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India to have 10,000 CNG stations in next 10 years, on track to adapt cleaner fuels: Dharmendra Pradhan

Oil Minister Dharmendra Pradhan on Thursday, September 6, said the country was on its way to construct more than 10,000 compressed natural gas (CNG) stations in the coming decade. He was speaking at an event held by the Society of Indian Automobile Manufacturers. "CNG vehicles are cheaper and less polluting and for this reason, according to the road map created by the government, India will get 10,000 CNG stations in the coming 10 years from around 1,400 today. These numbers are not part of any announcement; the numbers are based on the commitments made by winning bidders under the 9th City Gas Distribution (CGD) round," Pradhan said. He added that the government had initiated the process to launch the 10th CGD bidding round as well. Pradhan said that after the 9th CGD round government's access to the CGD networks would increase to more than 300 districts, which will entail an investment of more than Rs 70,000 crore. Earlier, in 2014 only 73 districts in the country had accessibility to the CDG networks. Speaking on the country's energy imports, Pradhan said, "India imports around 3,500 million tonne (mt) of crude oil, coal, LPG, LNG and if we calculate the waste and unused carbon available in the country in the form of agri-waste, forest waste, etc, it comes to around 4,500 mt."

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/india-to-have-10000-cng-stations-in-next-10-years-on-track-to-adapt-cleaner-fuels-dharmendra-pradhan/65700258>

Gujarat: Armed with licences, gas companies unleash talent hunt

Talent hunt is intensifying among city gas distribution (CGD) companies following the government issuing retailing licences for 78 Indian cities in one go in August. With as many as four Gujarat-based companies having bagged licences, hiring activity has intensified, leaving a dent in public sector firms. In the last six months, about half a dozen top honchos have switched sides. Recently, PPG Sarma, former CEO of Gujarat Gas Ltd, joined Torrent Gas Pvt Ltd., a part of Torrent group which forayed into city gas distribution by bagging licences for nine cities. Around the same time, Shridhar Tambraparni, who retired from Adani Gas Ltd., too joined Torrent as vice-president. Gujarat Gas Limited, one of the oldest and largest players in CGD business, has been at the receiving end. In the last two months, the company has lost five senior professionals to Torrent Gas. "The development of CGD networks could result in 80,000-90,000 incremental jobs over the next five years, including contingent jobs," said Amit Vadera, head-BFSI and PSU, TeamLease Services Ltd, a human resource service company. "Existing players have large pool of manpower and exodus of few employees won't make much of a difference to them," said the source, adding that similar trend was witnessed when GSPC Gas and Gujarat State Petronet Limited (GSPL) were launched. According to industry estimates, for a new company in CGD business, 100 to 150 professionals are required to build the core team for planning, execution, administration and regulatory clearances. Apart from this, 30 onsite employees are required to serve 1 lakh connections.

These jobs pertain to billing, accounting, collection and technical as well as safety support.

<https://timesofindia.indiatimes.com/city/ahmedabad/gujarat-armed-with-licences-gas-companies-unleash-talent-hunt/articleshowprint/65802444.cms>

Fuel prices set new record on fall in rupee, surge in global crude oil

Petrol and diesel prices have set a new record, pushed by a combination of the dramatic fall in rupee and a sharp rise in crude oil, resurrecting the demand for lowering of duties on the fuel. Petrol reached a peak of Rs 86.25 a litre in Mumbai and Rs 78.84 in Delhi on Sunday. Diesel rose to its highest levels of Rs 75.12 in Mumbai and Rs 70.76 a litre in Delhi. Fuel prices vary from state to state due to local levies. State oil companies barely import petrol or diesel for the local market but charge customers prices based on the international rates. They also factor in the exchange rate and taxes before determining the final price. The exchange rate has fallen to a record Rs 71 to a dollar, depreciating Rs 2.5 in a month. Crude oil has gained \$7 a barrel in a fortnight, driven by fears that the US sanctions on Iran will likely contract supplies although the price rise has still been limited due to the hope the increased production by Saudi Arabia, Russia and the US will make up for much of the shortfall. A strong oil demand predicted for the rest of the year is expected to keep prices higher. The appreciation of dollar against rupee has also pushed up rates for compressed natural gas (CNG) as well as piped natural gas (PNG) since the price of gas procured by city distributors is mostly dollar-denominated. Indraprastha Gas raised the

prices of CNG by 63 paise per kg and Rs 1.11 per standard cubic meter in Delhi on Saturday. Local natural gas prices, due for revision at month-end, is also expected to rise by about 14%. This would further raise CNG and PNG rates. Higher fuel prices stoke broader inflation in the economy, prompting the central bank to raise interest rates to fight inflation, and trigger public demand for tax cuts by the government, reducing resources for social spending. Fuel prices have been setting new records every now and then in 2018 but the central government has refused to cut taxes to lower prices.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/fuel-prices-set-new-record-on-fall-in-rupee-surge-in-global-crude-oil/65651222>

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Agility launches new bus and truck systems for India featuring composite cylinders

Agility's Type 4 cylinders are manufactured using carbon fiber composite and are 70% lighter than steel cylinders. Agility Fuel Solutions (Costa Mesa, CA, US), a global provider of clean fuel solutions for medium- and heavy-duty commercial vehicles, announced Aug. 29 at the Busworld India tradeshow in Bengaluru, India, that its clean energy storage and powertrain systems are being launched in the Indian market with a turnkey approach that includes design, manufacture, testing and aftermarket support, with the requisite local certifications and homologation. In 2017, India's Petroleum and Explosives Safety Organisation (PESO) approved the use of Type 4 cylinders in the automotive sector, opening the Indian market to these lightweight gas cylinders which have been widely used in vehicles in Europe and North America over the past 20 years. Agility's Type 4 cylinders are manufactured using carbon fiber composite and are 70% lighter than steel cylinders and offer superior safety with no corrosion or metal fatigue. This enables a fleet owner to have a bus that is up to 750 kg lighter than existing CNG buses with comparable fuel capacity. Agility's product offerings enable a range of up to 800 km on CNG for buses and in excess of 1,500 km for trucks. These CNG storage systems open up the possibility for the first time of using CNG for long-range intercity buses and trucks in India.

<https://www.compositesworld.com/news/agility-launches-new-bus-and-truck-systems-for-india-featuring-composite-cylinders>

Piped gas supply to reach more cities in Tamil Nadu/Puducherry

Nine districts in Tamil Nadu and Puducherry have been covered in the 9th CGD round. Piped Natural Gas is expected to become the order of the day in the next few years with the Petroleum and Natural Gas Regulatory Authority (PNGRA) issuing Letters of Intent (LoI) to 10 successful bidders across 30 geographical areas (GAs) in the 9th CGD (City Gas Distribution) bidding round. This is expected to cover 20% of the country's populace (as per 2011 census) and 11% of its geographical area. With the completion of the 9th CGD bidding round, CGD would be available in 178 GAs comprising 280 districts spread over 26 States and Union Territories covering more than 50% of India's population and 35% of its GA. Incidentally, the bids for Coimbatore and Salem districts in TN have gone to State-owned oil and gas company Indian Oil Corporation Ltd (IOCL). R Sitharthan, Executive Director and State Head, IOC (TN and Puducherry), who was in the city to formally launch the 5-kg LPG cylinder fuelled iron boxes, told this correspondent on the sidelines of the event that the proposed investment towards pipeline expansion, construction of POL terminals, captive jetty, additional facilities for handling of petrol and diesel products has been estimated at Rs.7,112 crore. "This is for TN and over the next three years," he added.

<https://www.thehindubusinessline.com/news/piped-gas-supply-set-to-undergo-major-overhaul-to-reach-more-cities/article24849318.ece>

India's long-range heavy vehicles now can run on clean fuels

Agility Fuel Solutions has launched its efficient, globally-used clean energy storage and powertrain systems in the Indian market. Agility's turnkey approach includes design, manufacture, testing and aftermarket support, with the requisite local certifications and homologation. Agility's offerings enable a range of up to 800 km on CNG for buses and in excess of 1,500 km for trucks. These CNG storage systems open up the possibility for the first time of using CNG for long-range intercity buses and trucks in India. In 2017, India's Petroleum and Explosives Safety Organisation (PESO) approved the use of Type 4 cylinders in the automotive sector, opening the Indian market to these lightweight natural gas cylinders which have been widely used in vehicles in Europe and North America over the past 20 years. These composite cylinders are 70% lighter than steel cylinders and offer superior safety with no corrosion or metal fatigue. This enables a fleet owner to have a bus that is up to 750 kg lighter than existing CNG buses with comparable fuel capacity. With natural gas powertrain systems compliant to Euro 6 equivalent standards, CNG fuel management modules, and a range of other clean fuel solutions, Agility can help change the Indian transport industry to help improve air quality in the country and move towards clean propulsion systems as desired by policymakers.

