

Energy News Monitor

GROWTH SPURT IN GAS DEMAND Monthly Gas News Commentary: July 2019

India

India has become the second-fastest growing natural gas market globally as a result of a sustained policy push by the government that is aided by firm investment plans to the tune of a whopping \$30 bn for production, import and distribution infrastructure. The multinational investment bank said that India is investing significantly to meet its growing demand. The country has five new terminals under construction with 25.5 mtpa of capacity that are likely to be completed by 2020. These terminals will ease import constraints in the existing western and northern market and also make gas available in the southern and eastern parts of the country. India's LNG demand is expected to grow from 22 mt in 2018 to 31 mt in 2025 at a compounded annual growth rate of 4 percent. India, as a gas market, is extremely price-sensitive, with demand fluctuating between LNG, propane, and fuel oil, depending on the economics, especially for power and industrial gas usage. Despite significant growth, India is still a decade behind China – the fastest-growing gas market -- on gas infrastructure and penetration, with current gas penetration levels similar to China in 2004.

GAIL (India) Ltd has hired a newly-built LNG ship from Japan's Mitsui OSK Lines for ferrying gas from nations such as the US for three years beginning 2021, and plans to charter hire additional vessels. GAIL in its latest annual report said it has contracted long-term LNG from the US (5.8 mtpa) and Russia (2.5 mtpa) and is now actively trading the gas in international market. It also hired two

vessels - Cadiz Knuten and CLean Horizon - in 2018 for shorter periods to meet its shipping requirements. GAIL said it is fully equipped to meet its spot /short/mid/ long term shipping requirements and has been able to develop LNG shipping capabilities in a very short span of time. It is the largest natural gas company of India with about 11,400 km of the cross country existing trunk pipeline network and another 4,000 km pipeline in advance stage of completion. GAIL was instrumental in renegotiating LNG supply contract from Australia through Petronet LNG Ltd. These contracts, GAIL said, were entered into with the primary objective of meeting the demand of a growing Indian economy and with power sector being considered as one of the major long-term buyers of LNG. To mitigate this risk, GAIL said it is exploring opportunities to market LNG volumes in the international markets either directly and/or through its subsidiary, GGSPL Singapore. GAIL is looking at the fertilizer sector for market some of the LNG and is also looking at refineries and steel plants for the same.

GAIL will set up three more CNG filling stations in Patna and Naubatpur by August this year to cater to the residents who wish to opt for cleaner, environment-friendly fuel to run their vehicles. The new CNG stations will come up at petrol pumps near Zero Mile (Bypass Road), Saguna Mor and Naubatpur. The CNG stations will be set up under the PMUG Yojana and will be connected to the eastern and north-eastern states with the national gas grid. The GAIL aims to set up 10 CNG

stations in city by March 2020. Of the three new CNG stations, two will be mother stations and one at Zero Mile will be daughter booster station. Mother stations are directly connected to the pipelines. CNG is made available in Patna through Haldia-Jagdishpur gas pipeline. CNG daughter station does not have the connectivity of natural gas pipeline. At these stations, CNG is transported through mobile cascades (bunch of cylinders) and then dispensed to vehicles through CNG dispensers. The estimated cost of setting up one CNG station is around ₹25-30 mn. Currently, two CNG stations are functioning at Rukanpura (mother station) and Choti Pahari (daughter booster station). According to GAIL, the daily consumption of CNG at Rukanpura station is between 2,000 and 2,500 kg while it is 1,500 kg at Choti Pahari. The two stations had been launched in February this year. Around 1,500 CNG vehicles were running in the city and most of them were auto rickshaws. 1500 more auto rickshaws have been provided with the licence to run on CNG.

GAIL said the PMUG, the gas pipeline from central India to east, has reached Gorakhpur in Uttar Pradesh. The company said a 165 km spur line to take the natural gas to Gorakhpur has been successfully commissioned. GAIL's infrastructure in Gorakhpur is in readiness to commence gas supplies to the upcoming fertiliser plant and the city gas project in the city. The revised project contour spans over 3,400 km to serve eastern and northeastern states. Sequential commissioning of the PMUG project amid ground-level challenges is encouraging. In south, GAIL is scheduled to commission the 450 km Kochi-Koottanad-Mangaluru pipeline by September 2019.

GAIL has offered two cargoes of LNG for loading from the Cove Point plant in the US in August and November. The cargoes will be offered on a free-on-board basis. GAIL is also seeking an LNG cargo for India's Dahej terminal for late December delivery on a delivered ex-ship. The tender for the swap deal closes on 3 July.

The Indian government will introduce rules in six months that could lead to the phase-out of monopolies controlled by natural gas distribution companies in 34 cities,

including New Delhi and Mumbai, allowing consumers to choose a new supplier. In 2009, PNGRB gave exclusive gas marketing rights, initially for five years, to companies who had established gas distribution networks in cities across the country as a way to recover their costs along with exclusive rights to use the networks for 25 years. However, the regulator will open the marketing business to competition. The rules are expected to be ready in three months; implementation would take another three months as the regulator will first seek feedback from companies and the public. The move could affect the business of GAIL, the biggest gas distributor in the country. GAIL has direct or indirect control of many of the single-city distributors, such as Mahanagar Gas Ltd in Mumbai, Indraprastha Gas Ltd in New Delhi. Gujarat Gas Ltd may also have rivals moving into the 11 cities in which it distributes gas, including Jamnagar, Ahmedabad, Hazira, Surat and Rajkot in western Gujarat state. Some cities awarded to IOC and Adani Gas Ltd would also be open to new distributors, under the new provisions. The PNGRB recently awarded over 130 city gas projects and is hoping that those will involve new investment of ₹1.2 tn (\$17.50 bn). Notable winners include GAIL, Adani, IOC, BPCL and HPCL. The companies will provide piped gas to an additional 22.1 mn domestic customers, build 4,600 fuel stations and increase the size of the pipeline network by two-thirds. At the end of March 2019, India daily supplied about 21.1 mcm of gas to about 5 mn households, 35,000 commercial and industrial clients and for vehicles through 1,700 fuel stations. India plans to raise the share of natural gas in its overall energy mix to 15 percent by 2030 from the current 6.2 percent and connect 10 mn households with piped gas by 2020. By opening up the existing markets, India hopes to attract foreign investment into the industry.

India has fixed about 64 percent lower tariff for the KG basin gas pipeline network at ₹16.14/mmBtu according to an order by the PNGRB. The previous tariff was ₹45.32/mmBtu and India's biggest pipeline operator, GAIL, had proposed a revision to ₹47.20/mmBtu for the pipeline network that begins from KG basin in the east coast, the order said. However, the Board has fixed tariffs

for Jagdishpur-Haldia-Bokaro-Dhamra pipeline and Hazira-Vijaipur-Jagdishpur pipeline in line with GAIL's proposal.

CNG price in Delhi and its suburbs was hiked by about ₹1/kg the seventh increase in rates in 15 months. Indraprastha Gas Ltd, the sole supplier of CNG to automobiles in the national capital region, said the increase was warranted because of "recent changes in transmission tariffs of gas pipeline." CNG price in Delhi was raised by ₹0.90/kg to ₹46.60/kg. The increase in adjoining Noida, Greater Noida and Ghaziabad was ₹1 per kg to ₹52.95. CNG rates in Rewari, Gurugram and Karnal in Haryana have been raised by 95 paise. This is the 7th increase in CNG prices since April 2018. CNG price was last hiked in April by ₹1/kg because of the rise in the price of domestic natural gas and fall in rupee value against the dollar. In all, rates have gone up by ₹6.89/kg since April 2018. IGL, however, did not raise the price of piped natural gas it supplies to households in these cities for cooking purposes. PNG currently costs ₹30.50/scm in Delhi and ₹30/scm in Noida, Ghaziabad and Greater Noida. Rates of CNG and PNG vary in different cities due to the incidence of local taxes. IGL said it will continue to offer a discount of ₹1.50/kg in the selling prices of CNG for filling between 12.00 am to 6.00 am at select outlets in Delhi, Noida, Greater Noida, and Ghaziabad. The revision in retail prices of CNG has been effected after an increase in transmission tariff of gas pipeline and an increase in operating expenses since the last price revision. IGL sells CNG to over 1.05 million vehicles in the national capital region through a network of over 500 CNG stations. It also supplies PNG to over 1.120 mn households in Delhi and NCR towns.

