

DOWNSTREAM INVESTMENTS GATHER MOMENTUM

Monthly Oil News Commentary: July - August 2019

India

India's oil imports from Venezuela surged to about 475,200 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 including 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 m 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 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.

ONGC and its Chinese and Malaysian partners have decided to exit their oil blocks in Sudan, frustrated by the years of reluctance by the Sudanese government to pay for the oil it lifts from these blocks. ONGC has been engaged in an arbitration with Sudan for more than a year to recover its oil dues that have now climbed to \$500 mn. ONGC owns 25 percent stake in a joint venture that operates blocks 2A and 4 in Sudan whose output the local government had been lifting but not paying for since 2011. Sudan had denied ONGC and partners an extension of license to operate block 2B after the initial contract expired in November 2016.

Delays in bidding rounds notwithstanding, the government has increased the EoI submission cycle for O&G acreage to three times a year from two times earlier, the DGH said. India had in July 2017, allowed companies to carve out blocks of their choice with a view to bring about 2.8 mn square kilometre of unexplored area in the country under exploration. Under this policy, called OALP, companies are allowed to put in an EoI for

prospecting of O&G in any area that is presently not under any production or exploration licence. The government has, under the first three rounds of OALP, awarded 87 oil and gas fields to private and public entities. The government has set a target of cutting oil import bill by 10 percent to 67 percent by 2022 and to half by 2030. Import dependence has increased since 2015 when Prime Minister Narendra Modi had set the target. India currently imports 83 percent of its oil needs.

India has increased the cost estimate of a giant refinery and petrochemical project to be jointly built with Saudi Aramco and Abu Dhabi National Oil Company by more than 36 percent, after protests by farmers forced the relocation of the plant. The 1.2 mn bpd coastal refinery in the western state of Maharashtra is expected to be built at Roha in the Raigad district, about 100 km south of Mumbai. The new cost estimate is \$60 bn for the refinery.

HPCL is planning to set up a 9 mtpa refinery-cum-petrochemical complex at an approved cost of ₹431.29 bn at Pachpadra in Barmer district of Rajasthan. 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. HPCL plans to shut some secondary units at its Mumbai and Vizag refineries in the current fiscal year in order to be able sell Euro-VI compliant fuel from April. The refiner plans to shut units that improve gasoline specs and a diesel hydro desulphuriser at its 166,000 bpd. Vizag refinery in southern India from early September to the end of October for upgrades. HPCL plans to shut a gasoline deslphuriser at its 150,000 bpd Mumbai refinery in the western state of Maharashtra for 15-20 days in December. The refiner had shut a 70,000 bpd crude unit at the Mumbai refinery in April for 23 days and the company has no further plans to shut crude units at its two refineries in 2019/20.

IOC will invest ₹250.83 bn this fiscal to meet its capital expenditure. 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.

State-owned OMCs have issued letters of intent for more than 9,000 new petrol pumps as part of their biggest-ever expansion of fuel retail network. The companies are moving quickly to select dealers for new pumps that would help double their retail network in just a few years, serve customers better in less-penetrated micro markets and meet the growing challenge from the private sector. In November 2018, IOC, BPCL and HPCL had launched the process to select petrol pump dealers at about 78,500 locations across the country. Companies received applications for about 95 percent of locations – single applications for 39 percent and two or more applications for 56 percent. So far, winners for 33,200 locations have been picked up by companies, of which 9,000 have been issued letters of intent and about 110 new pumps are already commissioned.

India's fuel retailers have firmed up plans to expand door-step delivery of fuel beginning with diesel. IOC, the country's largest fuel retailer, initiated door-step delivery of diesel in Pune and Chennai in 2018 and now plans to expand this service to 300 more locations. IOC's close competitor HPCL is not far behind. It is planning to expand door-step delivery of fuel to ten locations. The company had started door-step delivery of diesel in Raigad, Maharashtra, last year. In the private sector, RIL has already started delivering diesel in packaged containers at more than 260 sites. RIL has received the regulatory permits for launching diesel in High Density Polyethylene packs. Most of India's downstream companies have initially focused on delivering diesel to institutional customers as well as stationary installations as diesel is safer to handle as compared to petrol. The government had in 2017 floated the idea of initiating door-step deliver of motor fuels. Later, IOC and HPCL

initiated pilot projects to deliver diesel for stationary installations, telecom towers and diesel generator sets. The government has set-up a special task force on door-to-door delivery of fuel and the state-run Petroleum and Explosives Safety Organization -- a body meant to ensure safety and security of public and property from fire and explosives -- held at least six meetings last year to formulate a frame-work for door-to-door delivery of fuel.