<http://www.ngvjournal.com/s1-news/c5-products/advanced-clean-fuel-solutions-launched-in-india-for-long-range-heavy-vehicles/>

NATIONAL: NATURAL GAS/PIPELINES/COMPANY IN THE NEWS

ONGC Finds Oil, Gas Reserves In Madhya Pradesh, West Bengal

State-owned Oil and Natural Gas Corporation has made oil and gas discoveries in Madhya Pradesh and West Bengal that may potentially open up two new sedimentary basins in the country, the firm's director for exploration said. ONGC had previously opened six out of India's seven producing basins for commercial production. It is in the process of adding the eighth by putting Kutch offshore on the oil and gas map of India.

The seventh basin was opened way back in 1985. We are looking at adding three more basins in next five years time. The firm has found gas deposits in a block in the Vindhyan basin in Madhya Pradesh that is now being tested, he said. ONGC has drilled four wells after the discovery and will now hydro-frack it by the end of the year to test commerciality of the finds. Similarly, an oil and gas discovery has been made in a well in Ashok Nagar of 24 Parganas district in West Bengal, he said adding that one lakh cubic meters per day of gas flowed from one object that was tested. Now, the firm would go for appraisal of the find, only after which commercially exploitable reserves could be established. Dwivedi said the company is on the way to putting the Kutch offshore discovery to production. This would make Kutch India's eighth sedimentary basin. Cauvery was the last Category-I producing basin which was discovered in 1985.

[Source: LNG Global](#)

Vedanta Ltd announces natural gas discovery in KG Basin

Vedanta's subsidiary Cairn Oil and Gas operates six blocks including five located in India and a block in South Africa. Natural resources giant Vedanta Ltd today announced a gas discovery in its block KG-OSN-2009-3 in the Krishna Godavari basin off the east coast of India. The company owns 100 per cent participatory interest on the block. The company said in a filing at the Bombay Stock Exchange (BSE) it has notified the oil ministry and the upstream regulator Directorate General of Hydrocarbons (DGH) of the discovery. "A3-2 is the first exploration well drilled within the KG-OSN-2009/3 block. Down hole formation tester (MDT) sampled oil and gas from the zones of interest. The zone from 3610-3715m MDBRT flowed gas to surface during well testing. Further appraisal will be required to assess the potential commerciality of this Mesozoic rift discovery," it said. Vedanta's subsidiary Cairn Oil and Gas operates six blocks including five located in India and a block in South Africa. State-run Oil and Natural Gas Corporation (ONGC), too, had last week announced discoveries in Madhya Pradesh and West Bengal.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/vedanta-ltd-announces-natural-gas-discovery-in-kg-basin/65801081>

GAIL plans to add 5,500 km of pipelines in next 3 years

GAIL (India) Ltd plans to increase its pipeline capacity by 50% in the coming three years, according to its Chairman and Managing Director BC Tripathi. "GAIL aims to

add 5,500 km gas pipelines to the existing network and leapfrog to capacity augmentation by about 50% on the current base in the next three years in phases," Tripathi said in a statement to shareholders at the company's 34th Annual General Meeting. GAIL's plans fit into India's goals of increasing dependence on natural gas as a transport and cooking fuel. Tripathi also said the company has achieved record PNG connections to over 5,00,000 households and establish 120 CNG stations during the financial year 2017-18. The company has also strategically subscribed to 14.3% equity investments in the natural gas-based urea fertiliser unit at Ramagundam with production capacity of 1.27 MMTPA. "Our company also endeavours to supply natural gas to Ramagundam Fertilizers and Chemicals Ltd from financial year 2019-20 onwards and has executed necessary agreements to this effect," Tripathi said. Commenting on the way ahead for the company, Tripathi said, "LNG supplies have commenced under long-term portfolio that witnessed an addition of 8.3 MMTPA in recent years."

<https://www.thehindubusinessline.com/companies/gail-plans-to-5500-km-of-pipelines/article24928538.ece>

Govt to sign oil and gas contracts with winning bidders of maiden OALP round on 6 September

The upstream regulator said oil minister Dharmendra Pradhan would preside over the signing ceremony held in Delhi, adding the regulator would soon offer 14 exploration blocks under the second round of ongoing auctions. The government has

approved the award of 55 exploration blocks held under India's largest oil and gas auctions Open Acreage Licensing Policy (OALP) and plans to sign exploration contracts with the successful bidders in New Delhi on 6 September, the Directorate General of Hydrocarbons (DGH) said. The oil ministry had made OALP auction live on 1 July last year, offering over 85% of the country's 3.14 million square km of hydrocarbon sedimentary area under OALP and a revamped Hydrocarbon Exploration Licensing Policy (HELP). DGH had received 57 Expressions Of Interest and subsequently 55 blocks were cleared for bidding after eliminating areas that were under no-go zone or were overlapping with existing mining lease. The new bidding mechanism allows interested firms to bid for blocks of their choice at any time of the year with the help of National Data Repository (NDR) -- a comprehensive database of the country's key sedimentary basins that provides the bidders data on contract areas that would be available for auctioning. Under the new bidding mechanism an investor would be allowed to put forth an Expression of Interest for undertaking contracts under the Petroleum Operations Contract or Reconnaissance Contract. The investor has the liberty to apply for such contracts bi-annually -- 1 July to 31 December and 1 January to 30 June -- and is allowed to participate in rounds of auctions conducted by DGH over and above the applications made under OALP.

<https://energy.economictimes.indiatimes.com/news/oil-and-gas/govt-to-sign-oil-and-gas-contracts-with-winning-bidders-of-maiden-oalp-round-on-6-september/65626354>

GAIL to set up battery charging stations for e-vehicles

GAIL India, the country's largest gas transportation and marketing company, plans to set up battery charging stations for electric vehicles as well as build solar plants as it looks to be "future ready" for emerging businesses, a senior company official said. It also wants to explore the business opportunity in waste-water treatment plants, water distribution, large water pipeline laying as an early mover. "We have the country's biggest network of pipelines and gas marketing infrastructure. We want to leverage for emerging business opportunities," he said. "We want to be future ready." It is looking at possibilities of setting up battery charging stations for e-vehicles at CNG dispensing stations in a bid to diversify its portfolio beyond gas and petrochemicals. "It is all at drawing board stage. A lot will depend on norms. For example, we don't know if rules permit a battery charging facility at a petrol pump or a CNG station. We don't know at what price we can sell that battery charge," he said. GAIL wants to insert six new sections in the main objects clause of the memorandum of association of the company to foray into new business. According to a shareholder notice, it wants to invest in "start-ups in core business areas (of natural gas, petrochemicals, and energy) and non-core areas (like health, social and environment, safety, and security) either directly or indirectly." "The investment can be made through special purpose vehicle (SPV), alternative investment fund (AIF), fund of funds (FoF) and trust," it said. The official said there is a necessity to adopt new and different pathways to provide clean, cost-effective and efficient mobility services that are safe, reduce dependence on oil imports and achieve more efficient land-use in cities with the least environmental footprints and impacts on human health. With the government planning to make a major shift to electric vehicles by 2030, GAIL feels that charging infrastructure for electric vehicles in India has not been fully developed yet. In line with its strategy to promote the use of green fuel, it is contemplating to promote gas appliances in households to increase gas usage and minimise electric usage in housing equipment and appliances such as gas boiler, gas-based air conditioner and bathroom heater. It also wants to "carry on the business of manufacture, import, distribution, and marketing of appliances relating to gas marketing and distribution, such as gas meter and CNG kits".

Source: ET Energyworld

Policy tweak in works to allow companies to sell oil & gas to affiliates

The oil ministry is considering redefining 'arm's length sale' for oil and gas contracts to include sale to an affiliate, which would allow a producer to sell its output to a related party, people familiar with the matter said. All oil and gas contracts in the country mandate parties to follow arm's length principle whereby the buyer and the seller are unrelated and act independently to achieve a fair market value of the product or service being transacted so that the government gets its fair share of revenue for the oil and gas produced in the country. The directorate general of hydrocarbons (DGH), the oil and gas industry regulator, has recently written to the ministry of petroleum and natural gas that the arm's length sale must be redefined to end a contradiction in the model revenue sharing contract under the latest exploration licensing policy, sources said. The definition of arm's length sale explicitly excludes sale to an affiliate. But, the new contract introduces a provision allowing sale to an affiliate. It is this contradiction DGH wants resolved, they said. The development has triggered a debate in the oil ministry on whether it is possible to redefine the universally-recognised principle of arm's length transaction in the narrow context of oil and gas contracts. All contracts related to oil, natural gas and coal bed methane (CBM) have the provision of arm's length sale, which prevents producers from doing related-party sale. In cases where blocks were awarded without an auction to state firms, the government, not companies, allocates oil and gas to customers. <https://economictimes.indiatimes.com/industry/energy/oil-gas/policy-tweak-in-works-to-allow-companies-to-sell-oil-gas-to-affiliates/printarticle/65760317.cms>

GAIL set to be unbundled

India's gas monopoly GAIL, is set to restructure operations and become a pure infrastructure provider. India's gas monopoly GAIL, is set to restructure operations and become a pure infrastructure provider. It opened its Natural Gas Pipeline Open Access System governing the 11,400-kilometre pipeline network to private gas marketing companies. This strengthens the marketing business of the company, along with freer movement of gas. Almost two-thirds of GAIL's capacity stays unutilised. With this move, private players can now import and sell gas to consumers using GAIL's infrastruc-

ture. Regulator PNGRB is already working out plans to unbundle the marketing and pipeline business in a phased manner. It is learnt, that GAIL plans to segregate the two businesses. Meanwhile, Petroleum Minister Dharmendra Pradhan is pushing GAIL to concentrate on building pipeline infrastructure and sell off non-core businesses like petro-chemical complexes at an 'appropriate' time and price. State-owned oil marketing companies - Bharat Petroleum and Indian Oil - have already offered to buy stakes in the unbundled GAIL.