AGCL, OIL and GGL signed an agreement for incorporating a new company for implementation of the CGD network in five districts of Assam. With the connection of Assam to the National Gas Grid, steady supply of natural gas shall initiate a spurt in the industrial sector, power generation sector, automotive CNG sector and domestic piped gas to households sector. The supply of PNG to the industrial, commercial and domestic customers in the first phase in Kamrup, Kamrup (Metro),

Cachar, Hailakandi and Karimganj districts will be a major initiative in this regard. AGCL, along with OIL and GGL had formed a consortium and bid for laying, building and operating the CGD Networks in two GA in Assam. GA-2 comprises of Cachar, Hailakandi and Karimganj districts and GA-3 comprises of Kamrup and Kamrup (Metro) districts. The joint venture company shall implement the CGD Network and supply piped natural gas to the domestic, commercial and industrial customers and CNG to the vehicles in Kamrup, Kamrup (Metro), Cachar, Hailakandi and Karimganj districts. In these five districts, approximately 416,000 households will be connected with the PNG and 72 CNG stations will be set up in these districts at an estimated cost of ₹17 bn. Around 95,000 households will be connected with the PNG and 21 CNG stations will be set up in Cachar, Hailakandi and Karimganj districts at an estimated cost of approximately ₹5 bn. Around 321,000 households will be connected with the PNG and 51 CNG stations will be set up in Kamrup and Kamrup (Metro) districts in the coming years at an estimated cost of approximately ₹12 bn.

Rest of the World

European gas hub prices have risen above the price of LNG on the Asian spot market in a rare occurrence that largely rules out arbitrage of LNG cargoes from the Atlantic to the Pacific basins. Dutch and British month-ahead gas prices exceeded Asian spot LNG in April for the first time in four years. Asian LNG prices tend to be higher due to the huge demand there with few alternative supplies. The switch in the price values is another twist in a unique year for the fast-expanding commodity as soaring production from new plants, much of it in the US Gulf Coast, coincides with tepid demand from Asia, normally consumer of 75 percent of global LNG. Month-ahead Dutch gas was \$4.56/mmBtu and the British equivalent was \$4.48/mmBtu, while Asian spot LNG for August was heard at \$4.40/mmBtu. Dutch and British month-ahead gas prices soared in part due to a string of planned outages in Norway, although their 38 percent to 44 percent gains in the past two weeks have not fully reversed the prolonged 66 percent fall since last October.

European gas trading volumes this year may beat the record 52,604 TWh recorded in 2018 due to growth at the Dutch, German and Italian gas trading hubs, research firm Prospex said. Last year's volume rose 5 percent and trading across 11 markets monitored by Prospex increased by at least 10 percent in the first half of 2019 compared with the same 2018 period. Prospex said that volume growth on Dutch gas exchange Title Transfer Facility remains dominant, more than offsetting a continued decline on Britain's NBP. The two account for 80 percent of European wholesale gas trading. Wholesale trading has picked up in recent years as the region's gas resources fall and more LNG arrives. The NBP serves as the trade hub for LNG arriving into British terminals, but also all exchange futures trading and price risk management for markets in Britain denominated in sterling. As global gas prices increased by around 20 percent last year, the total European gas trading value in 2018 amounted to €1,190 bn (\$1.34 tn), up 35 percent and exceeding €1 tn for the first time ever. The Netherlands, Britain, Germany, France, Italy and Belgium are the leading markets in that order.

Russian gas giant Gazprom has increased its gas transit via Ukraine to Europe by about a quarter, to 300 bcm/d gas transport firm Ukrtransgaz said. Ukrtransgaz said a repair of both two lines of the Nord Stream pipeline between Russia and Germany was the reason for the jump in transit. Both lines are shut for planned maintenance 16-30 July. Russian gas volumes piped via Ukraine to European consumers in the first five months of 2019 rose to 37.6 bcm up 8 percent from a year earlier. More than a third of Russia's gas exports to the European Union cross Ukraine, providing Kiev with valuable transit fee income. Russia's gas exports via Ukraine fell 7 percent in 2018 to 86.8 bcm.

Gazprom has signed a 5-year contract with Turkmengaz to purchase natural gas, the Russian gas producer said. Turkmenistan will supply Gazprom with up to 5.5 bcm of natural gas per year, the company said. In April, the Central Asian country resumed natural gas exports to Russia after a three-year suspension. The volume agreed is much lower than Turkmenistan's shipments to Russia in the decades preceding the suspension when annual

exports could reach 50 bcm. The bulk of Turkmen gas - about 40 bcm out of the total output of 70 bcm - now goes to China and the Ashgabat government is building a pipeline through Afghanistan and Pakistan to India to open up new markets.

EU Foreign Ministers turned up the pressure on Turkey after approving an initial batch of sanctions against the country over its drilling for gas in waters where EU member Cyprus has exclusive economic rights. Turkey issued its own warning that his country would step up drilling activities off Cyprus if the EU moved ahead with sanctions. Two Turkish vessels escorted by warships are drilling for gas on either end of ethnically divided Cyprus. The Cyprus government has licensed energy companies including ExxonMobil, France's Total and Italy's Eni to carry out gas drilling in blocks, or areas, off the island's southern coastline.

The Dutch government's top advisory body called for a clearer explanation from the government regarding how natural gas extraction at Groningen will be ended. Output at Europe's largest onshore gas field reached 88 bcm in 1976 but tremors blamed on drilling in recent years have damaged buildings and forced authorities to slash production. Following a 3.4 magnitude earthquake, the government last year vowed to halt output at Groningen by 2030 and to lower production as quickly as possible in the coming years. The Groningen field is operated by NAM, a joint venture between Royal Dutch Shell and Exxon Mobil. The Dutch gas sector regulator has said output should be limited to 12 bcm next year to limit risks. But the government has repeatedly said such a step would lead to shortages, as the Netherlands still depends on Groningen gas for a large part of its energy supply. Plans to reduce demand for Groningen gas include building extra capacity to convert high-caloric imported gas to the low-caloric gas needed for the Dutch network.

California utility regulators proposed changing when SoCalGas can withdraw natural gas from its Aliso Canyon storage facility in Los Angeles to address energy reliability and price impacts in Southern California. The current withdrawal protocol has been in effect since 2 November 2017, following a leak at the facility between October 2015 and February 2016, the California Public

Utilities Commission said. Under the proposed new withdrawal protocol, SoCalGas would be able to pull gas out of Aliso if the amount of fuel in the region's pipelines is low, Aliso is over 70 percent full during February or March, or the amount of gas in two of the utility's other storage fields is low.

Italian oil major Eni, China's overseas energy unit PetroChina and two trading houses are vying to supply LNG to Pakistan in one of the largest tenders ever worth billions of dollars. The 240-cargo 10-year tender, which is likely to be worth from \$5 bn to \$6 bn. Pakistan is expected to be a significant growth driver in global LNG demand, with Wood Mackenzie estimating the country will need 25 mt a year as domestic supplies dwindle and its economy grows. That would make it a top-five LNG buyer. Eni and PetroChina's Singapore unit were joined by the trading arm of Azeri state oil company SOCAR and commodities trader Trafigura in placing offers. Pakistan LNG, the state-owned company that issued the tender, declined to name any bidders. SOCAR Trading SA confirmed it had bid. The tender is keenly watched due to its size and because Pakistan is expected to publish the lowest prices offered by the companies. This will give valuable insight into the opaque LNG market, which is characterized by closed bilateral trades, secret long-term supply agreements and an over-the-counter spot market. Commercial offers are expected to be opened on 2 August, when Pakistan LNG is likely to reveal bids. The largest tender in recent years was issued by Egypt in October 2016 for 96 cargoes, but that was for a two-year period between 2017 and 2018 after the country suffered an acute gas shortage. Pakistan, like most Asian buyers, purchases LNG priced against Brent crude oil expressed as a price slope, or percentage of the oil contract. Pakistan LNG issued the tender in early June to import 240 LNG cargoes of 140,000 cubic meters each for delivery over a 10-year period for the country's second LNG terminal. The cargoes will be sent into the Pakistan GasPort Consortium Ltd terminal, with first delivery expected between September 2019 and March 2020.

The recently expanded Tilbury LNG terminal in Delta, BC, has won its first export contract, facility owner

FortisBC said. FortisBC said that it will produce LNG for Top Speed Energy Corp to export to China under a two-year term supply agreement. The BC firm contends the term supply agreement is unprecedented in Canada's LNG export industry and was made possible with the Tilbury expansion earlier this year, which added 250,000 tpa of LNG production capacity and 46,000 cubic meters of storage. Under the agreement, 53,000 tonnes of LNG a year – approximately 60 standard-sized ISO shipping containers per week – will be shipped from Tilbury to China by the summer of 2021, FortisBC said. According to FortisBC, the Top Speed deal is the company's latest pioneering move in Canada's LNG industry. It stated that in 2017 it became the first Canadian company to supply LNG for exports to China and has been doing so on a spot basis since then.

