emissions of particulate matter and sulfur oxides are avoided nearly entirely. Nitrogen oxide and CO2 emissions are sustainably reduced. Highlights on board this ship belonging to an entirely new AIDA generation include new culinary and entertainment offerings. Naturally, guests will find the ever popular Theatrium, the activity area Four Elements with a ropes course and waterslides, and the Beach Club for relaxing on board on AIDAnova as well. Also on board: an approx. 3,500-sqm-large wellness area, an outdoor fitness studio, a penthouse suite with two decks, individual staterooms, 17 restaurants and 17 bars. By 2023, two further AIDA ships of this new generation are to follow, also built at the Meyer Werft shipyard in Papenburg.



<http://www.ngvjournal.com/s1-news/c7-lng-h2-blends/netherlands-aidanova-cruise-ship-refuels-natural-gas-for-the-first-time/>

Ship scarcity threatens LNG market growth more than tight supply – IEA

The lack of timely investments in building the LNG carrier fleet threatens market development and security of supply, which could materialize earlier than insufficient liquefaction capacity, Keisuke Sadamori, Director of the Office for Energy Markets and Security at the International Energy Agency, said earlier this week. The Paris-based energy watchdog's comments come against the backdrop of LNG carrier spot rates hitting record levels. The Pacific and Atlantic shipping rates have touched \$170,000/day and \$140,000/day respectively, and Atlantic and Pacific ballast rates remain steady at 125% and 150% respectively, according to S&P Global Platts data. The IEA's projections show that spare fleet capacity in the LNG market was sustained well above 15% between 2015 and 2018, but starts to decline sharply from 2019 onwards into single digits, and drops below zero by 2022-2023, indicating severe vessel shortages. Shipping investment has been under pressure as the banking sector has pulled bank due to sharp losses and write-downs incurred in the last decade as shipping companies reeled from heavy losses and oversupply. Rising interest rates and tighter money supply have raised concerns about new investment in LNG shipping. "Under the move towards a more volatile and flexible business environment, the shipping industry must find new ways of mitigating credit

risks to incentivize shipping investment," Sadamori said.

<https://www.hellenicshippingnews.com/ship-scarcity-threatens-lng-market-growth-more-than-tight-supply-iea/>

Turkey's Arkas Bunkering, Sumitomo Corporation signs agreement on LNG bunkering

Arkas Bunkering has signed an agreement with Japanese integrated trading and investment company Sumitomo Corporation for the use of LNG as bunker fuel in Turkish and nearby seas. Arkas is securing LNG ahead of the changes in the International Maritime Organization's global sulphur cap to 0.5% in bunker fuels, from 3.5% currently, which will come into effect on January 1, 2020. This applies outside the designated emission control areas where the limit is already 0.10%. Preparations for the service of LNG-powered vessels have already started, with a focus on distribution network and infrastructure, Arkas said in a press release. Ship-to-ship LNG bunkering will be offered for the first time in Turkey. "We invest for the future in our fields of operations and make accurate projections, both of which add value not only to our company, but also to our nation and clients. The importance of sustainability is becoming even more evident day by day, and using alternative fuels takes the lead as a measure in environmental preservation," Arkas Holding's president Lucien Arkas said at the signing ceremony on October 16. With the collaboration, both partners hope to propel

Turkey into a major LNG bunkering hub in the East-Mediterranean sea. Arkas Bunkering started operations in January 2006 and is the first Turkish fueling company with the capacity to perform direct refueling due to a network of offices in the Mediterranean and Black Sea ports.

<https://www.hellenicshippingnews.com/turkeys-arkas-bunkering-sumitomo-corporation-signs-agreement-on-lng-bunkering/>

Samsung Heavy wins US\$185 million LNG ship order from Oceania company

Samsung Heavy Industries Co. said Monday it has received a US\$185 million order to build a liquefied natural gas carrier for a company in the Oceania region. Samsung Heavy said it is set to deliver the carrier, which can hold 174,000 cubic meters of LNG, to the client by January 2021. The company didn't provide the name of the shipper. So far this year, Samsung Heavy has obtained orders to build 41 ships valued at \$4.9 billion.