<https://www.businesstoday.in/magazine/the-buzz/gail-unbundled/story/282056.html>

Now, no permit required for commercial vehicles using alternative fuel

The government has provided incentives for electric mobility and policies would support electric vehicles, said Union Minister Babul Supriyo. Union Road Transport and Highways Minister Nitin Gadkari announced that commercial vehicles that are powered by alternate fuels such as "Ethanol, Methanol, Bio-diesel and CNG" will be exempted from the permit requirements at the 58th Annual Convention held by the Society of Indian Automobile Manufacturers (SIAM). He said that by introducing this change, he hopes to see a marked difference in the transportation field. "I am happy to announce that we have decided that

electric vehicles and all vehicles which operate on Ethanol, Methanol, Bio-diesel, CNG will not require a permit," Mr Gadkari said. Later tweeting about the Convention, Mr Gadkari said that he has urged the automobile industry to focus on water transport and has also encouraged companies that produce bio-fuel and electricity-powered vehicles to come forward. Mr Gadkari listed three long-term focus areas of the government - reduce import, increase export and reduce pollution. Speaking at the Convention, Union Minister for Heavy Industries and Public Enterprises Babul Supriyo said the government has provided incentives for electric mobility and the policies would support electric vehicles. He added that "an increased focus on safety is impacting the technological development in the auto industry." John Simlett, Global Leader future of mobility, E&Y said, "The future will be less about the advanced technology and more about the new ways of applying it." Union Minister of Heavy Industries and Public Enterprises, Anant G Geete assured that the government would soon come out with the new auto policy and assured all aspects of the industry would be discussed with the industry and considered before finalizing the new auto policy.

<https://www.ndtv.com/india-news/no-permit-required-for-commercial-vehicles-using-alternative-fuel-nitin-gadkari-1912728> [Edited]

PM Modi unveils mobility road map, seeks investments in e-vehicles manufacturing

The Indian economy, he said, is the world's fastest growing major economy that is building 100 smart cities and constructing roads, airports, rail lines and ports at a greater pace. Prime Minister Narendra Modi unveiled a mobility road map that seeks investments in manufacturing electric vehicles and increased use of public transport for travel, saying congestion-free mobility is critical to check economic and environmental costs of congestion. Speaking at the Global Mobility Summit 'MOVE', he said clean mobility powered by clean energy is the most powerful weapon to fight climate change. "This means a pollution-free clean drive, leading to clean air and better living standards for our people. We should champion the idea of 'clean kilometres'." "My vision for the future of mobility in India is based on 7 Cs: common, connected, convenient, congestion-free, charged, clean, cutting-edge," he said. The focus must be to go beyond cars to other vehicles such as scooters and rickshaws, Modi said. "Common public transport must be the cornerstone of our mobility initiatives." The Prime Minister called for leveraging the full potential for vehicle pooling to improve private vehicle utilisation. "Congestion-free mobility is critical to check the economic and environmental costs of congestion," he said. Mobility should be safe, affordable and accessible for all sections of the society, he said. "We need to ensure that public transport is preferred to private modes of travel," he said. "The Internet-enabled Connected Sharing Economy is emerging as the fulcrum of mobility." Mobility, he said, is a key driver of the economy. "Better mobility reduces the burden of travel and transportation, and can boost economic growth. It is already a major employer and can create the next generation of jobs." <https://energy.economictimes.indiatimes.com/news/power/pm-modi-unveils-mobility-road-map-seeks-investments-in-e-vehicles-manufacturing/65718795>

Automakers call for clear, stable policy

Seek roadmap to plan capacities and align investments, support for implementing new technologies. Automobile industry leaders on Wednesday, September 6, called for a 'clear and stable policy framework' for the industry. Whenever there is a regulatory change, it should not "become a crisis for the industry," they said. Heads of Maruti Suzuki India, Mahindra & Mahindra and Tata Motors were of the opinion that having a short, medium and long-term policy roadmap would help automobile and component makers plan capacities and align capital investments accordingly. Speaking at the annual convention of the Auto Component Manufacturers of India (ACMA), Mr. Ayukawa of Maruti Suzuki said a clear and stable policy framework for the new technologies would give confidence to principal investors in OEMs and component manufacturers. "Policy stability and support for new technologies will help attain quick critical mass for the industry," he added. He added that while the industry was committed to meet the energy security goals of the government, imperatives for India were different. Hence to meet the energy security goals, India may need a technology neutral approach. "Let us keep all options open EVs, hybrids, CNG, methanol and ethanol. We must invest in new technologies and build capabilities and capacities in all these areas," he said. Mahindra & Mahindra Managing Director Pawan Goenka cited examples of BS-VI emission norms adoption and implementation of BS-IV across India to highlight

how regulatory changes could impact the auto industry. Asking the government to provide a long-term road map "so that we can prepare for these changes", Goenka said, "Every change that happens should not become a crisis for the industry." Tata Motors CEO and Managing Director Guenter Butschek also stressed the need for support from the government with active policies to meet the challenges ahead. He said that such support would help the auto industry to "very carefully prioritise" and put "rightly resources behind," going forward.

<https://www.thehindu.com/business/automakers-call-for-clear-stable-policy/article24874859.ece>

Pet coke import ban is likely to affect aluminium, steel industry

The Union Commerce Ministry's notification prohibiting import of pet coke is likely to hit the aluminium and steel manufacturers. While aluminium industry estimates the cost impact at about 50 dollars per tonne, the secondary steel manufacturers apprehend significant escalation in cost of production as they have to look for alternate fuel feed for their electric arc furnaces. However, large steel mills, using the blast furnace route for steel making, are insulated as they do not have much use of pet coke in their process. Major aluminium makers Vedanta, Hindalco and Nalco import pet coke to make anodes for use in the smelters for electrolytic process to separate aluminium. On the other hand, a steel industry source said, the pet coke used in the steel

melting shop are of high quality containing low impurities like sulphur. "Such high quality pet coke import is not banned. Hence, there won't be much impact on the large steel mills producing high grade steel", he added. Though the notification issued by Director General of Foreign Trade (DGFT) under the Commerce Ministry has prohibited import of pet coke for fuel purpose, it has exempted the ban for certain category of industries, including cement which is the largest importer of pet coke in the country. "Import of pet coke is allowed for only cement, lime kiln, calcium carbide and gasification industries when used as feed stock or in the manufacturing process on actual user condition", said the notification. Meanwhile, the aluminium industry is hopeful of getting relief in the next batch of hearing on the matter as the government is conducting studies for submission to the court on adverse impact of use of anodes built from imported pet coke in smelter pots. In its July ruling, the court said, the decision on the use of imported pet coke in the steel industry and aluminium industry is under consideration. We are informed by the learned ASG (Additional Solicitor General) that studies will have to be conducted and BIS standards have to be fixed in the case of aluminium industry. As this exercise may take about eight weeks, the court has granted time till 1st October, 2018 for a decision on the matter.

<https://www.hellenicshippingnews.com/pet-coke-import-ban-is-likely-to-affect-aluminium-steel-industry/>

Natural gas price likely to go up by 14% from October

The government may from October raise price of domestic natural gas by over 14%, a move that will translate into higher CNG price and increased cost of electricity and urea production. Price paid to most of the domestic producers of natural gas is likely to be hiked to \$3.50 per MMBtu from October 1, from the current \$3.06, sources privy to the development said. Natural gas prices are set every six months based on average rates in gas-surplus nations like the US, Russia and Canada. Sources said the price revision is likely to be announced on September 28. India imports half of its gas which costs more than double the domestic rate. The increase in price will boost earnings of producers like Oil and Natural Gas Corp (ONGC) and Reliance Industries but will also lead to a rise in price of CNG, which uses natural gas as input. It would also lead to higher cost of urea and power production. Gas price was last hiked to \$3.06 per MMBtu for April-September 2018 from \$2.89 in the previous six months. This was just the second hike in nearly three years. The government is also likely to hike the cap price based on alternate fuels for undeveloped gas finds in difficult areas like deep sea, which are unviable to develop as per the existing pricing formula, sources said. The price for such fields is likely to be about \$7 per MMBtu for six month beginning October 1 as compared to \$6.78 currently, they added. The increase in natural gas prices will mean higher raw material cost for compressed natural gas (CNG) and natural gas piped to households (PNG). It would also mean higher feedstock cost for power generation and manufacturing of fertilisers and petrochemicals. The hike will boost producers like ONGC. Every dollar increase in gas price results in Rs 4,000 crore additional revenue for the PSU on an annual basis, sources said. ONGC is the country's biggest gas producer, accounting for two-thirds of the over 70 million standard cubic meters per day current output.