Recently announced plans to foster competition in the Brazilian natural gas market may trigger a wave of privatizations among state-controlled distribution companies, luring international and domestic bidders, experts on the sector said. Brazil's Cosan SA and Spain's Naturgy Energy Group SA, are among the companies potentially interested in the segment, which also include Portugal's Galp, France's Engie and Spain's Repsol, consultants, lawyers and other experts said. The plan to overhaul Brazil's domestic natural gas market, approved by Brazil's energy policy council in late June, calls for companies with a "dominant position" to sell all of their stakes in distributors. Petrobras has struck a deal with local antitrust authority to sell of its gas transportation and distribution assets by 2021. Petrobras holds minority stakes in state-owned gas firms through its subsidiary Gaspetro, in which Japan's Mitsui holds a 49 percent stake. Brazilian state-owned oil firm Petrobras has reached an agreement with anti-trust regulator Cade to sell off a series of natural gas transportation and distribution assets, the company said. Petrobras said it had pledged to sell stakes in pipeline networks including a 10 percent stake in Nova Transportadora do Sudeste SA, 10 percent in Transportadora Associada de Gas SA and 51 percent in Transportadora Brasileira Gasoduto Bolivia-Brasil SA. The deal comes as Brazil's government seeks to break up the company's dominance of the sector

in a plan that is expected to deliver “a shock of cheap energy” to the country.

Indonesia has agreed to extend the production sharing contract for the Corridor natural gas block with ConocoPhillips, Spain’s Repsol SA and Pertamina. The existing contract will expire in December 2023 and the ministry has agreed to extend the contract by 20 years to 2043. ConocoPhillips will operate the block until 2026 before starting to transfer operatorship to state-owned Pertamina. Corridor is Indonesia’s second largest gas producing block, with 827 mmscfd of gas lifting in the first semester this year, according to upstream oil and gas regulator SKK Migas, higher than the 810 mmscfd target. Under the new contract, the contractors will have 53.5 percent of the gas produced from the block and 48.5 percent of the oil.

Indonesia’s energy ministry has approved a revision by Japan’s Inpex Corp of its development plan for the \$20 bn Masela natural gas project, upstream oil and gas regulator SKK Migas said. The details of the approved plan were the same as agreed in a deal signed, including the timeline, estimated costs and fiscal conditions. Inpex had to revise the gas block development plan, causing years of delay, after a government order in 2016 to move the project inland, versus the earlier plan for development offshore. The Japanese oil and gas company, which controls 65 percent of the project, is expected to proceed with their final investment decision for the project. The LNG plant, which will have a capacity of 9.5 mtpa is expected to start operations in 2027. In a heads of

agreement signed in June, Indonesia gave Inpex initial approval for a 27-year contract extension to 2055.

Bangladesh’s Left Democratic Alliance led a protest against the government’s raising of the price of natural gas. Almost all the oppositions, including the country’s largest opposition Bangladesh Nationalist Party, supported the protest. Bangladesh Energy Regulatory Commission raised natural gas prices by 32.8 percent on average for all users effective from 1 July, the first day of the country’s fiscal year. The business community was also protesting against the decision to raise the gas price, a critical input for industry. Bangladesh Garment Manufacturers and Exporters Association said that the gas bill will take up around 1.5 percent of the manufacturing cost after this hike, an almost 1 percent increase in production cost.

LNG: liquefied natural gas, mt: million tonnes, mn: million, bn: billion, tn: trillion, mtpa: million tonnes per annum, US: United States, km: kilometre, CNG: compressed natural gas, kg: kilogram, PMUG: Pradhan Mantri Urja Ganga, PNGRB: Petroleum and Natural Gas Regulatory Board, IOC: Indian Oil Corp, HPCL: Hindustan Petroleum Corp Ltd, BPCL: Bharat Petroleum Corp Ltd, KG: Krishna-Godavari, mmBtu: million metric British thermal units, IGL: Indraprastha Gas Ltd, PNG: piped natural gas, scm: standard cubic meter, NCR: national capital region, AGCL: Assam Gas Company Ltd, OIL: Oil India Ltd, GGL: GAIL Gas Ltd, CGD: city gas distribution, GA: geographical area, TWh: terawatt hour, mcm: million cubic meters, bcm: billion cubic meters, EU: European Union, SoCalGas: Southern California Gas Co, mmscfd: million metric standard cubic feet per day, BC: British Columbia, Petrobras: Petroleo Brasileiro SA

NATIONAL: OIL

IOC to invest ₹ 250.8 bn this fiscal

30 July. Indian Oil Corp (IOC) will invest ₹ 250.83 bn this fiscal to meet its capital expenditure, IOC Chairman Sanjiv Singh said. Last fiscal, IOC had incurred a capital expenditure of ₹ 282 bn. IOC which caters to nearly half of India's petroleum consumption has been making significant investments in upstream assets and petrochemicals which are contributing to the company's business in terms of equity oil and profitability. The company will hold its annual general meeting on 28 August in Mumbai. Besides focus on refinery expansion and refinery-petrochemicals integration, IOC is leveraging its research and development expertise to move into horizon technologies like 2G (2nd generation) and 3G (3rd generation) ethanol, bio-fuels, coal gasification, Hydrogen fuel cells, battery technologies etc.

Source: *Livemint*

Petronas, JXTG may buy stake in India's Bina oil refinery

29 July. Malaysia's Petrolia Nasional Bhd (Petronas) and a consortium led by Japan's JXTG Holdings Inc are among the companies interested in buying a stake in India's Bina oil refinery. The Bina plant in central India, capable of processing 156,000 barrels per day (bpd) of crude oil, is operated by Bharat Oman Refineries Ltd (BORL), a 50-50 joint venture between Oman Oil Co and state-run Bharat Petroleum Corp (BPCL). BPCL plans to double the capacity of the refinery in next five years and build a petrochemical complex that would require an investment of about ₹500 bn (\$7.24 bn). Global oil producers are vying to gain entry into India to profit from strong gasoline and petrochemical demand due to the rising disposable income of its 1.3 bn population. India, the world's third-biggest oil importer, plans to raise its refining capacity by 77 percent to about 8.8 mn bpd by 2030 to meet rising fuel demand, Prime Minister Narendra Modi's government had said.

Source: *Reuters*

India's Venezuelan June oil imports highest in seven quarters

27 July. India's oil imports from Venezuela surged to about 475,200 barrels per day (bpd) in June, more than double the previous month and highest in 21 months, data from shipping and industry sources showed. Washington imposed sanctions on Venezuela's state oil company PDVSA in January to put pressure on socialist President Nicolas Maduro. These sanctions have driven away many customers of Venezuelan oil, leaving supplies for some refiners. Private refiners Reliance Industries Ltd (RIL) and Nayara Energy, part owned by Russian oil major Rosneft, are the only Indian buyers of Venezuelan oil. These companies had a term deal to buy oil from PDVSA, which predated the sanctions. Apart from PDVSA, Indian refiners also buy crude from Rosneft that receive oil in return for a reduction in Venezuela's debt. Russia has loaned Venezuela almost \$16 bn since 2006, which is being repaid in oil shipments. RIL, which had signed a 15-year deal with PDVSA in 2012 to purchase up to 400,000 bpd of heavy crude, received about 1 million tonnes (mt) of oil from the Venezuela in June. India's Venezuelan imports surged in June as most of the cargoes were delayed parcels from previous months. India's imports of Venezuelan oil in June were about 54% higher than the year ago, the data showed. In the first half of 2019, India's imports of Venezuelan oil rose 11 percent to about 357,000 bpd, the data showed. Rising imports from Venezuela in January-June 2019 also partly helped to compensate for the loss of Iranian oil. India stopped buying Iranian oil from May because of US (United States) sanctions against Iran. Since November last year, only state refiners in India had made purchases from Iran between November and May, when waivers for buyers of Iranian oil ended. RIL and Nayara halted purchases of oil from Tehran from the fourth quarter of 2018 as payment channels were affected by the US sanctions. India's overall oil imports in June fell about 7.6 percent from a year ago to 4.47 mn bpd as some refinery

units were shut units for maintenance, the shipping and industry data sources showed.

Source: *Reuters*

HPCL's ₹431.2 bn Barmer oil refinery on track: Oil Minister

24 July. There are no roadblocks for Hindustan Petroleum Corp Ltd (HPCL) in setting up the 9 million tonnes (mt) per annum refinery-cum-petrochemical complex at an approved cost of ₹431.29 bn at Pachpadra in Barmer district of Rajasthan, Oil Minister Dharmendra Pradhan said. The mega refinery project is likely to provide direct employment to around 1,500 skilled persons and is expected to generate indirect employment for 30,000 workers during the construction stage.