<https://www.hellenicshippingnews.com/samsung-heavy-wins-us185-mln-lng-ship-order-from-oceania-company/>

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Fuel options for the marine industry

The IMO sulphur cap is meant to help shipping clean up its act directly, by reducing air pollution and particulate matter, and indirectly, as it is expected to boost the uptake of lower carbon fuels, including LNG. Other steps put forward to meet the 0.5% limit include retrofitting ship exhaust stacks with so-called scrubbers, which filter out the sulphur. Scrubbers are seen as a short-term but cost-effective option that does not resolve the issue of what to do with the sulphur once it has been filtered. The head of the Union of Greek Shipowners recently branded the IMO "hypocritical" for allowing their use beyond 2020. In addition to the sulphur cap, the IMO has also launched an as-yet voluntary pledge to cut carbon emissions by 50% from shipping by mid-century, as well as aspiring to 100% cuts. But how to decarbonise a sector that is currently responsible for 3% of global emissions and which already carries over 80% of the world's trade remains a Herculean prospect. For lighter vessels, electrification is considered a real prospect but current battery technology is still too underdeveloped to be applicable to large ships. Hydrogen and biofuels have also been touted as options, but both come with downsides like cost and sustainability issues attached. LNG offers its own pros, which include being easy to transport, and cons, including high methane content. But LNG-advocates insist that shipping should use the fuel as a short to mid-term solution and move to low carbon bio-LNG in the longer term. Wim Groenendijk, president of Gas LNG Europe, recently told EURACTIV that so-called renewable LNG could allow shipping to go carbon neutral and would have a significant impact on reducing air pollution and fine particles. But green mobility NGO Transport & Environment is against shipping's potential switch to LNG and a recent study commissioned by the group warned that the EU would foot a bill of over €20 billion under a high-gas scenario for a return of only 6-10% emissions cuts. Faig Abbasov, T&E shipping officer, told EURACTIV that instead of building new LNG-compatible infrastructure, the sector should in the short-term look to ultra-low sulphur marine gas oil. He added that "all economic efforts should be directed to making hydrogen cheaper as opposed to subsidising LNG and wasting public money".

<https://www.euractiv.com/section/transport/news/us-threatens-to-capsize-marine-emissions-cap/>

European Union praises Baleària's project to convert five ferries to LNG

The European Union has described as "excellent" Baleària's initiative to retrofit five ferries (Naples, Abel Matutes, Sicily, Bahama Mama and Martín i Soler) of its fleet so that they can run on LNG. Under the CEF (Connecting Europe Facility) funds, the European Commission has granted Baleària a subsidy of a maximum of 11,797,424 Euros (of the 15 million Euros requested), representing 20% of the investment that Baleària will make in these five conversions, which will be carried out from the end of this year until 2021. The president of Baleària Adolfo Utor expressed his satisfaction with this concession, which supports the main challenge of the shipping company: implementing the use of natural gas, the most environmentally-friendly fossil fuel, in its fleet in the next years. "Our medium-term goal is to become the shipping company with the most sustainable and eco-efficient fleet in the sector," said Utor, who recalled that, in addition to these five vessels that will be converted, the company will deploy in the coming months the first of the two LNG-powered smartships being built at the Italian

shipyards Visentini. The Iberian Peninsula currently offers one of the fastest growing markets in terms of the adoption of natural gas in maritime transport, as well as in road transport. In this extremely encouraging scenario, AltFuels Iberia 2019 will take place on 11-14 June at IFEMA Trade Center, Madrid. It will be an event consisting of first level conferences and exhibition of vehicles of all kinds, refueling stations, components, plants, road and marine engines, as well as the entire universe of the alternative fuels industry with the latest technological developments, multiple options for networking, business and new advances. For more information, please contact info@altfuelsiberia.com.