<http://www.freepressjournal.in/business/natural-gas-price-likely-to-go-up-by-14-from-october/1346295>

Gazprom's second quarter profit soars on rising energy prices, sales

Russian gas giant Gazprom reported a surge in second-quarter net profit, beating analysts' expectations, as it benefited from rising energy prices. It said second-quarter net profit jumped to 259 billion roubles (\$3.8 billion), from 48 billion roubles in the year-earlier period and above a forecast of 228 billion roubles in a Reuters survey of analysts. Gazprom's shares were up 1.1% after the results, outperforming the broader Moscow stock market, which was 0.8 percent higher. Gazprom shipped more than 101 BCM of natural gas to the EU and Turkey in the first half of the year, up 6% year-on-year and accounting for around a 34% share of Europe's gas market. It said its average gas export price rose by a quarter to 13,858 roubles per 1,000 cubic metres in the first half of this year.

Total sales in April-June increased to 1.83 trillion roubles, from 1.39 trillion roubles in the second quarter of 2017.

<https://www.hellenicshippingnews.com/gazproms-second-quarter-profit-soars-on-rising-energy-prices-sales/>

Egypt natural gas output rises to 6.6 BCF per day

Egypt's natural gas output has risen to 6.6 BCF per day after an increase in production at its gigantic Zohr offshore gas field in the Mediterranean, a petroleum ministry official told Reuters. On Friday, September 7, Minister of Petroleum Tarek El-Molla said in a statement that daily natural gas production from the Zohr gas field has increased to two billion cubic feet. El-Molla attributed the record-breaking achievement to the efforts of the petroleum employees and the government. Zohr, discovered by Italian energy company Eni in 2015, is the largest ever discovery of natural gas in the Mediterranean Sea. The total gas in place in the field is estimated to be around 850 BCM. If true, Zohr could almost double Egypt's gas reserves. Egypt seeks to speed up production from recently discovered fields, including Zohr, with the aim of ending gas imports by 2019 and achieving self-sufficiency of natural gas.

<https://www.hellenicshippingnews.com/egypt-natural-gas-output-rises-to-6-6-bln-cubic-feet-per-day/>

Petro China Q2 profit surges to three-year high on oil price recovery

Second quarter profit at Petro China Co, China's largest oil and gas producer, more than doubled from a year earlier to 16.94 billion yuan (\$2.48 billion), according to Reuters' calculations based on first half results released on Thursday. For the first half, net income rose 114 percent from the same period last year to 27.09 billion yuan, a company filing to the Shanghai Exchange showed. The quarterly performance is the best since the second quarter of 2015, according to Reuters data. The gains were led by the recovery in oil prices since the middle of 2017. The results were above the guidance the company gave in July for a first-half result of 26.17 billion yuan to 28.17 billion yuan. Revenue for the first six months of this year was 1.109 trillion yuan (\$162.19 billion). Second-quarter revenue was 567 billion yuan, up 17.5% from 482.4 billion a year earlier and its highest since the third quarter of 2014, according to Reuters calculations. Petro-China's crude oil production in the first half rose to 437.7 million barrels, up from 435.8 million barrels in the first half of 2017. Gas production in the first half increased 3% from a year earlier to 1,791 billion cubic feet. Strong refining margins as well as higher crude oil prices and robust gas sales have boosted the performance of China's three oil majors. Sinopec on Monday reported its best first-half performance since it listed 18 years ago, while its smaller peer CNOOC Ltd also posted its best ever half-year net profit since the first six months of 2015.

<https://energy.economicstimes.indiatimes.com/news/oil-and-gas/petrochina-q2-profit-surges-to-three-year-high-on-oil-price-recovery/65616859>

Russia's Gazprom revives Korean gas pipeline idea amid easing tensions

Russian natural gas producer Gazprom is revisiting plans to build a pipeline to South Korea across North Korea after noting signs of easing tensions on the Korean peninsula, a Gazprom executive said. Deputy CEO Alexander Medvedev told an economic forum in Russia's far east that Gazprom had returned to the idea of the pipeline in June "now signs have appeared of an improvement in the political situation". "...We are in contact with our South Korean and North Korean colleagues. We are preparing to enter a very important stage... in this case it is preferable to call this the phase of investment substantiation," Medvedev said. Gazprom has long planned to build the natural gas pipeline to South Korea, but the project has not materialised amid decades of tension between the two Koreas. Those tensions have eased this year with South Korea's President Moon Jae-in scheduled to attend his third summit with North Korean leader Kim Jong Un next week in Pyongyang. Seoul has pushed for a three-way summit involving U.S. President Donald Trump, with the aim of agreeing a joint declaration to formally end the 1950-53 Korean War.

<https://www.hellenicshippingnews.com/russias-gazprom-revives-korean-gas-pipeline-idea-amid-easing-tensions/>

China connects major gas trunklines to optimize supplies

China's two natural gas trunklines, the Sincuan-to-East China and West-to-East pipeline joined together in Jiangsu's Yizheng city this week, after a new pipeline was added to connect the two, state oil and gas group Sinopec said on Thursday, August 29. The connection, a pipeline of about 1.2 kilometres (0.75 mile), was built between Nanjing pumping station of the Sichuan line and Qingshan station of the West-to-East line, the group said. The new connection could help boost gas supplies by 10.06 MMSCMD. Inter-connection between trunk gas lines will allow greater supply flexibility and also boost supply security especially during peak demand seasons in winter when gas demand in northern China surges faster than in the south and creates regional supply imbalances. The Sincuan-to-East China project sources gas from China's Sichuan basin in the southwest, while the West-to-East line sources gas from northwestern Xinjiang region and Central Asia's Turkmenistan.

<https://www.hellenicshippingnews.com/china-connects-major-gas-trunklines-to-optimize-supplies/>

GLOBAL LNG-Supported by demand, prices exceed past winter peak

Asian spot LNG prices edged higher this week as Asian demand ahead of the winter persisted and the region's vulnerability to unpredictable natural events was underscored by the worst power outages in years in Japan due to an earthquake. Spot prices for October LNG-AS delivery in Asia rose to \$11.55 per MMBtu this week, up 5 cents from the week before, market sources said. At such levels, during a usually off-demand time, prices are not only at a four-year seasonal high, they are above winter peaks of 2014 onwards, according to Reuters data. Few trades were seen this week but prices were well supported by crude oil, which jumped mid-week due to a hurricane approaching the U.S. Gulf Coast, against which some spot LNG trades are done. Demand for the super-cool gas remained constant as Asian buyers prepare for winter, eager to avoid a repeat of last year when unexpectedly low temperatures caused prices spikes. Japan, the world's largest LNG buyer, suffered unprecedented heat waves over the summer, depleting storage levels which now have to be rebuilt in time for winter. One trader said its September import volumes may be higher than a year ago. While nuclear restarts should broadly reduce Japan's demand for LNG, a 6.7 magnitude earthquake that struck the populous northern island of Hokkaido on Thursday, September 6, triggered a blackout after disabling a coal energy plant and cutting power to an already shut nuclear facility. China is also preparing to shore up supplies, with state-controlled CNOOC opening its LNG terminals to third parties and the government considering subsidies to encourage gas storage and tax rebates for LNG imports. South Korea's Korea Midland Power Co Ltd (KOMIPO) is seeking an LNG cargo for delivery between Nov. 16 and Nov. 21 in a tender closing on Sept. 10, a document reviewed by Reuters showed. One trader said an earlier issue at Russia's Sakhalin-2 terminal, which halted production at one train at the start of the month, has likely been resolved. Russia's Yamal LNG plant has offered cargoes for winter delivery to Asia, traders said, although it was not clear how many have been sold. Production at Yamal has been ramping up faster than expected with another three newbuild arctic-classed LNG carriers about to head towards the facility, taking the total of vessels working from Yamal to 10. In the United States, feedgas flowing into Cheniere Energy's Sabine Pass train 4 terminals fell this week, which may indicate an outage at the 4.5 million-tonne-a-year plant. Separately, vessels coming in and out of the Sabine Pass Channel on the Texas-Louisiana border have been restricted by the U.S. Coast Guard due to a displaced pipeline, blocking the entry of one and the departure of another LNG tanker.