Source: *The Economic Times*

Maharashtra to cover those left out by Ujjwala gas scheme

24 July. The state cabinet has cleared a new scheme to provide subsidy on LPG (liquefied petroleum gas) connections on the lines of the Prime Minister Ujjwala Yojana (PMUY). The state will release ₹3,846 for every new gas connection to poor families who have been left out of the PMUY ambit. The central scheme covers only a certain number of below poverty line families in the state every year. There are 41 lakh households in the state without a gas connection, and most of them are likely to be covered under the PMUY this year. The rest will be helped by the state's scheme, which aims to create a "smoke-free" state. The state scheme will be first implemented in the 14 districts where farmer suicides have been the highest, said officials of the Food and Civil Supplies department. An official said an allocation of ₹1 bn has been made to implement the scheme. The LPG connection will be provided in the name of the woman in the family as they are the most affected. Nearly 42 lakh PMUY gas connections have been given in the state till March this year, and officials claimed nearly 80 percent have ordered a refill. The scheme has shown one negative: the refill rate is low because of the steep cost of the refill.

Source: *The Economic Times*

NATIONAL: GAS

IOC, Adani to invest ₹ 96 bn in gas projects in 10 cities

29 July. Indian Oil Corp (IOC) and its partner Adani Gas Ltd will invest about ₹96 bn in rolling out infrastructure for retailing CNG to automobiles and piped natural gas to household kitchens in 10 cities for which they recently won licences for. The two firms in 2013 had incorporated a 50:50 joint venture company, IndianOil-Adani Gas Pvt Ltd, for implementation of city gas distribution (CGD) projects in various cities in the country.

Source: *Business Standard*

Vedanta's Cairn Oil and Gas to ramp up oil, gas production to 260-270 kboepd by FY20

29 July. Mining giant Vedanta's upstream arm, Cairn Oil and Gas, expects to ramp up its crude oil and natural gas production to an average of 260-270 thousand barrels of oil equivalent per day (boepd) by the end of financial year 2019-20 (FY20) from its current production of 180 kboepd, the company said. The company has increased its production guidance for FY20, as compared to its earlier projection of 200-220 kboepd. The company said that 70 percent of the increase in oil and gas production is expected to come from Rajasthan assets alone.

Source: *The Economic Times*

Torrent Group plans ₹30 bn investment for gas pipeline network in UP

28 July. The Torrent Group said it is planning to invest ₹30 bn for laying a gas pipeline network in Uttar Pradesh (UP). Torrent Group Chairman Sudhir Mehta said that there is also a plan to set up 200 CNG (compressed natural gas) stations in the state. These investments will bring environment friendly natural gas to UP, he said.

Source: *Business Standard*

India's natural gas production declines 2 percent in June 2019

24 July. India's domestic natural gas production declined 2 percent to 2,636 million metric standard cubic meter (mmscm) in June 2019, according to oil ministry's fresh

data. The country had produced 2,678 mmscm of natural gas in the corresponding month a year ago. Cumulatively, the country's domestic natural gas production in the first three months (April-June) of the current financial year 2019-20 was almost flat at 8,031 mmscm, as compared to 8,069 mmscm produced in the corresponding period a year ago. Oil and Natural Gas Corp (ONGC), the country's largest producer of oil and gas' natural gas production in June 2019 increased 3 percent to 2,008 mmscm, as compared to 1,953 mmscm reported in the corresponding month a year ago. Oil India Ltd (OIL), the country's second government-owned oil and gas explorer's natural gas production in June this year increased marginally by 2 percent to 225 mmscm, as compared to 221 mmscm produced in the corresponding month a year ago. Natural gas production by private operators, joint ventures and from fields under production sharing contracts (PSC) declined 20 percent to 404 mmscm in June 2019, as compared to 505 mmscm produced in the corresponding month a year ago. The natural gas production from private operators and joint ventures (JVs) declined 18 percent to 1,223 mmscm in the first three months of the current financial year, as compared to 1,493 mmscm produced in the corresponding period a year ago. According to the oil ministry, the decline can primarily be attributed to shutdown of Reliance Industries' MA field and closure of two wells in D1D3 field. Delay in production from ONGC's DDW D-5 field, and decline in production from fields operated by Focus Energy decreased production from Essar's Raniganj East CBM (coal-bed methane) block.

Source: *The Economic Times*

NATIONAL: COAL

Odisha CM announces ₹5 lakh each for kin of Talcher coal mine mishap victims

27 July. Odisha Chief Minister (CM) Naveen Patnaik announced an ex-gratia of ₹5 lakh each for the next of the kin of the two persons who were killed in the Talcher coal mine accident. The accident at the coal mine, operated by Mahanadi Coalfield Ltd (MCL), occurred following to a landslide. Bodies of two workers have been

retrieved and two other workers are feared dead. Nine injured workers were shifted to hospital after a rescue operation was launched by the MCL's security staff, police and fire services personnel.

Source: *The Economic Times*

CIL clears over 44 percent rake backlog to non-power sector consumers

25 July. After supplying enough coal to the state-owned power plants in the country, Coal India Ltd (CIL), in the last three and a half months, accelerated rake loading to the non-power sector consumers, thereby reducing its backlog to this sector by more than 44 percent. Out of a total dispatch of 33.7 million tonnes (mt) of coal to the non-power sector during April to late July, around 8.75 mt backlog volume was cleared. The total backlog volume to non-power sector is estimated at around 19.38 mt. Out of a backlog of 5,100 rakes, which were committed to the non-power sector, the miner was able to clear 2,300 rakes during the first quarter of the current fiscal year. During mid 2016-17, when CIL was ramping up production to meet its target, the demand for coal from the state-owned power sector declined due to enough supplies. Faced with this situation, CIL booked rakes for the non-power sector for speedy delivery and for boosting sales in this sector. As a result of impacted movement of rakes to non-power sector, the backlog kept piling up for the bookings already made for this sector. To cater to the demands of non-power sector, CIL at the time offered increased dispatches by road. According to Union Coal Minister Pralhad Joshi, the highest priority accorded by the Indian Railways is towards transportation of coal, especially for the power plants.

Source: *Business Standard*

Delhi court discharges former MoS in coal block case

24 July. A Delhi court discharged former MoS (Minister of State) Coal Santosh Bagrodia and one more accused in Bander coal block case. The case pertains to alleged corruption in the allocation of Bander coal block in Maharashtra to AMR Iron and Steel Company Ltd.

Source: *The Economic Times*

NATIONAL: POWER

UP to invest ₹200 bn in improving power transmission infra

29 July. The Uttar Pradesh (UP) government plans to invest ₹200 bn in five years for improving power transmission, seeking to provide uninterrupted electricity to industries as it aims to become a \$1 tn economy. It's estimated that the peak hour energy demand in the state will increase by more than 35 percent from 22,000 MW at present to nearly 30,000 MW by 2024. In 2016, the peak hour power demand was only 16,500 MW. The policy of electrifying all households in the urban and rural areas, coupled with incremental demand is pushing up the power consumption in the state. According to UP Energy Minister Shrikant Sharma, the government had already increased power transmission capacity 60 percent from 15,000 megavolt-ampere (MVA) in 2017 to the current level of 24,000 MVA. He said power was the backbone of industry and UP was committed to providing 24 hour power supply to industrial areas. The state is working on two-pronged strategy of increasing power generation and cutting generation cost. The plant load factor of state run power generation units have jumped 13.8 percent to 78.83 percent over the last 2 years, he said. He announced by 2021, prepaid and smart electricity meters would be installed at premises of all rural and urban power consumers respectively. Over the past 2 years, nearly 11 mn households in UP were provided with power supply under the central Saubhagya scheme, while more than 1,78,000 hamlets were electrified.

Source: *Business Standard*

Power discoms' dues to generation companies stand at ₹210 bn monthly

29 July. The dues to be paid by power distribution companies (discoms) in India to generators stand at a monthly average of ₹210 bn and large firms including

QUICK COMMENT

Power discom dues to generation companies points to gaps in electricity access policies!

Bad!