North East India's largest refiner NRL said it has firmed up plans to diversify into exploration of crude oil within the next few months. The Mini Ratna PSU's board has already given its nod for an initial investment of ₹1.5 bn for the diversification and the company has sought approvals for commencing exploration in two blocks in Assam along with other partners. The company will pump in more money if oil is found in the two blocks. The company has identified Namrup block in Dibrugarh and Mesaki in Tinsukia districts for foraying into exploration of crude. NRL said it has received the imported crude oil consignment from Malaysia, the first such instance in its history. The refinery in Golaghat district received the first consignment of imported Miri crude oil from Petronas, Malaysia through a railway rake comprising 50 wagons carrying around 2,760 mt of crude from Haldia port in West Bengal. The Miri crude is low in sulphur and is close in specifications to Assam crude oil, also known as sweet crude for its low sulphur content, which the refinery is currently processing from the oil fields of Upper Assam. As a result, the Guwahati-Barauni pipeline, which was earlier used to transport crude from the region to other parts of the country, is now being utilised for reverse flow of crude oil into the region. The NRL is expanding its capacity from existing 3 mtpa to 9 mtpa at an investment of ₹225.94 bn, which also include a 1,398 km crude oil pipeline of 9 mtpa from Paradip to Numaligarh and a 654 km product pipeline of 6 mtpa from Numaligarh to Siliguri.

BPCL will set up a LPG bottling plant and POL terminal. The petrol consumption in Jharkhand had increased 61 percent, signifying growing prosperity. The state government has allotted 20 acres of land to BPCL in Bokaro Industrial Estate for the project. The POL

project, which will come up at Radhanagar, is expected to complete in 2021-22.

Malaysia's 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 bpd of crude oil, is operated by BORL, a 50-50 joint venture between Oman Oil Company and 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.

Saudi Aramco's proposed purchase of part of RIL will allow it to regain its grip on the world's fastest-growing oil market where suppliers including the US and Russia are making inroads. Aramco's plan to buy 20 percent of the oil-to-chemicals business of RIL -- which includes the world's biggest refining complex at Jamnagar on India's west coast -- comes with an assurance to buy half a million barrels a day of the kingdom's crude on a long-term basis. That's around 25 mt a year and will allow Saudi Arabia to easily reclaim the top supplier spot from Iraq. India imports about 85 percent of its crude requirements and the International Energy Agency forecasts it will be the world's fastest-growing oil consumer through 2040. The nation's oil consumption will grow from less than 5 mn barrels a day at present to 8.2 mn by 2035, according to Wood Mackenzie. The US, which allowed global oil exports from the first time in 2015, shipped 6.4 mt of oil to India in the financial year ending March 2019, making it the ninth-largest supplier.

RIL plans to produce only jet fuel and petrochemicals at its mega Jamnagar refinery complex as it implements an oil-to-chemical strategy that will eliminate most fuels it produces in favour of high value products. The company is preparing its Jamnagar complex, the world's largest refinery at a single location, to be future ready as fuel demand undergoes change with advent of electric

vehicles. Its refineries currently convert crude oil, sourced from around the globe, into petrol, diesel, LPG, ATF, naphtha and other value added fuels. Some of these products are used to produce petrochemicals used for making plastics and other products. Now, it is implementing a strategy that will convert the crude oil only into petrochemicals and ATF used in aeroplanes. The fundamentals of the Jamnagar oil-to-chemical strategy are to employ advanced molecule management to upgrade the refinery intermediate streams by value. India already has an oil refining capacity that is in excess of fuel demand. RIL said the objectives of this plan was to preserve as well as upgrade existing refinery margins, while maximising asset utilisation for a sustainable competitive cost of chemicals.