<https://www.hellenicshippingnews.com/global-lng-supported-by-demand-prices-exceed-past-winter-peak/>

China LNG demand seen up by 25 pct in 2018 -Qatar energy minister

China's demand for liquefied natural gas (LNG) is expected to grow by 20 percent to 25 percent in 2018 despite heightened trade tensions with the United States, Qatari Energy Minister Mohammed al-Sada said. Al-Sada said demand from China, which displaced South Korea as the world's second largest importer of LNG in 2017, was expected to show strong growth again this year after rising about 46 percent last year. "It looks like that growth is going to continue at 20, 25 percent, maybe more," he told Reuters ahead of a bilateral Qatar-Germany investment conference in Berlin. Overall global demand for LNG this year was expected to match the 11 percent jump seen in 2017, al-Sada said. Worldwide growth is driven by new LNG consumers as well as growth in existing markets such as China, which is buying more gas to wean the country off dirty coal to reduce pollution. Al-Sada said he hoped the United States and China would resolve their differences over trade and avert a trade war. "I think and hope that logic and rationalism will prevail," he said. "It is in the interest not only of the two countries, but also the rest of the world." China last month included LNG for the first time in its list of proposed tariffs on

\$60 billion worth of U.S. goods, signalling that it will not back down in a protracted trade standoff with Washington.

<https://www.hellenicshippingnews.com/china-lng-demand-seen-up-by-25-pct-in-2018-qatar-energy-minister/>

PetroChina inks its biggest Qatar LNG deal as U.S. trade at risk

PetroChina Co. signed a deal with Qatar-gas Operating Co. to purchase 3.4 MMT of LNG annually, the Chinese company's biggest supply deal, amid a brewing trade war with the U.S. that threatens to stifle the Asian nation's purchases of American fuel. Under the 22-year agreement, Qatargas will supply LNG from the Qatargas 2 project, a joint venture between Qatar Petroleum, Exxon Mobil Corp. and Total SA, state-controlled Qatargas said in a statement Monday. The first cargo will be delivered later this month. The contract is PetroChina's largest by annual volume, according to data compiled by Bloomberg NEF. China's LNG imports have surged 35 percent in the first eight months of this year, helping it overtake Japan as the world's biggest buyer of natural gas, amid a drive by President Xi Jinping's government to boost use of the fuel. The deal comes as President Donald Trump's trade war threatens to snuff out the budding energy relationship between the U.S. and

China. Just last year, U.S. officials were courting Chinese companies to invest in new export projects. Now, the Asian nation is poised to hit American supplies with a 25 percent retaliatory duty, a move that's pushed PetroChina to consider a temporary halt to U.S. spot purchases and increased buying from other nations. The new long-term Qatar agreement may also help insulate China from volatility in the spot market this winter. Regional spot prices this month have already topped last winter's peak, which was reached in January when they hit the highest since 2014 as the government's campaign sent domestic demand soaring.

The Qatar agreement announced Monday allows cargoes to be delivered to several receiving terminals around China, including in Dalian, Jiangsu, Tangshan and Shenzhen.

[Source: LNG Global](#)

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.

Qatar Petroleum in talks over potential German LNG terminal

Qatar Petroleum, the world's top supplier of LNG, is talking to German energy firms Uniper and RWE about cooperating on a potential local LNG terminal, its chief executive told a paper.

"We have a serious interest in participating in a German LNG terminal and are talking to Uniper and RWE," Saad Al-Kaabi told business daily Handelsblatt in an interview ahead of the Qatar Germany Business and Investment Forum in Berlin on Sept. 7. Al-Kaabi said there were two ways of participating in an LNG terminal, either by securing capacity to open up supply, or by taking a stake in the terminal infrastructure. A spokeswoman for RWE, Germany's largest power producer, said talks with Qatar Petroleum were about potential gas deliveries to Germany, not about a shareholding in a potential German LNG terminal. Germany, Europe's largest energy consumer, shelved plans for an LNG terminal of its own a few years ago, with major operators participating in foreign projects - including Rotterdam's Gate terminal - instead. However, talks about installing an LNG terminal have been revived in the wake of increasingly dynamic global flows of the fuel and discussions about its use in shipping to meet looming requirements for cleaner

fuels. A consortium comprising Dutch gas network operator Gasunie, German tank storage provider Oiltanking and Dutch oil and chemical storage company Vopak, is currently trying to get such a project off the ground. A funding decision by the consortium, dubbed German LNG Terminal, expected by the end of 2019. Some policymakers favour LNG as a way of reducing Europe's dependence on gas from Russia, which is pressing ahead with its Nord Stream 2 pipeline. Uniper said it has repeatedly pointed out that a German LNG terminal would be beneficial in light of declining gas resources in Europe, adding that Qatar Petroleum subsidiary, Qatargas, had been a strategic partner for years. "We are in constant contact with them. Such discussions are, of course, confidential," the group said.

[Source: LNG Global](#)

Japan's nuclear reboot gathers pace, set to curtail LNG demand

Japan's consumption of LNG is set to fall as the country's nuclear reactors restart, with output from atomic power set for its highest since the aftermath of the Fukushima disaster. Kansai Electric Power will restart the 870-megawatt (MW) No. 4 reactor at its Takahama station later on Friday, August 31, a spokesman told Reuters. The Kansai restart followed Kyushu

Electric Power bringing back the 890-MW No. 2 reactor at its Sendai plant on Wednesday, August 29. Kyushu now has four reactors running. Each returning reactor will cut demand for LNG by as much as 1 MMTPA, said Kosho Tamura, a gas analyst at Japan Oil, Gas and Metals National Corp. The return of Japan's nuclear capacity should lead to lower imports of fossil fuels, especially LNG. While that is a positive for Japan's utilities, especially as LNG prices are near four-year highs in Asia, the loss of Japanese demand could undermine the demand outlook for the global market. The three units at Kansai will save about \$1.5 billion in fuel costs each year they are running, the Kansai spokesman said, declining to comment on what fuels it would substitute. Operating Kyushu's nuclear units will save the company about \$2.2 billion in annual costs based on current LNG prices, its spokeswoman said. With two more reactors likely to restart by the end of the year, when Japan enters its peak demand period, as much as 9 MMTPA of LNG demand could be replaced by nuclear operations. The country's use of LNG in power generation has been declining this year as more reactors return. In June, LNG imports fell to the lowest monthly amount since May 2016 and for the year through to July are down 2.4 percent.

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

Asian demand could create deficit in global LNG market

Growing gas demand from Asia, particularly from China, could swing the liquefied natural gas (LNG) market into a deficit by 2022-2025, Fitch Ratings says. Market expectations of oversupply and weak gas prices have curtailed new investment activity in the sector in the past two years. Limited capacity additions beyond 2020 should be positive for spot prices, especially in Asia and Europe. This will benefit LNG projects with significant uncontracted volumes and those linked to gas spot prices. An unprecedented wave of new projects becoming operational in 2016-2019 has not resulted in, and is unlikely to result in a material surplus in the LNG market in the medium term. Additional LNG volumes continue to find a home across a diverse array of countries and new buyers, and under more flexible contracts. Funding for new LNG capacity is often structured as non-recourse project finance and is dependent on sponsors' ability to secure long-term offtake agreements, which buyers have been less willing to sign in anticipation of larger volumes of uncontracted LNG coming to the market. Therefore, sponsors may need to commit a higher equity contribution to get funding for LNG projects, which will continue to delay final investment decisions (FIDs) for some time. A typical timeframe for a new LNG project to become operational following the FID is four to five years. Due to limited new FIDs very few new projects will come on stream in the early 2020s. FIDs in the next one to two years are likely to be limited to projects with lower capital and operating costs given constraints on the funding side. We expect gas demand to continue its robust growth in the coming years, mostly driven by Asian markets that account for two-thirds of overall LNG demand. This is due a combination of healthy power demand growth in the region, natural gas being the fossil fuel of choice in pursuit of curbing air pollution, and the backlash against nuclear energy. Japan is currently the largest LNG importer, but China is catching up quickly and becoming the major market for LNG. The LNG market could shift into deficit by 2022-2025. Gas pricing is therefore likely to improve in the major importer markets, benefiting LNG projects relying on spot and hub pricing and entities with significant LNG trading portfolios. We also expect oil companies to gradually return to their earlier LNG ambitions. This includes oil majors, like Shell, BP and Total, most of which emphasise the growing role of gas in the global energy mix. The LNG market is still in its formative stage. Pricing mechanisms, contract terms and financing structures continue to evolve. Long-term oil-linked contracts are giving way to increased trading activity, which represented around a quarter of all new contracts in 2017, according to IGU World Gas LNG Report, compared to just 1% in 2012. New large LNG projects still rely on long-term contracts in order to secure financing. However, elsewhere contracts are becoming shorter, and the quality of counterparties is declining.