<http://www.ngvjournal.com/s1-news/c7-lng-h2-blends/the-european-union-praises-balearias-project-to-convert-five-ferries-to-lng/>
[Edited]



US threatens to capsize marine emissions cap

The United States is pushing for a late change to the International Maritime Organisation's (IMO) landmark cap on sulphur emissions, throwing into doubt the 2020 implementation date. Ocean-going vessels will have to burn fuel with no more than 0.5% sulphur content by the end of the decade, under IMO rules agreed back in late 2016 that lower the existing limit of 3.5%. But the US has attempted to alter the course of the rapidly approaching deadline by pushing for an amendment that introduces an "experience-building phase" to the switch. A meeting of the UN shipping body is ongoing at its London headquarters this week but delegates told the Financial Times that an agreement on the vague US-helmed change would be unlikely before Wednesday (24 October) at the earliest. As a so-called flag state, which means ships registered in that country only have to abide by the laws imposed by that country while in international waters, the US wields a lot of power over a significant portion of the sector.

<https://www.euractiv.com/section/transport/news/us-threatens-to-capsize-marine-emissions-cap/>

LNG carriers set to exceed 50% of DSME's sales

Daewoo Shipbuilding & Marine Engineering (DSME) said on Oct. 15 that liquefied natural gas (LNG) carriers would soon account for more than 50 percent of its sales. During an investor relations (IR) meeting held at Conrad Seoul Hotel in Yeouido, DSME projected that the company's LNG carrier sales would reach 5 trillion won (US\$4.41 billion) this year. The figure is about 51% of this year's total sales projections of 9.9 trillion won (US\$8.74 billion). This will be the first time for the share of LNG carriers in the total sales to exceed 50%. The figure stood at 7%, or 970 billion won (US\$856.13 million), in 2014. However, the number of new orders for LNG carriers has been increasing every year amid a steady rise in global demand for LNG. The company's sales of LNG carriers in 2015 and 2016 doubled compared to a year earlier and the figure also grew more



than 40% to 4.36 trillion won (US\$3.85 billion) last year from 3.07 trillion won (US\$2.71 billion) a year ago. DSME saw its proportion of LNG carriers to the total sales grow partially due to a decrease in new orders for offshore plants. The proportion of the plant sector, such as production facilities and drilling ships, to the total sales came to 37% in 2014 but it is forecast to drop to 21% this year. This trend is expected to continue for a while because the demand of LNG carriers is on the increase. British shipbuilding and marine industry tracker Clarkson Research Services predicted in March that the number of new orders for LNG carriers would reach 37 this year and 39 next year but it upgraded the figures to 55 and 61, respectively, in September. In addition, the annual average number of new LNG

carrier orders is expected to reach 46 between 2020 and 2023 and 56 between 2024 and 2027.

<https://www.hellenicshippingnews.com/lng-carriers-set-to-exceed-50-of-dsmes-sales/>

Enagás and Ferrovial partner to develop new biogas projects in Spain

Enagás and Ferrovial have signed a collaboration agreement in order to explore together opportunities that boost the production and distribution of biogas. Specifically, both companies will analyze projects for the development and operation of plants where biogas, produced at some of the waste treatment facilities managed by Ferrovial, turns into biomethane. The agreement signed highlights the commitment of both companies to the circular economy. Enagás bets for non-electric renewable energies (biogas/biomethane and hydrogen) as key energy solutions for the decarbonization process. For Ferrovial, this agreement means a further step in the development of new businesses related to the recovery of waste, extracting sustainable energy. Biogas contributes to the development of a circular economy, as it is the result of efficient waste recovery. It is a renewable gas generated by the anaerobic decomposition of wastewater and solid municipal waste, and waste produced by the agriculture, livestock farming and forestry industries. The gas is purified in the plants by a technological process so-called upgrading. This turns it into biomethane, a renewable energy that can be injected directly into the gas grid or used by industry or as an alternative vehicle fuel.