GMR Energy and CLP India top the list of developers facing the highest level of financial stress as a result of these mammoth receivables, according to the latest analysis by CRISIL. The analysis is based on data on 18 generators -- 6 central and 12 private -- with a total conventional capacity of 115 GW tied up with state discoms across the country. NTPC Ltd, which has 54 GW of operational power-generation capacity, has the largest share in overdue from discoms. Among private gencos, Adani Power, which operates 10 GW of generation assets and supplies power to different states, has ₹32 bn overdue. The monthly average discom overdue as a share of the annual revenue of gencos stands at 212 percent for GMR Energy, 87 percent for CLP India and 75 percent for JPVL. A parallel analysis of the discom-wise share in overall overdue reveals Uttar Pradesh tops the chart accounting for 22 percent of the total dues to generating companies, followed by Tamil Nadu (15 percent), Karnataka (15 percent) and Telangana (9 percent). In order to address the issue of dues, the power ministry has directed all the discoms to open and maintain sufficient letters of credit (LC) as a payment-security mechanism under power purchase agreements (PPAs) signed with generation companies. The order, dated 28 June 2019, is to be implemented from August. The implementation of the order will benefit generators, as the power supplied to discoms is conditional upon the opening of an LC for an amount adequate to cover the entire quantum of power to be supplied. Once an LC is opened, it will be communicated to the load despatch centre, enabling generators to recover any overdue amount by invoking the LC when a discom does not pay on time. Delaying payments to generators has helped discoms manage their working-capital cycles, meet short-term obligations and avoid costly working-capital loans. This extra working-capital cushion, leveraged extensively by discoms, will not be available now, compelling discoms to raise additional funds either through internal accrual or state-government support in the form of grants or bank borrowings to finance operations. Alternatively, discoms will be forced to undertake load-shedding when requisite generation is not available. That move, however,

is going to be penalised as the government is likely to announce stringent norms to that effect.

Source: *The Economic Times*

Centre plans national panel to select members of all state electricity commissions

27 July. The government is planning a national-level selection committee for appointing chairpersons and members in all state electricity regulatory commissions to set the bodies free from political intervention, helping them take correct decisions, Power and Renewable Energy Minister R K Singh said. The selection committee will not have representation from the state for which electricity regulators or members are being appointed, he said. Industry experts have over the years questioned the said independence of power regulatory commissions for not allowing tariff hikes and not taking action against discoms (distribution companies) for not filing timely petitions. Regulators have also been creating regulatory assets (deferred tariff hikes) in favour of distribution companies, which are piling up. The ministry of power has recently written to the Appellate Tribunal for Electricity to exercise powers to address the situation at state regulators level. At the same time, the commissions impose unfair charges on industrial consumers to refrain them from purchasing power from sources other than distribution companies.

Source: *The Economic Times*

Tata Power Delhi first in India to use drones for network maintenance

25 July. Power discom (distribution company) of the national capital, Tata Power Delhi Distribution Ltd (TPDDL), has become the first power utility in the country to deploy micro drones for the maintenance of its network. Small-sized drones, weighing less than 2 kilogram (kg), with a flying capacity of below 200 feet are being used by the discom to patrol 66 and 33 KV

transmission lines in north and north west Delhi areas. The drones are equipped with integrated thermal vision camera to render infrared radiations, LIDAR (Light Detection and Ranging) capability to measure distances with the use of laser lights, and high resolution camera for electrical asset inspection. The monitoring and mapping of the drones is manoeuvred through their GPS-enabled autopilot system by a ground control station. TPDDL CEO (Chief Executive Officer) Sanjay Banga said drone usage will have wide application in the years to come and reinforce TPDDL's credentials as a "future ready utility". The discom is regularly using the drones for maintenance purposes after a successful pilot run last year, TPDDL said. The drones are being used for maintenance of the discom's power lines, poles and towers. Permission to use such drones has been taken from the Ministry of Home Affairs and police authorities. Besides, they are being used to determine if anyone is encroaching on the power lines along with thermal inspection at grids, TPDDL said.

Source: *The Economic Times*

UP government to send electricity bills to consumers only after verification

24 July. The Uttar Pradesh (UP) government said it will implement a mechanism whereby electricity bills of ₹20,000 or more will be sent to consumers having a power connection of 2 kilowatt or less only after verification. This will give relief to consumers, who wrongly get a heavy pending electricity bill, UP Power Minister Shrikant Sharma said. He said consumers can dial 1912 helpline number and register their grievances pertaining to their electricity bills. He said that the government has fixed a target of changing 27,000 kilometre (km) damaged electricity wires in the state. He said the government will also make an effort to prepare the electricity bill in Hindi.

Source: *Business Standard*

NATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

Only 2,681 of 23 lakh buildings have solar panels in Coimbatore circle

29 July. Of the 23 lakh buildings in Coimbatore circle, only 2,681 buildings have set up solar panels in the last five years. The buildings include houses, commercial buildings and educational institutions. About 4–5 units of power could be generated from a solar panel with a capacity of 1 kilowatt hour (kWh) on a sunny day. A panel with a capacity of 1 kWh costs around ₹50,000 to ₹60,000.

Source: *The Economic Times*

BPCL to produce 100 kl ethanol using paddy straw near Bhandara

29 July. Bharat Petroleum Corp Ltd (BPCL) will produce 100 kilolitres (kl) second generation bio-ethanol per day using paddy straw near Bhandara. The project will be a role model for the entire state, as BPCL will get ethanol to blend in petrol, while burning of paddy straw will stop, and farmers will get alternate revenue source. Guardian Minister of Bhandara and Gondia Parinay Fuke said the plant will run on solar power and would be the first-of-its-kind in the entire state. Fuke said that construction of biogas plant will be done after completion of ethanol plant. Fuke said the best available technology will be selected through global tender.

Source: *The Economic Times*

India's renewable energy cost lowest in Asia Pacific: WoodMac

29 July. India's renewable energy cost is the lowest in the Asia Pacific, consultancy Wood Mackenzie (WoodMac) said. India's levelised cost of electricity (LCOE) using solar photovoltaic (PV) has fallen to \$38 per megawatt hour (MWh) this year, 14 percent cheaper than coal-fired power that has traditionally been the cheapest source of power generation, WoodMac said. India wants to have 175 GW of renewable-based installed power capacity by 2022.

Source: *Reuters*

Government committed to combat climate change at highest level: Environment ministry

28 July. The government is committed towards combating climate change at the highest level through its several programmes and schemes, the environment ministry said. Minister of State (MoS) for Environment Babul Supriyo said several schemes have been initiated by the government to fight the global issue, including the National Action Plan on Climate Change (NAPCC). The NAPCC provides an overarching framework for all climate actions, he said. India is likely to participate in the upcoming United Nations Climate Action Summit in New York to be held in September this year.

Source: *The Economic Times*

UP government allows farm land lease for solar power plant, agricultural industry

28 July. In a major push to boost investment and production as well as setting up of solar power projects in the state ahead of the ground breaking ceremony, the UP (Uttar Pradesh) government has made it possible to lease out agricultural land, so far prohibited, for agricultural purpose or for setting up solar plants. The new law permits lease of agricultural land for agricultural purposes for up to 15 years and for a solar project for up to 30 years. The change in rules will be highly beneficial for Bundelkhand where acres of land has been lying fallow as leasing was not permitted.

Source: *The Economic Times*

Maharashtra government mulls framing policy to set up solar projects

26 July. The Maharashtra government is contemplating to prepare a policy wherein vacant plots and agriculture land will be taken on lease to set up solar energy projects. The Energy Department said that many people have evinced interest in leasing out their land for a period of 30 years to set up solar projects. The land can be leased on rent at 8 percent as per the ready reckoner rates.

Source: *Business Standard*

**'50k solar pumps to be given to farmers and
'gaushalas' in Haryana'**

26 July. Fifty thousand solar pumps will be given to farmers and 'gaushalas' in Haryana with the assistance of NABARD, Minister of State for New and Renewable Energy Banwari Lal said. About ₹16.96 bn will be spent on this special scheme, he said. He said that about 238 MW of green energy will be generated in the state with the installation of these solar pumps.

Source: *Business Standard*

**NCLT approves NHPC's ₹9 bn bid for 500 MW
Lanco Teesta Hydro Power project**

26 July. The National Company Law Tribunal (NCLT) approved hydro giant NHPC's ₹9.07 bn bid for the debt-ridden Lanco Teesta Hydro Power Ltd. The Hyderabad bench of the NCLT approved the recommendations of the Committee of Creditors (CoC) of Lanco Teesta Hydro Power, which had in its meeting in December last year voted in the bid's favour. As per the resolution plan, NHPC would pay ₹8.77 bn to the financial creditors and ₹111.2 mn would go to the operational creditors of Lanco Teesta Hydro Power.

Source: *Business Standard*

**Uttarakhand CM allocates solar energy projects to
local entrepreneurs**

26 July. Uttarakhand Chief Minister (CM) Trivendra Singh Rawat allocated solar energy projects worth ₹6 bn to local entrepreneurs. Together, these projects will generate 148.85 MW power. He said another lot of solar power projects worth ₹2 bn will also be distributed soon among local entrepreneurs. Each entrepreneur will earn on an average ₹66.50 lakh per annum from these environment friendly projects, he said.