<https://www.hellenicshippingnews.com/asian-demand-could-create-deficit-in-global-lng-market/>

\$350m LNG terminal in Ghana deal sealed in China

Tema LNG Terminal Company Ltd. on Sunday, September 2, 2018, signed an agreement with China Harbour Engineering Company, for the construction of a Liquefied Natural Gas (LNG) Terminal to be sited in Tema. Tema LNG Terminal Company Ltd. is an entity controlled by Helios Investment Partners, the world's largest Africa-focused private equity fund. The LNG Terminal is being constructed on the back of a 12-year gas supply agreement that was executed between the Ghana National Petroleum Corporation (GNPC) and Rosneft, a global LNG trader and the world's largest listed oil producer. Rosneft subsequently engaged Tema LNG Terminal Company for the provision of the regasification services. The LNG Terminal, which will be completed in 18 months, will be Sub-Saharan Africa's first regasification terminal, strengthening Ghana's position as a regional trade and energy hub.

The project, which will generate some 1,600 jobs, is estimated to provide about two million tonnes of liquefied natural gas every year. This would mean that the facility would supply about 30% of Ghana's total electricity generating capacity, displacing crude oil and crude derivatives as fuel sources for the generation of power. In addition, a concession agreement signed between the Ghana Ports and Harbours Authority (GPHA) and Tema LNG Terminal Company Ltd, to allow for the siting and operation of the facility within the Tema port, will deliver an annual revenue in excess of \$6 million to GPHA throughout the total concession period. The Tema LNG Terminal Project is a private sector funded and driven project, led by established international sponsors, such as Rosneft, the world's largest listed producer of crude oil, and Helios Investment Partners, the world's largest Africa-focused private equity fund. As such, there was no requirement for capital from Government. The Terminal will be transferred to government (GNPC and GPHA) after 12 years. The contract was signed by Ogbemi Ofuya, the Director, Tema LNG Terminal Company Ltd, and Lin Yichong, Chairman, China Harbour Engineering Company
<https://www.hellenicshippingnews.com/350m-lng-terminal-deal-sealed-in-china/>

Qatar begins LNG shipments to Bangladesh

Qatar has started regular shipments of liquefied natural gas (LNG) to Bangladesh five months after a regasification vessel ran into trouble while trying to connect to the onshore infrastructure and offload its maiden cargo. An LNG cargo loaded over the weekend from Qatar's RasGas production facility and will be the first of about three 140,000 cubic-metre cargoes to arrive each month at Moheshkhali, Petrobangla officials told Reuters on Monday, September 11. The Excellence, a floating storage and regasification unit (FSRU), arrived at Moheshkhali near Cox's Bazar in April but bad weather hampered its ability to dock properly and connect to shore. It offloaded the cargo it came with last month. The shipments will ramp up to 2.5 MMTPA, as agreed with Qatar, and have turned Bangladesh into the latest nation to join the fast-growing LNG importing club. The South Asian country of 165 million people relies on gas for 70 per cent of its energy production but rising demand has coincided with falling domestic output, prompting it to consider a host of LNG projects. Aside from the Moheshkhali project, several others are being considered, usually combining LNG imports with onshore power plants that would use the regasified fuel as feedstock or with fertiliser complexes that are heavily gas-reliant. Bangladesh has penned several other long-term supply deals which are expected to begin once the import projects are developed. Using FSRUs is a quicker and cheaper way of importing LNG than the construction of traditional onshore facilities. Imports of LNG from Oman are expected to begin together with the arrival of another FSRU at Moheshkhali as part of a project developed by Summit Power with the participation of Japan's Mitsubishi Corp.
<https://en.prothomalo.com/economy/news/183176/Qatar-begins-LNG-shipments-to-Bangladesh>

Freeport signs initial LNG offtake deal with Sumitomo for Train 4

Privately-owned U.S. liquefied natural gas terminal operator Freeport LNG said it had signed a binding agreement with a U.S. unit of Sumitomo Corp to supply the Japanese company with 2.2 million tonnes a year for 20 years under a tolling structure (LTA).

- The LTA is expected to start in 2023 once commercial operations begin at the fourth train (Train 4) of Freeport LNG's export facility on Quintana Island near Freeport, Texas.
- "We are pleased to announce the start of a long-term relationship with Sumitomo as our first Train 4 foundation customer," said Michael Smith, Chairman and CEO of Freeport LNG.
- "Sumitomo's 2.2 mtpa of capacity under this HOA is a major step toward Freeport LNG contracting the approximately 3.5 mtpa needed for financing and commencing construction of Train 4."
- Freeport's first train, or facility, is due to come on stream in the first half of next year.

<https://www.hellenicshippingnews.com/freeport-signs-initial-lng-offtake-deal-with-sumitomo-for-train-4/>

Eight vessels stalled at Sabine Pass over draft restrictions – U.S. Coast Guard

Eight vessels were stalled on Friday at the Sabine Pass Channel on the Texas-Louisiana border after 37-foot draft restrictions were put in place this week to allow search operations for a displaced pipeline, the U.S. Coast Guard said. One liquefied natural gas (LNG), one liquefied petroleum gas (LPG) and two oil tankers were waiting to leave the Sabine Pass, while one LNG and three oil tankers were waiting to enter the channel, a Coast Guard spokesman said on Friday.

<https://www.hellenicshippingnews.com/eight-vessels-stalled-at-sabine-pass-over-draft-restrictions-u-s-coast-guard/>

**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.**

Nordic (Northern Europe and the North Atlantic) countries expand LNG station network for heavy trucks

Gasum is investing in the construction of around 50 natural gas refueling stations for heavy-duty vehicles in Finland, Sweden and Norway by the beginning of the 2020s. The investment will multiply the size of the Nordic heavy-duty NGV station network, enabling considerable emission cuts. The new facilities will be located at key transport nodes as regards road haulage, and they will enable significant increases in the use of LNG and biogas in heavy-duty transport. In the Nordic countries, heavy-duty transport plays a key role in the logistics system while at the same time generating a significant proportion of vehicle emissions. For the emission reduction targets set at the national and international levels to be reached, concrete solutions are needed to reduce heavy-duty road transport emissions considerably from the current levels. "We're on our way towards a carbon-neutral society and it's now time to accelerate the pace. Natural gas plays an indisputably important role in this transition," said Gasum CEO Johanna Lamminen. "In recent years, we've been making purposeful efforts to build the Nordic LNG and biogas infrastructure to improve access to gas. In early 2018, the Swedish Environmental Protection Agency granted Gasum an investment subsidy for the expansion of our filling station network as part of the Climate Leap ('Klimatklivet') program. This is key proof of the enormous potential of the gas market and enables the establishment of the role of gas as a low-emission fuel for heavy-duty road transport."

<http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/nordic-countries-expand-lng-truck-station-infrastructure/>

Nevada Transit Agency orders slew of CNG buses

The Regional Transportation Commission of Southern Nevada (RTC) has exercised its options for 55 Xcelsior compressed natural gas (CNG) transit bus orders with New Flyer of America Inc. The two orders, respectively, comprise 40 60-foot and 15 40-foot heavy-duty transit buses for a total of 95 equivalent units. RTC is a regional entity overseeing public transportation, traffic management, transportation and funding for southern Nevada. The transit authority has delivered over

63 million boardings in 2017 in the greater Las Vegas Valley. The buses represent executed options from New Flyer's contract with RTC that began in 2015. New Flyer has delivered 146 Xcelsior CNG buses to RTC since 2013, of which 81 were high-capacity, 60-foot transit buses. New Flyer is proud to be an innovator in the heavy-duty transit bus industry, increasing efficiency and reducing greenhouse gases with versatile propulsion solutions," comments Wayne Joseph, president of New Flyer of America. "We have a great relationship with the RTC and look forward to continuing that partnership with low-emission, high-capacity buses that improve transit mobility while eliminating emissions."

<https://ngtnews.com/nevada-transit-agency-orders-slew-of-cng-buses>

Scania takes LNG-fuelled long-distance coach to 2018 Hannover

Scania premieres its new Scania Interlink Medium Decker coach for liquefied gas (LNG) operations for a range of up to 1,000 kilometres, at IAA in Hannover, Germany, starting September 20. By doing so, Scania will extend the range of alternative fuel options to sustainable intercity coach journeys. "Whereas there are several options for carbon-conscious city and suburban bus operators, there has been a void in the long-distance travel market that we have now addressed," says Karin Rådström, Head of Buses and Coaches at Scania. "As LNG is becoming increasingly available throughout Europe, as well as in many other parts of the world, this is a timely and viable alternative." LNG operations have the potential to reduce CO2 emissions by 20 percent while also substantially reducing nitrogen oxide and particulate matter emissions. Additionally, noise levels are significantly lower. Some countries are also now starting to offer liquified biogas, cutting carbon emissions by 90 percent or more (depending on fuel source). Sustainability is Scania's guiding theme at IAA. Visitors will have the opportunity to experience the bus first-hand on an internal route in the Deutsche Messe trade fair area.