<http://www.ngvjournals.com/s1-news/c1-markets/enagas-and-ferrovial-partner-to-develop-new-biogas-projects-in-spain/>

India: State's first bio-CNG plant to come up in Kurukshetra

The state's first bio-CNG plant based on agri-waste may soon come up in Kurukshetra. Sources said Indian Oil Corporation Limited (IOCL) would build the compressed biogas plant (CBP) that would offer a green solution to the disposal of crop residue and other organic matter. Deputy Commissioner SS Phulia said the Haryana Renewable Energy Development Agency (HAREDA) had, last month, signed a memorandum of understanding (MoU) with the IOCL. A CBP plant is reportedly planned in the district. But we are yet to get inputs about the project site and other details," Phulia said. Sources in the HAREDA, however, said the IOCL

had proposed several CBPs in five years. The foundation stone of the first such plant may be laid here next month. As per the MoU, the total capacity of the proposed multi-facilities would be about 1,000 tonnes per day of compressed biogas, the sources said. According to officials, the state wants to promote agriculture waste-based biomass or waste-to-compressed-biogas (bio-CNG) plants in the state to curb stubble-burning and scientific disposal of agriculture waste. Sources said the initiative would not only increase farmers' income by way of selling crop residue, but also create jobs in villages.

<https://www.tribuneindia.com/news/haryana/state-s-first-bio-cng-plant-to-come-up-in-kurukshetra/670717.html>

Finnish dairy manufacturer rolls out first biomethane delivery truck

The Finnish dairy manufacturer Valio's first biogas-fueled delivery vehicle was taken into service in the Helsinki Metropolitan Area in September. Valio also takes part in the biofuel production by supplying waste generated in food production to Gasum's biogas plants. The biogas pilot was inspired by Valio's circular economy with the aim to recover the waste generated in dairy production. Renewable and 100% Finnish biogas can help achieve substantial cuts in transport emissions. "We want to test new, environmentally sound fuels. Feedstocks used in biogas production include inedible side streams from Valio's production. This is circular economy at its best," said Mika Jyrkönen, Logistics Manager, Valio. "It's great that Finland's leading dairy product manufacturer is able to utilize its own waste as an environmentally friendly fuel and that way reduce its emissions. Biogas is financially competitive compared with other biofuels. In Finnish transport, 40% of emissions come from heavy-duty transport and therefore this sector is under particular pressure to cut emissions," said Gasum Sales Manager Juha-Matti Koskinen. During the joint project, the biogas delivery vehicle will transport Valio products from the main warehouse in Helsinki to shops in the Helsinki Metropolitan Area. The collaboration launched in September involves testing the biogas truck as regards operational reliability and costs, after which the potential for continued use will be evaluated. At Valio,

seeking environmentally friendly solutions goes beyond this vehicle, as the company is planning to try out a natural gas milk collection vehicle in the future.

<http://www.ngvjournals.com/s1-news/c3-vehicles/finnish-dairy-manufacturer-rolls-out-first-biomethane-delivery-truck/>

Consortium gets funds to develop UK's first hydrogen dual fuel ferry

Innovate UK have granted £430,332 of funding to design and integrate a hydrogen diesel dual fuel injection system onboard a commercial ferry. The hydrogen to be used in the project will be produced by the European Marine Energy Centre (EMEC) in Orkney, from the abundance of clean renewable energy sources available on the islands and will power a ferry operating between the main town of Kirkwall and the island of Shapinsay. The 12-month HyDIME (Hydrogen Diesel Injection in a Marine Environment) project was formally started on August 1 2018. Led by Ferguson Marine Engineering Limited, the project will be executed by a consortium consisting of Orkney Islands Council, High Speed Sustainable Manufacturing Institute (HSSMI), the EMEC, and Lloyds Register. The project will apply, with Ultra Low Emission Mileage Company (ULEMCo), a globally unique technology in hydrogen dual fuel, and will provide a stepping stone to de-risk and kick-start future hydrogen marine projects and contribute to reducing emissions within the maritime industry. The aim of HyDIME is to prove the use of hydrogen/diesel injection technology in the marine industry. Ferguson Marine, in conjunction ULEMCo will develop the design of how this technology can work in tandem with existing systems to power auxiliary units onboard vessels. Following this, the system will be physically integrated and will result in the UK's first hydrogen injection system on this type of vessel. "This exciting project is yet another positive step on our journey, joining up with world leading technology innovators to move us one step closer to our goal of delivering a zero-emission, hydrogen powered commercial ROPAX ferry by 2020," said Chief Naval Architect of Ferguson Marine Chris Dunn.

<http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/new-consortium-gets-funds-to-develop-uks-first-h2-injection-system-on-a-ferry/> [Edited]