BP and RIL announced that they have agreed to form a new JV that will include a retail service station network and aviation fuels business across India. Building on RIL's existing Indian fuel retailing network and an aviation fuel business, the partners expect the venture to expand rapidly to help meet the country's fast-growing demand for energy and mobility. The partners have agreed to set up a new joint venture company, held 51 percent by RIL and 49 percent by BP, that will assume ownership of RIL's existing Indian fuel retail network and access its aviation fuel business. It is anticipated that final agreements will be reached during 2019 and, subject to regulatory and other customary approvals, the transaction will be complete in the first half of 2020. The venture is also expected to benefit from access to competitive fuels supplies from RIL's Jamnagar refining complex in Gujarat.

The bankrupt NOCL, which is under liquidation process after failing to find out a successful resolution plan, has received bids from three firms — Adani Ports and Special Economic Zone, Haldia Petrochemical and Accord Distillers and Brewers — to revive the company. NOCL, which is setting up a 6 mtpa petroleum and oil refinery project in Cuddalore in Tamil Nadu, had been ordered to undergo liquidation process after the company failed to get a successful resolution plan in the Corporate Insolvency Resolution Process. Subsequently, in December 2018, the National Company Law Tribunal,

Chennai, ordered liquidation of the company, which is an associate of Nagarjuna Oil Refinery.

Jharkhand has announced a second gas cylinder refill under PMUY for around 2.9 mn women in the state. The step is taken to provide free refill to 99 percent of the PMUY beneficiaries. PMUY is an initiative launched on 1 May 2016, by the Ministry of Petroleum and Natural Gas. Jharkhand 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 4.1 mn 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 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 4.2 million 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.

Rest of the World

OPEC 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. 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 IEA, and OPEC itself, had used to gauge market conditions. 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.

The US has removed nearly 2.7 mn barrels of Iranian oil from global markets daily as a result of Washington's decision to reimpose sanctions on all purchases of Iran's crude. In May, Washington ended sanction waivers given to importers of Iranian oil, aiming to cut Tehran's exports to zero. Iran exported about 100,000 bpd of crude in July. If condensate, a light oil, is included, shipments were about 120,000 bpd a day. The OPEC, Russia and other producers have been cutting 1.2 mn bpd since 1 January to reduce global supply. OPEC in July renewed the pact until March 2020 to avoid a build-up of inventories as worldwide demand is seen weakening. Despite OPEC's actions along with US sanctions on Iran and Venezuela, Brent crude international oil prices LCOc1 have been relatively weak, falling to \$59/barrel from a 2019 high of \$75, pressured by concerns about slowing demand. US oil output is expected to rise 1.28 mbpd to 12.27 mbpd this year, the US EIA said, slightly lowering its annual growth forecast from 1.40 mbpd. The reduction in the EIA's growth forecast came after Hurricane Barry disrupted Gulf of Mexico output in July, EIA said. Growth in the Permian Basin of Texas and New Mexico and other shale basins has boosted the US to become the world's top crude producer, exceeding output from Russia and Saudi Arabia. US oil output from seven major shale formations is expected to rise by 85,000 bpd in September, to 8.77 mn bpd, the US EIA said in its monthly drilling productivity report. The largest change is forecast in the Permian Basin of Texas and New Mexico, where output is expected to climb by 75,000 bpd, to 4.42 mn bpd in September.

Russia's biggest oil producer Rosneft said for the first time that it will claim compensation from pipeline monopoly Transneft for a drop in oil output due to the contamination in the Transneft network. The contamination, first discovered in April in Belarus, led to the stoppage of Russian oil exports via the 1 mn barrels per day Druzhba pipeline and a reduction in oil production in Russia, one of the world's top producers of crude. Rosneft said in its second-quarter results based on Russian accounting standards that the company will include losses from the fall in oil output in an estimate of damages from the contamination. Russian oil production is expected to total 556-557 mt this year, or 11.17-11.19

mn bpd. 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 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 production soars. Novak said the global oil market was fairly balanced and volatility was not high. Russian oil production fell close to a three-year low in early July as output was undermined by a row between Russian oil pipeline monopoly Transneft and the country's biggest producer Rosneft. The Antipinsky oil plant, Russia's largest independent refinery, is on track to more than double its output this month following suspension of its operations for more than two months. The refinery, located in western Siberia, with an annual capacity of 9 mt temporarily halted oil processing in April through June amid financial problems that led to the arrival of new owners and bankruptcy proceedings. The refinery said Russian oil major Surgutneftegaz would be the main supplier of oil to the plant.