<http://www.ngvglobal.com/blog/scania-takes-lng-fuelled-long-distance-coach-to-2018-iaa-0905>

Snam and Api will develop 200 CNG and biomethane stations in Italy

Snam and api Group have signed a framework agreement for the development of approximately 200 new natural gas and biomethane fueling stations in Italy, within IP commercial network. The agreement is part of both companies' commitment to promoting sustainable mobility and aims to extend the distribution network of natural gas for transport throughout the country. Italy is the leading European market for natural gas consumption for vehicles, with over 1 million existing vehicles using CNG. Under the agreement, Snam and API Group will jointly identify existing fueling stations on the IP ordinary and motorway networks where they will be able to install facilities to supply CNG to cars. The first 30 stations will be contractualized within the first few months of 2019. Distributors of LNG for heavy-duty vehicles are also under consideration (the number of vehicles using LNG in Italy has increased from less than 100 in 2015 to approximately 1,000 today). This agreement will help promote sustainable mobility in Italy therefore benefitting both the environment and consumers. Snam4Mobility's initiatives are aimed at sector operators to support the development of natural



gas and biomethane stations and their increased presence in the country's various regions, which will also help improve the quality of supply to consumers. The diffusion of innovative and sustainable fuels such as natural gas is consistent with the development path of the api Group which is today, with over 5,000 service stations throughout Italy, the leading Italian operator in the fuel sector by number of distribution points, thanks also to the recent acquisition of TotalErg. The agreement with Snam is a firm contribution to the creation of an efficient national infrastructure for alternative fuels, which is one of api Group's main objectives.

<http://www.ngvjournals.com/s1-news/c4-stations/snam-and-api-plan-to-develop-200-cng-and-biomethane-stations-in-italy/>

Korea Gas Corp. to develop LNG trucks with Tata Daewoo

Korea Gas Corp. will be running liquefied natural gas-powered trucks starting this month, as part of its shift toward eco-friendly fuel such as natural gas and hydrogen, according to the public corporation. Korea Gas Corp. said it would operate a pilot project involving 400-horsepower LNG trucks in partnership with Tata Daewoo, an automaker headquartered in Korea and owned by the Indian company Tata Motors, until early next year. After the pilot project, dozens more LNG trucks will be provided in 2019. The pilot project is part of the public natural gas company's attempts to provide LNG to trucks currently powered by diesel, which accounts for 63% of fine dust emissions in Korea. Through the business, it hopes to improve air quality by reducing fine dust, diversify energy sources for transportation and create new demand for natural gas. The plan regarding LNG trucks was part of the company's announcement on Wednesday, September 5, that it would invest 1 trillion won (\$890 million) in the

areas of LNG trucks, liquefied natural gas bunkering and hydrogen, in line with the nation's "Renewable Energy 3020" goal to increase the use of renewable energy to 20% by 2030 amid growing concerns over fine dust and climate change.

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

Bolivia: cooperation agreement promotes safer CNG use in vehicles

The Director of the Executing Entity for Conversion to Natural Gas Vehicles (EEC-GNV) Alejandra Huaylla Vargas and the Executive Director of the National Hydrocarbons Agency (ANH) Gary Medrano signed a strategic alliance for the sustainability of the energy grid and the safety use of CNG. The agreement will be valid for a period of one year and may be extended at the request of one of the parties. The commitments assumed in the agreement include: the implementation of control mechanisms for companies that provide CNG services, through information and control systems of the ANH; the coordination of computer inte-

gration through the implementation and electronic transmission of data related to the assignment of requalification services and replacement of CNG cylinders; the coordination of the development and implementation of regulations and procedures for the application of new technologies in the installation of CNG equipment and the requalification of CNG cylinders, among others. The director of the EEC-GNV added: "The entity has been carrying out the work of conversion, maintenance, requalification and replacement of CNG cylinders, at a national level, for free; drivers only have to come to the regional offices to request the conversion of the vehicle; those who already accessed this service must also approach our offices to request the maintenance of the conversion kit and the requalification of the cylinder, this with the objective to provide security to the driver, the user and the population in general."

<http://www.ngvjournals.com/s1-news/c1-markets/bolivia-cooperation-agreement-will-promote-safe-natural-gas-use-in-vehicles/>

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

Rolls-Royce will deliver technology for new hybrid/LNG live fish carrier

Nordlaks in Stokmarknes, Norway, has ordered a new hybrid/LNG live fish carrier (wellboat) to be built at the Tersan shipyard in Turkey. Rolls-Royce has been commissioned to provide equipment, which have been designed by NSK Ship Design. The new, environment-friendly wellboat will transport live salmon from the offshore fish farm to the onshore processing facility. The wellboat will be fitted with four LNG engines, as well as propulsion and Dynamic Positioning (DP) system from Rolls-Royce. Capable of carrying over 600 tons of live salmon, the wellboat will substantially increase Nordlaks's transport capacity. "By choosing a hybrid solution that includes our well-proven Bergen gas engines and the energy-efficient Promas propeller system, Nordlaks and NSK Ship Design have taken a long-term perspective with regard to both environmental and financial performance," explained Ottar Ristesund, Rolls-Royce, SVP Propulsion Sales – Marine. "In addition, they have specified a propeller solution that provides the best possible maneuverability – whether the vessel is serving traditional fish farms in Norway's fjords or the new installations located in rougher waters offshore. Combined with the DP system, this means the vessel produces low emissions and will run efficiently for many years," added Ristesund.

<http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/rolls-royce-will-deliver-technology-for-new-hybrid-lng-live-fish-carrier/>

World's most eco-friendly bulk carriers were delivered in China

The next-generation bulk carriers Haaga and Viikki were delivered to Aspo Group's ESL Shipping, Finland from Jinling Shipyard in Nanjing, China. The 160-meter, 25,600 dwt, LNG-powered vessels generate less than 50% of the carbon dioxide emissions of the previous generation of vessels. They can also be fueled by completely carbon-free biogas, once the availability of biogas improves over time. The vessels, which incorporate several innovative solutions to reduce its environmental footprint by minimizing their energy consumption and emissions, will first head from the shipyard to Japan, from where they will arrive fully laden at the Baltic Sea approximately by mid-September (Haaga) and the end of October (Viikki). The plan is that both vessels will travel to the Baltic Sea via the Northern Sea Route. This shortens the travel time by nearly three weeks compared to the route via the Panama Canal and, therefore, significantly reduces the environmental impact of the trip. The completion of the new vessels will have a positive effect on the shipping company's profitability and competitiveness. "Viikki and Haaga significantly reduce emissions from our customers' transportation chains, and this new vessel category increases the flexibility of deliveries. We are proud that these innovative and energy-efficient vessels sail under the Finnish flag," said Mikki Koskinen, Managing Director of ESL Shipping. This newbuilding project is part of the Bothnia Bulk project, partly funded by the EU. Its goal is to modernize the sea route between Luleå, Oxelösund and Raahé to be more eco-friendly. The vessels have been designed by Deltamarin in Finland, and European equipment suppliers have provided roughly 60% of all vessel systems.

<http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/worlds-most-eco-friendly-bulk-carriers-were-delivered-in-china/>

Carnival Corporation's AIDA Cruises introduces cruise ship powered by LNG

Carnival Corporation and its AIDA Cruises brand held a naming ceremony to welcome AIDAnova into their fleet on August 31st, 2018. AIDAnova will be powered at sea and in port by LNG. AIDAnova is the first of 11 next-generation cruise ships from Carnival Corporation between 2018 and 2025 able to generate their power at sea and in port from LNG. AIDAnova will embark on its first voyage at the end of September and will head for Eemshaven in the Netherlands. Once the ship has received its final fittings and has completed various sea trials, AIDAnova will be delivered to AIDA Cruises in an official handover ceremony from the Meyer Werft shipyard on November 15, 2018, in Bremerhaven, Germany. AIDAnova will begin its maiden voyage from Hamburg to the Canary Islands on December 2, 2018. As of 2023, more than half of AIDA Cruises' guests will be spending their vacation on a cruise ship that runs on LNG.

[Source: LNG Global](#)

Another Spanish port is upgraded to offer LNG bunkering services

Ayesa of Spain is set to redesign the mooring jetty for the Enagás regasification plant in the Port of Huelva. This will allow small-scale vessels to be refueled and vessels to be loaded with LNG for subsequent ship-to-ship bunkering. The

mooring jetty in Huelva will be the third designed by Ayesa, following similar ones in Barcelona and Cartagena. Stefan Pardo, Head of Oil & Gas at Ayesa, said that the company will be responsible for drafting the detailed engineering project, as well as the specifications for materials and equipment. In order to adapt the plant for these kinds of services, new pipe connections must be created on the mooring jetties, as well as monitoring and measuring systems to allow LNG to be loaded onto small-scale methane tankers through flexible hoses suitable for very low temperatures. These tankers will then refuel large vessels moored in the port or transport the LNG to other small-scale vessels.