Source: *Business Standard*

**Waaree Energies launches financing facility for
solar power projects**

26 July. India's largest solar photovoltaic (PV) module manufacturer and Engineering, Procurement and

Construction (EPC) player Waaree Energies announced it has launched a financial lending facility for solar power developers. The financing solution focusses on the residential and the small-scale industries segment and will cover up to 70 percent of the total project cost repayable through EMIs. The company has partnered with Metafin Cleantech, a Non Banking Financial Company active in renewable energy and clean tech space, for providing this facility.

Source: *The Economic Times*

**Andhra Pradesh government asks all wind power
developers to stop power production**

25 July. The Andhra Pradesh (AP) government in a shocking move has asked all wind power developers to stop power production. The state government notified all

QUICK COMMENT
*Suspension of wind production contracts goes against
commercial norms!*
Ugly!

power units that they are curtailing wind power procurement by 100 percent. The move comes the same day when the Andhra Pradesh High Court stayed the proceedings for revising the rates of renewable power and cancelling agreements signed by last government.

Source: *Business Standard*

**Adani Green Energy plans to add 800 MW of
renewable energy projects**

25 July. Adani Green Energy Ltd (AGEL) plans to add over 800 MW of renewable energy projects in the current financial year and 3300 MW in two more years, the company said. Adani Group company has a current project portfolio of 4,560 MW including 46 operational projects and 18 projects under construction.

Source: *The Economic Times*

**Avaada Energy to set-up 2 GW open access solar
power plants in 5 states**

24 July. Avaada Energy is in the process of implementing 2 GW of open access solar plants in Maharashtra, Tamil

Nadu, Haryana, Karnataka, and Odisha. According to the company, the plants were being built for corporates who are looking to optimise their operating costs and meet their energy needs through solar, rooftop and hybrid energy solutions. The company claims to have commissioned over 1.8 GW of renewable energy plants and has a portfolio of over 500 MW of open access solar plants in commercial category. Avaada Energy plans to develop 5 GW of renewable energy portfolio in Asia and Africa by 2022.

Source: *The Economic Times*

Solar power will soon become a peak-load source of energy: UPERC Chairman

24 July. The viability of storing solar power using batteries and using the same power during peak times is increasing due to declining battery prices, Uttar Pradesh

QUICK COMMENT
Stored solar for peaking power generation may be a viable option!
Good!

Electricity Regulatory Commission (UPERC) Chairman Raj Pratap Singh said. He explained that the solar batteries would be large storage units, with inverters, etc. With the advent of technology and the improving viability for battery storage, solar energy can become a broad-based load-bearing source of energy, he said. Earlier, CII launched eco-labelling standard 'GreenPro' for rooftop solar PV modules.

Source: *The Hindu Business Line*

NTPC, BHEL ink pact for environment friendly power plant in Chhattisgarh

24 July. NTPC Ltd said it has signed a pact with BHEL (Bharat Heavy Electricals Ltd) to set up an 800 MW technology demonstration plant (TDP) at its power plant in Chhattisgarh. The TDP will be set up through a joint venture (JV) company, NTPC said. The demonstration plant shall be based on the advanced ultra super critical (AUSC) technology which marks a significant improvement in operational parameters over contemporary super-critical technology, NTPC said.

NTPC said the plant shall be the most efficient power plant in the world, once it becomes operational, resulting in reduction of carbon dioxide emission by about 20 percent as compared to the conventional sub-critical technology.

Source: *Business Standard*

Government amends bidding guidelines for wind power projects

24 July. In a bid to fast-track wind energy projects, the Centre has made certain amendments to the bidding guidelines for such projects. The amendments have been made based on the experience of bidding and consultation with various stakeholders, the Ministry of New and Renewable Energy (MNRE) said. The development assumes significance as the government has set an ambitious target of having 175 GW of clean energy capacity by 2022, including 100 GW solar and 60 GW of wind energy. As per the MNRE, now the timeline for land acquisition for wind power projects has been extended from seven months to scheduled commissioning date i.e. 18 months. While Power and New and Renewable Minister R K Singh is positive on achieving 175 GW renewable energy target, several recent reports have cautioned that India is unlikely to meet the capacity targets for wind and solar power.

Source: *Business Standard*

Gujarat tops India in rooftop solar power generation capacity

24 July. Gujarat has emerged as the state with the most rooftop solar panels installed. According to data tabled in Rajya Sabha, Gujarat has an installed rooftop solar power capacity of 261.97 MW, against 1,700.54 MW for all of India. Gujarat is followed by Maharashtra (198.52 MW) and Tamil Nadu (151.62 MW) in terms of installed rooftop capacity. According to the data, out of the 261.97 MW installed, 183.51 MW is subsidized. As part of the grid-connected rooftop solar programme, the Union government provided financial assistance and incentives worth ₹6.78 bn in financial year 2016-17 and ₹4.46 bn in 2018-19. The Union government aims to install rooftop solar capacity of 40,000 MW by 2022.

Source: *The Economic Times*

INTERNATIONAL: OIL

BP has no plans to take its tankers through Hormuz

30 July. BP has not taken any of its oil tankers through the Strait of Hormuz since a 10 July attempt by Iran to seize one of its vessels, Chief Financial Officer (CFO) Brian Gilvary said. The oil and gas company has no current plans to take any of its own vessels through the strait, Gilvary said. BP is shipping oil out of the region using chartered tankers. Tensions spiked between Iran and Britain this month when Iranian commandos seized a British-flagged tanker in the Strait of Hormuz, the world's most important waterway for oil shipments.

Source: Reuters

Alberta government eases oil production curtailments for September

27 July. The government of Canada's main crude-producing province Alberta eased oil production curtailments for September, setting the new limit at 3.76 mn barrels per day (bpd). That is a 25,000 bpd increase on the August production limit. Alberta introduced curtailments effective 1 January 2019 to ease congestion on export pipelines that left crude stranded in storage tanks and pushed the discount on Canadian crude versus US (United States) barrels to record levels. Canada exported 285,000 bpd of crude by rail in May, according to the latest data from the National Energy Board regulator, up 23 percent from April. However, there are ongoing delays to new export pipeline projects, including Enbridge Inc's Line 3 replacement.

Source: Reuters

Russia's 2019 oil output will be in line with commitments under global deal: Energy Minister

26 July. Russian oil production is expected to total 556-557 million tonnes (mt) this year, or 11.17-11.19 mn barrels per day (bpd), Energy Minister Alexander Novak said. That would be in line with Moscow's commitments under a global deal between oil producers to cut output. Under the global deal, Russia committed to cut output by 228,000 bpd from the 11.41 mn bpd pumped in October 2018. Novak said that Moscow is committed to keeping

its monthly average oil production in line with the global agreement, but the level may fluctuate in the course of a month due to various factors. OPEC (Organization of the Petroleum Exporting Countries) and non-OPEC nations, led by Saudi Arabia and Russia, agreed to extend the current oil production cut deal to until March 2020, seeking to prop up the price of crude as the global economy weakens and US (United States) production soars. Novak said the global oil market was fairly balanced and volatility was not high.

Source: Reuters

China exports gasoline to Mexico, Nigeria amid overflowing output

25 July. China will ramp up gasoline exports in July and August to near record levels with cargoes moving to Mexico and Nigeria as refiners seek outlets for their fuel amid a wave of new production and slowing domestic demand. The surge in Chinese shipments will fill a supply gap caused by refinery outages in the United States (US) and the Middle East but are likely to accelerate a plunge in Asian gasoline margins, which have dropped 50 percent since 12 July, when they clawed back to a three-month high. China's refineries, led by PetroChina Co, the country's second-largest, will export about 1.5 million tonnes (mt) of gasoline a month in July and August. That is up from June exports of 1 mt and near the record of 1.69 mt exported in March, according to Chinese customs data.

Source: Reuters

Saudi Arabia aims to expand pipeline to reduce oil exports via Gulf

25 July. Saudi Arabia aims to raise the capacity of its east-west pipeline by 40 percent in two years so more of its oil exports can avoid passing through the Strait of Hormuz, Energy Minister Khalid al-Falih said. Falih said that importers should, as a first immediate step, secure shipments through the strategic waterway at the mouth of Gulf, after attacks on oil tankers in the area and the seizure of a British-flagged ship by Iran. Falih said the

international community should take swift action to protect oil supplies and secure the Strait, through which about a fifth of the world's oil passes.