Top oil exporter Saudi Arabia may cut prices for most of the crude grades it sells to Asia for a second straight month in September after Middle East benchmark prices weakened. The OSP for flagship Arab Light crude could drop by at least 50 cents a barrel, falling below a premium of \$2 a barrel for the first time in four months, a survey of five buyers in Asia showed. Asia's incremental demand for September-loading Middle East crude weakened with several North Asian refineries scheduled to shut for maintenance during their autumn season. Strong fuel oil margins, however, are likely to support prices for heavier grades that produce more of the residual fuel, survey respondents said. Saudi Arabia's crude OSPs are usually released around the fifth of each month, and set the trend for Iranian, Kuwaiti and Iraqi prices, affecting more than 12 mn bpd of crude bound for Asia. 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.

CNPC, a leading buyer of Venezuelan oil, has halted August loadings following the latest US sanctions on the South American exporter. The Trump administration in early August froze all Venezuelan government assets in the US and US officials ratcheted up threats against companies that do business with Venezuela's state-run oil company, PDVSA. China oil is the trading vehicle of CNPC that buys most Venezuelan crude under term contracts and is one of Caracas' top clients. Most deliveries of Venezuelan oil and refined products to CNPC's units are intended to monetize billions of dollars lent by China to Venezuela through oil-for-loan pacts. PDVSA has never failed to deliver crude to China to pay off debts, although refinancing and grace periods have been agreed upon over the last decade to ease the debt burden. CNPC will wait for more guidelines from the US Treasury before further moves in dealing with Venezuelan oil. For the first six months of this year, China imported 8.67 mt of crude oil from Venezuela, or roughly 350,000 bpd about 3.5 percent of its total imports, according to Chinese customs data. China issued its third batch of export quotas for refined oil products for 2019 totalling 6 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. 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 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 Company, the country's second-largest, will export about 1.5 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.

PetroChina was granted gasoline export quotas of 4.7 mt in the second batch of quotas issued in May, more than half of the quotas given. As a result, the company is placing cargoes to Mexico, Chile and Nigeria, according to the traders.

Libya is gradually restarting production at the El Sharara oilfield, the country's largest, after unknown gunmen had blocked a pipeline. The field, south of Zawiya port in western Libya, and which produces around 290,000 bpd was shut late in July by an armed group. The field accounts for a quarter of Libya's oil production. Prior to the shutdown, Libya was producing 1.2-1.3 mn bpd, a six-year high for the OPEC member which has struggled to return to a pre-civil war capacity of 1.6 mn bpd. Oil production at Libya's Sharara oilfield, the OPEC member's largest, has reached around 295,000 bpd. The oilfield resumed production earlier this month having faced two unplanned shutdowns.

NNPC said that 15 companies had won the right to swap the nation's crude oil for fuels following a tender for the deals. About 132 companies bid for the deals, NNPC said in May. The tender for the one-year contracts effective 1 October, dubbed direct sale, direct-purchase, was issued in March. Nigeria is almost entirely reliant on imported fuel because of years of neglect at its own refineries. It has leaned heavily on the swap arrangements to get fuel, particularly gasoline, as other would-be importers struggle to make money due to price caps. NNPC said the companies that won the bids were made up of consortia of 15 companies including Vitol, Trafigura, oil major BP and local downstream companies. 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 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. The contract ended in December. Nigeria is Africa's biggest crude producer and the oil industry is the mainstay of the continent's biggest economy. Crude sales provide around 90 percent of

Nigeria's foreign exchange - and a slump in oil prices in 2014 pushed the economy into a recession in 2016.

Malaysia said the Johor Port Authority was working to develop a \$477 mn oil storage and ship refuelling site in the country's south. That marks the latest step in a push to turn Malaysia's southern peninsular state of Johor into an oil and gas hub that could one day rival Singapore, currently Asia's main oil centre. The "Bunker Island Development" is set to have the capacity to store about 1.2 mcm of various oil and gas products, the transport ministry said. The ministry said that the project would also be used to promote cleaner marine fuel in accordance with International Maritime Organization rules that will require lower sulphur content in shipping fuel from 2020.