<http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/another-spanish-port-is-upgraded-to-offer-lng-bunkering-services/>

Baleària will convert two RoPax ferries to LNG dual fuel operation

MAN PrimeServ, the after-sales division of MAN Energy Solutions, has won the contract to convert two RoPax ferries from Spanish operator, Baleària Eurolineas Maritimas, S.A., to dual-fuel operation. Dr Thomas Spindler, Head of Upgrades & Retrofits, PrimeServ Four-Stroke, MAN Energy Solutions, said: "We showed – with the conversion of Wessels Reederei's 'Wes Amelie' containership – that operational MAN engines can successfully be converted to LNG operation with a tremendous effect on exhaust

emissions and the environment. We are very happy that Baleària has seen fit to bring these benefits to a new segment and application and look forward to the conversion procedure." The conversion of the Nápoles is due to take place in Spain between November 2018 and January 2019, with the conversion of Sicilia to take place from October to December 2019. The conversion to LNG operation is part of MAN's wide-ranging engagement for the establishment of LNG as a shipping fuel. Calling for a 'Maritime Energy Transition' the company considers the use of natural gases as the fuels of choice in global shipping as the most promising way to supporting the goal of a climate-neutral shipping industry. Launched in 2016 after COP 21, MAN's initiative has since found broad support within the shipping industry and politics. 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, Al-Fuels 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. <http://www.ngvjournals.com/s1-news/c7-lng-h2-blends/balearia-will-convert-two-ropax-ferries-to-lng-dual-fuel-operation/>

INTERNATIONAL: LNG DEVELOPMENT

Japanese firm secures licence to set up terminal in Pakistan

A Japanese firm has secured a licence to set up and operate re-gasified liquefied natural gas (RLNG) terminal in the country, The News learnt on Monday, September 10. Officials said Taber Energy (Pvt) Ltd, a subsidiary of Diamond Gas International of Mitsubishi Corp., got a provisional licence for construction and operation of RLNG terminal in Pakistan. Financial and other details of the upcoming project could not be obtained. Taber Energy, formed in January followed by a formation of a subsidiary Taber Energy Marketing (Pvt) Ltd, will venture into sales and marketing of LNG. The government has already issued licences to Bahria Foundation, Global Energy Infrastructure and Energas Terminal to develop and operate LNG terminals in the country that has two terminals of 1.2bcfd regasification capacity, operated by Pakistan Gas Port and Engro Elengy. The country has imported millions of tons of LNG in the last three years. Around 80 percent of imports have been under long- and medium-term supply agreements, and the remaining was purchased on spot rates. A highly-developed pipeline grid, extensive industrial demand and the biggest natural gas-powered vehicle fleet in Asia after China and Iran make Pakistan an easy fit for LNG and official estimates show imports could jump fivefold to 30 million tons per annum by 2022. Analysts said Pakistan is facing an increasing shortfall of natural gas supply aggravated by declining indigenous gas production. The current shortfall is approximately two bcf, which is projected to increase to up to four bcf – equal to almost current supplies – by 2020 unless new gas import projects begin. A joint venture of Shell, Engro, Gunvor and Fatima Group also planned to start LNG merchant terminal by the second quarter of 2020. The terminal will have the re-gasification capacity of 750 million metric cubic feet/day. Analysts said the new government will have to resolve the gas pricing issue as imported gas is very expensive compared to domestic gas. Imported gas follows international market whereas domestic gas pricing is set under political consideration. Imported gas is, however, extremely cheaper alternate to furnace oil, diesel, motor gasoline and liquefied petroleum gas. It gives huge cost benefits in transport and power sectors.

<https://www.thenews.com.pk/print/366635-japanese-firm-secures-licence-to-set-up-terminal>

Delhi may soon have green fuel even cleaner than CNG

Almost two decades after the Capital shifted to compressed natural gas (CNG) as a 'clean' alternative fuel, Delhi could soon have an even cleaner variant with testing to begin on H-CNG (hydrogen-CNG) later this month. Following a report submitted by the Environment Pollution (Prevention and Control) Authority (EPCA) to the apex court, the Supreme Court had last month directed the Union government and Indian Oil Corporation Ltd to look into hydrogen-CNG as an alternative fuel option after the report stated that it could result in reduction of CO and other emissions by as much as 70%. According to the Supreme Court's instructions, as many as 50 buses will be required to be tested based on H-CNG with a deadline of one year allotted to agencies to carry out testing. IOC officials say work on the fuel variant will be carried out in the city after they are allotted a bus depot later this month. S S V Kumar, director, Indian Oil Corporation, R&D centre, said, "There can be a 70% reduction in carbon monoxide and the icing on the cake is that this can give 3 to 4% fuel economy improvement as well. Our studies indicated that there is no reduction in NOx however, but with certain changes, that too can be achieved." He spoke at the two-day conclave on clean and low carbon mobility by the Centre for Science and Environment (CSE). Kumar says an 18% mixture of hydrogen is added to the CNG mix for optimum usage, however, H-CNG does not require any additional infrastructure. "Hydrogen is stored separately and it is mixed with CNG and then dispensed directly to the bus. The dispensing infrastructure remains the same so there is no additional cost in that regard. Our demand to the Supreme court was to provide us with 50 buses of BS IV vintage and a bus depot so we can scale up our trials and demonstrate to the world that this can be replicated at a much higher level."

<https://timesofindia.indiatimes.com/city/delhi/delhi-may-soon-have-green-fuel-even-cleaner-than-cng/articleshow/65694352.cms>

Xebec will supply biogas system to Toronto's waste-to-energy project

In July, Enbridge Gas Distribution Inc (Enbridge) announced a joint project with the city of Toronto to construct the city's first biogas facility, located at the Dufferin Solid Waste Management site, and Xebec will be the supplier for the turn-key biogas upgrading system that will help turn the city's organic waste into clean energy. Almost 50% of household waste (by weight) is organic material. When organic waste breaks down, biogas or methane is created. Many municipalities and sewage treatment plants burn off this methane into the atmosphere. But by cleaning and conditioning the methane, a valuable energy resource can be created: biomethane, a sustainable, and carbon neutral source of energy which is identical to natural gas. It can be injected into the gas pipeline network or it can be used independently as a fuel for transport, heating or power generation, significantly offsetting greenhouse gas (GHG) emissions. The city of Toronto project provides a perfect example of a truly closed loop – where Green Bin organic waste is collected, cleaned and conditioned to become carbon-neutral renewable natural gas, and then injected into the gas grid to fuel the collection trucks that pick it up. Expected to be completed in 2019, the project will allow the city to reduce fuel costs for its fleet of collection trucks and significantly reduce its carbon footprint.

<http://www.ngvjournal.com/s1-news/c5-products/xebec-supplies-biogas-upgrading-system-to-torontos-power-to-gas-project/>

Germany reaches 50 H2 filling stations

The launch of the 50th public hydrogen service station has been celebrated by H2 MOBILITY, a company formed by Air Liquide, Daimler, Linde, OMV, Shell and TOTAL to advance hydrogen refuelling infrastructure in Germany. Located in Potsdam and with a refueling time of under 5 minutes, the station has capacity to refuel up to 40 vehicles per day and a facility for future refuelling of hydrogen buses. Linde and TOTAL celebrated this important stage in the development of hydrogen mobility in Germany. In the presence of representatives of the European Union's Fuel Cells and Hydrogen Joint Undertaking (FCH JU), the German federal government, the government of the federal state of Brandenburg and the city of Potsdam, the station in Horstweg in the southeast of Potsdam was ceremoniously inaugurated. Alongside a 700-bar pump for cars, a facility for an optional 350-bar pump for filling up buses has been preliminarily installed at the station. The technology for the new hydrogen facility at the TOTAL service station in Potsdam is produced by Linde. The facility is owned and operated by H2 MOBILITY. The partners' primary goal is to operate 100 stations in seven German metropolitan areas (Hamburg, Berlin, Rhine-Ruhr, Frankfurt, Nuremberg, Stuttgart and Munich) and along motorways and highways by 2019. Another 300 hydrogen fuelling stations will follow as the vehicle numbers are ramped up.

<http://www.ngvglobal.com/blog/germany-reaches-50-h2-filling-stations-0914> [Edited]

INTERNATIONAL: NATURAL GAS/ TRANSNATIONAL PIPELINES/COMPANIES/ OTHERS

China considers extending subsidies for unconventional gas

China's State Council, the Cabinet, said the government is considering to extend subsidies for unconventional natural gas productions, and will push the gasification drive in a measured manner in accordance with demand. China says domestic natural gas output to top 200 BCM by end of 2020. The target level will be about 36 percent higher than the output rate in 2017. Without giving further details, the Cabinet said it will consider extending subsidies for unconventional gas between 2021 and 2025, and the subsidies will also cover tight gas. It said it will also consider value-added tax rebates on LNG imports and grant subsidies for gas storage beyond state-set targets.

<https://www.hellenicshippingnews.com/china-considers-extending-subsidies-for-unconventional-gas/>