Source: Reuters

Global oil market in glut, but not a big enough one for OPEC

24 July. OPEC (Organization of the Petroleum Exporting Countries) has shifted the goalposts for assessing an overhang in oil inventories, giving the group more room to prolong production cuts, while analysts warn the move will offer a distorted view of market conditions. In OPEC's view, eliminating the glut in inventories would achieve a balanced oil market. Saudi Energy Minister Khalid al-Falih said OPEC was using the period 2010-2014 as one metric to assess the success of its oil cuts. Including this new metric would be a shift away from the more recent five-year average of 2014-2018, which the International Energy Agency (IEA), and OPEC itself, had used to gauge market conditions. He said the next meeting of the OPEC+ ministerial monitoring committee in September would look at stocks in terms of cover for future demand, and how much of those stocks was in pipelines and tank heels - referring to oil residue below a tank's suction pump.

Source: Reuters

Nigeria eyes partnership with Indonesia on crude exports

24 July. Nigeria's state oil firm Nigerian National Petroleum Corp (NNPC) plans to renew its contract for crude sales with Indonesia which expired last year, part of moves to boost exports, it said. NNPC said it was interested in working with Indonesia's national oil company Pertamina to improve its volume of crude exports, NNPC's new group managing director Mele Kyari said. NNPC said that the partnership with Pertamina could open up opportunities for Nigeria's crude oil in the face of unpredictable global markets. It said Indonesia imported crude oil worth \$2.5 bn from Nigeria last year.

Source: Reuters

China issues third batch of 2019 oil product exports quotas

24 July. China issued its third batch of export quotas for refined oil products for 2019 totalling 6 million tonnes (mt), traders said. The quotas were granted to four state-owned companies, with Sinopec receiving 2.78 mt, PetroChina Co at 2.02 mt, Sinochem Group at 600,000 tonnes and CNOOC Group at 600,000 tonnes. The new batch raises the total export quotas for refined oil products to 48.2 mt in 2019.

Source: Reuters

INTERNATIONAL: GAS

Leviathan partners considering LNG facility offshore Israel

30 July. The partners in the Leviathan field off Israel's Mediterranean coast are considering building a floating liquefied natural gas (FLNG) facility to enable LNG exports, Delek Drilling said. The partners, which include Delek and Noble Energy, signed agreements with Golar LNG Ltd and Exmar NV to receive plans for a FLNG facility. The facility will allow liquefaction of natural gas at a capacity of 2.4-5 million tonnes (mt) per year. According to the plan being examined, processed natural gas will be piped from the Leviathan production platform to the FLNG facility which will be located offshore Israel, where the gas will be liquefied and transferred to LNG vessels. Leviathan, with 22 trillion cubic feet of reserves, is one of the world's largest gas discoveries of the past decade.

Source: Reuters

Singapore to stop 'Sling' LNG indices, sheds hopes of main price hub

30 July. Singapore Exchange will stop producing and publishing its spot price indices - Sling - for liquefied natural gas (LNG), less than four years after their launch, dashing the city-state's hopes of becoming Asia's main pricing hub for the fuel. Sling - short for SGX LNG Index Group - indices will be published until 31 October this year, provided "there is sufficient data for an accurate and robust index to be published", Energy Market

Company (EMC) said. Sling comprise three indices - Singapore Sling, North Asia Sling and Dubai/Kuwait/India Sling. The Sling spot index is the average of expert assessments contributed by a portfolio of market participants including producers, consumers and traders who are active in the physical LNG market, according to EMC.

Source: Reuters

China's ENN wins LNG trailer transport permit for Zhoushan bridge

29 July. Chinese privately owned gas distributor and terminal operator ENN Group said it has won a permit to transport liquefied natural gas (LNG) carried by trucks over a large bridge in eastern China to reach more customers in the region. ENN is the owner of China's first major independent LNG terminal. The \$848 mn import facility located on Zhoushan Island in eastern China's Zhejiang province is currently under utilized as a pipeline linking the terminal to customers has not been built even though it started operations 10 months ago. The Zhoushan terminal has an annual receiving capacity of 3 million tonnes (mt) of LNG, with facilities including three berths, two storage tanks each capable of 160,000 cubic meters and 14 loading points for trailers.

Source: Reuters

Argentina's June gas production hits highest level in 11 yrs

27 July. Argentina's gas production rose to 140 mn cubic meters a day in June, the highest level in 11 years, the government said. That amount represented growth of 5.8 percent compared with the same period last year. Argentina's treasury ministry credited the growth to an increase in production at the Vaca Muerta shale play, which is about the size of Belgium and could house one of the biggest reserves of shale gas and oil in the world. The government said the growth in production enabled it to boost exports, including sending between 4.33 mn cubic meters and 6.3 mn cubic meters of gas daily to Chile in June.

Source: Reuters

US approves commercial service for Sempra Louisiana Cameron LNG export plant

26 July. US (United States) energy regulators approved Sempra Energy's request to commence commercial service of the first liquefaction train at its \$10 bn Cameron liquefied natural gas export (LNG) terminal in Louisiana. The plant exported its first cargo in May, making it the fourth big LNG export terminal operating in the US. In total, the facility has exported four cargoes, according to data firm Refinitiv. Natural gas use is growing fast around the world as countries wean their industrial and power sectors off coal as they seek cleaner forms of energy. Gas emits about half the carbon dioxide of coal when burned. There are three liquefaction trains at Cameron. The first started producing LNG in mid May. Sempra has said it expects Cameron 2 and 3 will enter service in the first and second quarters of 2020. Cameron is designed to produce about 12 million tonnes per annum (mtpa) of LNG, or roughly 1.7 billion cubic feet per day (bcfd) of natural gas. One billion cubic feet of gas is enough to fuel about 5 mn US homes for a day.

Source: Reuters

Papua New Guinea could renegotiate Total deal: Petroleum Minister

25 July. Papua New Guinea's Petroleum Minister Kerenga Kua said a gas deal it agreed with French oil major Total SA could be re-drawn if a government review finds its terms unfavorable. The deal, for a project called Papua LNG, was agreed in April but put up for review after the Prime Minister who signed it was ousted in a parliamentary vote in May, following a crisis caused by discontent over the distribution of resource riches. The Papua LNG (liquefied natural gas) project, a joint venture between Total, Exxon Mobil Corp and Australia's Oil Search Ltd, is part of a \$13 bn project set to double the country's exports of LNG. Total's Chief Executive Officer (CEO) Patrick Pouyanne in response, urged Papua New Guinea's government to respect the gas agreement.

Source: Reuters

INTERNATIONAL: COAL

Bidding process set for bankrupt US coal operator Blackjewel

27 July. A federal judge approved a bidding process for mines owned by bankrupt coal operator Blackjewel LLC. US (United States) Bankruptcy Judge Frank Volk in Charleston agreed with a motion by Blackjewel on a proposal made by Bristol, Tennessee-based Contura Energy. Contura has offered \$20.6 mn as the stalking horse bidder for three mines owned by Milton-based Blackjewel. In Wyoming, Blackjewel holds the license to mine coal in Wyoming while Contura, a company created out of the 2015 bankruptcy of Alpha Natural Resources, holds the state mine permits.

Source: *The Economic Times*

Australia's Suncorp to phase out exposure to thermal coal by 2025

26 July. Australian insurer Suncorp Group Ltd said it was no longer underwriting insurance for new thermal coal mines or power plants and it will phase out all exposure by 2025 as part of its responsible investment policy. Insurers globally have been reducing their business around coal. Insurer Chubb and Zurich Insurance Group have both in the past month revised their policies to limit their thermal coal exposure.

Source: *Reuters*

China coking coal futures edge higher on upbeat demand outlook

25 July. Coking coal futures in China edged higher in early trade on expectations that spot prices of the steelmaking raw material will remain strong, supported by brisk demand as the world's largest steel producer ramps up output. The most-active September coking coal contract on the Dalian Commodity Exchange rose as much as 0.6 percent to 1,410 yuan (\$205.23) a tonne. Coke, the processed form of coking coal, climbed as much as 0.9 percent to 2,144 yuan a tonne. Prices of spot and imported coking coal in China have weakened over the past month by around 6-7 percent due to rising inventory and robust imports of the material, Helen Lau,

metals and mining analyst at Argonaut Securities in Hong Kong, said. Coking coal inventory across ports in China stood at 5.73 million tonnes (mt), as of 19 July, up 36 percent from a year ago and 107 percent this year, Lau said. However, prices had stabilised, helped by a switch to lower-priced coking coal to improve steel margins, Lau said.