An oil discovery in Republic of Congo could produce nearly 1 mn bpd, a company involved said, possibly quadrupling the nation's output and propelling it into the same league as Africa's largest producers. Congo's cash-strapped energy industry has been boosted by major recent finds from Italy's ENI and France's Total, lifting an economy hobbled by debt, civil unrest and corruption, and raising output to about 350,000 barrels per day. Production from the new field, developed by SARPD-OIL in la Cuvette region, could dwarf that, the company said. SARPD estimates the field holds 1 bcm of hydrocarbons, including 359 mn barrels of oil, with a potential for daily output of 983,000 barrels.

Output at BP's oil projects in Azerbaijan fell to 542,400 bpd in the first half of 2019 from 596,000 bpd a year earlier, it said. In the first six months of the year, the company produced 13 mt of oil in Azerbaijan, down from 15 mt in the same period of 2018, and 0.9 bcm of associated gas, down from 1.1 bcm a year earlier. A BP-led consortium said that it spent more than \$272 mn in operating expenditure and more than \$657 mn in capital expenditure on operations at the Azeri-Chirag-Guneshli oilfields in the first half. The Baku-Tbilisi-Ceyhan pipeline exported more than 16 mt of crude oil loaded on 149 tankers at Ceyhan. 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. The oil and gas

company has no current plans to take any of its own vessels through the strait. 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.

The government of Canada's main crude-producing province Alberta eased oil production curtailments for September, setting the new limit at 3.76 mn bpd. That is a 25,000 bpd increase on the August production limit. Alberta introduced curtailments effective Jan. 1 2019 to ease congestion on export pipelines that left crude stranded in storage tanks and pushed the discount on Canadian crude versus US 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. Curtailment threw a lifeline to many oil producers who were struggling with low prices but was criticized by integrated oil companies like Suncor Energy and Imperial Oil. Under current legislation the production limits are set to expire at the end of 2019.

ONGC: Oil and Natural Gas Corp, RIL: Reliance Industries Ltd, bpd: barrels per day, mn: million, bn: billion, mt: million tonnes, US: United States, PDVSA: Petróleos de Venezuela, SA, O&G: oil and gas, DGH: Directorate General of Hydrocarbons, EoI: Expressions of Interest, OALP: Open Acreage Licensing Policy, HPCL: Hindustan Petroleum Corp Ltd, mtpa: million tonnes per annum, km: kilometre, IOC: Indian Oil Corp, OMCs: Oil Marketing Companies, BPCL: Bharat Petroleum Corp Ltd, PSU: Public Sector Undertaking, NRL: Numaligarh Refinery Ltd, LPG: liquefied petroleum gas, Petronas: Petroliaam Nasional Bhd, BORL: Bharat Oman Refineries Ltd, ATF: aviation turbine fuel, JV: joint venture, NOCL: Nagarjuna Oil Corp Ltd, PMUY: Pradhan Mantri Ujjwala Yojana, OPEC: Organization of the Petroleum Exporting Countries, bcm: billion cubic meters, IEA: International Energy Agency, EIA: Energy Information Administration, OSP: official selling price, CNPC: China National Petroleum Corp, NNPC: Nigerian National Petroleum Corp

NATIONAL: OIL

HPCL buys over 120k tonnes gasoline for September-October delivery, seeks more

27 August. Hindustan Petroleum Corp Ltd (HPCL) is seeking more gasoline after having purchased more than 120,000 tonnes of the fuel for September to early October delivery from the spot market to plug a supply gap. The state-owned refiner has been actively seeking gasoline from the spot market this year as Indian refiners undergo maintenance and upgradation to produce cleaner fuels. HPCL recently bought the cargoes for September to early October arrival at Visakhapatnam (Vizag) and Mundra from BP, Emirates National Oil Co and Trafigura, but the premiums were not immediately available. HPCL's latest tender is for 30,000 tonnes of gasoline scheduled for 5-8 October arrival at Vizag and offers are to be submitted by 28 August. It is not the only Indian refiner looking to import gasoline. Bharat Petroleum Corp Ltd and Indian Oil Corp have also been seeking the fuel.