Source: *Reuters*

INTERNATIONAL: POWER

Brazil's EMAE seeks partners for \$1.7 bn power project: CEO

29 July. Brazilian energy company Empresa Metropolitana de Águas e Energia (EMAE) is seeking partners for a \$1.7 bn thermoelectric power project due to be tendered in an upcoming government auction, its CEO (Chief Executive Officer) Ronaldo Souza Camargo said. The company, owned by the state of Sao Paulo, is in talks with potential investors for the 1.7 GW capacity natural gas project, and the so-called Piratininga Thermal Block I project has already obtained environmental permits from state licensing agencies, Camargo said.

Source: *Reuters*

Nigeria signs deal to improve power transmission

28 July. The Federal government of Nigeria has signed an implementation agreement for the Nigeria Electrification Roadmap (NER), a partnership between governments of Nigeria and Germany and Siemens AG, to upgrade Nigeria's power transmission and distribution infrastructure. The agreement which was signed between Nigeria's President Muhammadu Buhari and Siemens's Global Chief Executive Officer (CEO), Joe Kaeser, states that Siemens, Transmission Company of Nigeria and the regulator will work hand in hand to achieve 7,000 MW and 11,000 MW of reliable power supply by 2021 and 2023 in the first and second phases of the deal, respectively. By 2025 when the contract will lapse, a total of 25,000 MW is expected to have been met.

Source: *Construction Review*

INTERNATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

Portugal's solar energy auction breaks world record

30 July. Portugal's huge auction of solar energy broke a world record, with one of the 24 licences on offer selling for €14.76 per megawatt hour (MWh), the secretary of state for energy Joao Galamba said. Of the entities initially competing for the 1,150 MW auction, there were 13 winners, Galamba said. Spain's Iberdrola won seven of the 24 licences available and France's Akwo won 370 MW. Based on the locations where solar plants will be installed, auctions were held where the winners would be those offering the highest discounts to the bidding tariff of €45 MWh.

Source: Reuters

Iran's renewable power generation capacity reaches 760 MW

28 July. The capacity of Iran's renewable power plants has reached 760 MW, Iranian Energy Ministry's news portal (known as PAVEN) reported. As reported, a total of 115 renewable power plants were active across Iran as of July 2019 and the construction is ongoing for another 32 plants to supply an extra 380 MW of renewables to the national power grid. According to PAVEN, currently renewable power plants have created 43,450 job opportunities across the country and the volume of private investment in this sector has exceeded 124 tn rials (over \$2.95 bn). It said the bulk of electricity generation from renewables, around 85 percent, came from solar and wind plants, adding that biomass accounted for only once percent of the total output. Renewables, including hydropower, account for just six percent of the country's total energy generation, versus natural gas' 90 percent share. Overall, in the next five years, Iran is aiming for a 5,000 MW increase in renewable capacity to meet growing domestic demand and expand its presence in the regional electricity market. According to Iran's Renewable Energy and Energy Efficiency Organization (known as SATBA), the number of small scale solar power plants across the country which are used by households or small industries is being increased

noticeably as Iranian households and small industries have embraced the new technology with open arms and investors also seem eager for more contribution in this area. Currently over 100 large-scale renewable power plants are operating across Iran.

Source: Tehran Times

European Investment Bank proposes end to fossil fuel lending

26 July. The European Investment Bank (EIB) wants to stop funding new fossil fuel-reliant projects by the end of 2020, a draft of the EU (European Union) lending arm's new energy strategy showed. The EIB board, which is made up mostly of EU finance ministers, is expected to discuss the proposals at a meeting in September, though a final decision could take longer. Resistance could potentially come from coal-reliant eastern EU members or countries such as Italy where the EIB is helping fund the Trans-Adriatic Pipeline for gas. Incoming President the European Commission, Ursula Gertrud von der Leyen, has called for the EIB to spend half of the roughly €70-80 bn a year it invests on green projects, suggesting turning parts of it into a "climate bank". The EIB estimates that under 5 percent of its lending currently goes on fossil fuel projects.

Source: Reuters

Miner Anglo American to use only renewable energy in Chile by 2021

25 July. Anglo American Plc said it would use only renewable sources to power its mine operations in Chile beginning in 2021, thanks to a deal the global miner signed with the Chilean subsidiary of Italian energy giant Enel. Renewable energy supplied by Enel Chile will power Anglo American's flagship Los Bronces copper mine, as well as its El Soldado and Chagres operations, the company said. Global miners are increasingly seeking innovations to boost efficiencies, lower costs and reduce use of water and non-renewable energy at mines.

Source: Reuters

Philippines readies new renewable energy policies to curb coal dependence

25 July. The Philippines' Department of Energy (DOE) vowed to fast-track the implementation of two key renewable energy (RE) policies, following President Rodrigo Duterte's directive to reduce the country's dependence on coal. The Southeast Asian nation aims to double its power generation capacity by 2030 to support a growing economy, but it still relies heavily on coal, the cheapest yet dirty fuel option. Under the first policy, called the Renewable Portfolio Standards, Energy Secretary Alfonso Cusi said power distribution utilities will be mandated to source a minimum portion of energy from renewable sources, thus guaranteeing a market for RE producers.

Source: Reuters

New Jersey's PSEG to shut most fossil power plants by 2046 to cut carbon emissions

25 July. New Jersey energy company Public Service Enterprise Group Inc (PSEG) plans to shut all but three of its fossil fuel-fired power plants in a bid to cut carbon emissions by 80 percent by 2046 from 2005 levels, Chief Executive Officer (CEO) Ralph Izzo said. PSEG said it could reach net-zero carbon emissions in 2050 by shutting all of its fossil-fuel plants, assuming advances in technology and public policy. PSEG has about 11,000 MW of generating capacity. About 60 percent of the power those plants produce comes from nuclear reactors, 30 percent from gas, 8 percent from coal and 2 percent from solar.

Source: Reuters

Global solar installations to reach record high this year: Research

25 July. New solar photovoltaic (PV) installations are set to reach a record high this year, driven by improving markets in Europe and the United States (US) and fast growth in India and Vietnam, consultancy Wood Mackenzie said. Low auction prices are also expected to help boost new solar PV capacity by the end of this year to 114.5 GW, 17.5 percent higher than 2018 and the first time new installations have exceeded 100 GW. Last year,

new capacity dipped slightly, mostly due to a slowdown in the world's largest solar PV market, China, which ended feed-in tariff subsidies for new projects. The rise forecast this year will be driven mainly by Europe - in particular Spain, the US, India, Vietnam, as well as Egypt and the United Arab Emirates. The increase comes despite the slowdown in China, which is giving priority to renewable projects which can operate without subsidies after a rapid fall in manufacturing costs. Up to 2024, however, China, India and the US will account for more than half of total solar PV installations.

Source: Reuters

France to try again with solar road plan

25 July. French local authorities said that a high-profile "solar highway" experiment in Normandy had failed, but vowed to try again with new panels on a shorter stretch of road. From the time the one-kilometre-long (half-mile) road was inaugurated with great fanfare in December 2016 until March this year, the experimental route had produced 229 megawatt hours (MWh) of electricity, far less than an initial forecast of 642 MWh, Alain Pelleray, a senior regional official in the Orne department, Pelleray said. The panels will now be taken up and replaced new-generation ones on a 400 metre (440 yard) stretch, Pelleray said

Source: The Economic Times

EU plans to impose import duties on Indonesia biodiesel

24 July. The European Commission has proposed duties ranging from 8 percent to 18 percent on imports of biodiesel from Indonesia to counter what it says are unfair subsidies, the latest twist in a case that has lasted seven years. The subsidies would be a double blow for Indonesian biodiesel after the European Union (EU) decided in March that palm oil should no longer be considered as green and so should be phased out of renewable transportation fuel. The Commission, which coordinates trade policy for the 28-member EU, launched an anti-subsidy investigation in December following a complaint by the European Biodiesel Board.

Source: Reuters

DATA INSIGHT

State-wise Aggregate Technical & Commercial Losses by Discoms in India

State	AT&C Losses* (in %) for 2018-19
Andhra Pradesh	13.41
Assam	21.14
Bihar	27.39
Chhattisgarh	23.28
Daman & Diu	9.37
Goa	26.03
Gujarat	12.59
Haryana	17.45
Himachal Pradesh	8
Jammu & Kashmir	49.76
Jharkhand	31.95
Karnataka	14.1
Kerala	10.83
Madhya Pradesh	31.9
Maharashtra	16.94
Manipur	22.55
Meghalaya	37.76
Puducherry	16.41
Punjab	12.04
Rajasthan	21.29
Tamil Nadu	14.02
Telangana	11.77
Tripura	15.24
Uttar Pradesh	24.64
Uttarakhand	12.64

*Provisional / unaudited data

Source: Lok Sabha Questions (for Ministry of Power)

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