Source: Reuters

Centre reducing allotment of kerosene to Tamil Nadu: Food Minister

26 August. The central government has been constantly reducing the quantity of kerosene supplied to Tamil Nadu, Food Minister R Kamaraj has said. He said the union government has reduced the allotment of kerosene to Tamil Nadu as 14,000 litres constantly from 62,000 litres. The union government said the as almost all the household has been provided with LPG (liquefied petroleum gas) connection, there is no need to give them full quantity of kerosene. However, based on availability of the fuel, the government would provide kerosene on priority basis for those who do not have gas connection, he said.

Source: The Economic Times

India to increase US imports, buy more oil: Modi tells Trump

26 August. Prime Minister Narendra Modi informed President Donald Trump that India plans to further step up imports, including oil, from the United States (US) and

that \$4 bn worth of imports were already "in the pipeline", as the two countries sought to overcome differences over trade issues. The Modi-Trump meeting assumes significance in the wake of the strain that has popped up in the bilateral relationship on a host of trade and economic issues. India's exports to the US in 2017-18 stood at \$47.9 bn, while imports were at \$26.7 bn. The trade balance is in favour of India. Foreign Secretary Vijay Gokhale said President Trump spoke very warmly of the fact that India has become a major importer of energy.

Source: Business Standard

ONGC to drill 46 wells in Mehsana asset at the cost of ₹5 bn

23 August. Oil and Natural Gas Corp (ONGC) is planning to drill 46 exploratory wells in 12 onshore Mining Lease blocks in Mehsana district in Gujarat at the cost of ₹5 bn. ONGC said hydrocarbon reserve data obtained from various oil fields drilled in the region have shown very encouraging results and a lot of scope still exists in exploring new sub-surface structures in the area for hydrocarbons. The company has so far drilled more than 500 wells in Mehsana asset, including exploratory wells. Oil Minister Dharmendra Pradhan laid the foundation stone for ONGC's North Kadi Polymer project, the second heavy oil polymer flooding project being developed by the company in Mehsana asset. The company's crude oil production from onshore fields in the state of Gujarat has been on a steady rise in the last few years, the oil ministry data showed. ONGC's crude oil production from onshore fields in Gujarat in the first four months (April-July) of the current financial year (2019-2020) increased 2.19 percent to 1,537 thousand tonne, as compared to the corresponding period a year ago.

Source: The Economic Times

Videocon requests NCLT to include overseas oil assets in insolvency process

22 August. Videocon Industries has approached the bankruptcy court to include its overseas oilfield assets Videocon Energy Brazil Ltd and Videocon Indonesia

Nunukan Inc in the ongoing corporate insolvency resolution process. The company requested the National Company Law Tribunal (NCLT) to include details of its overseas oil and gas assets in the information memorandum that would be circulated to potential bidders and to restrain lenders from selling these assets. Videocon requests NCLT to include overseas oil assets in insolvency process

Source: *The Economic Times*

India's July petrol imports hit highest in at least 8 yrs

22 August. India's July crude oil imports declined from a year earlier, while petrol imports climbed to their highest since at least April 2011, data from the oil ministry's Petroleum Planning and Analysis Cell (PPAC) showed. Crude oil imports into the world's third-largest consumer declined 1.2 percent from a year earlier to 19.34 million tonnes (mt), but increased 14.6 percent from the previous month. Petrol imports rose to 230,000 tonnes in July, the highest since PPAC data going back to 2011. Government data showed sales of gasoline, or petrol, were 8.8 percent higher from a year earlier at 2.52 mt. India's imports of crude oil have stalled in recent months, with both coal and liquefied natural gas (LNG) also soft. This could be attributed to Indian refiners adjusting to the loss of cargoes from Iran after the United States (US) did not extend waivers to buyers of Iranian crude beyond the beginning of May. Meanwhile, imports of oil products rose by about 9 percent from a year earlier to 2.81 mt. Year-on-year exports fell 5 percent last month to 5.07 mt, the data showed.

Source: *Reuters*

IOC, HPCL and BPCL to shuffle LPG consumers

21 August. Indian Oil Corp (IOC), Bharat Petroleum Corp Ltd (BPCL) and Hindustan Petroleum Corp Ltd (HPCL) will soon shuffle millions of cooking gas or LPG (liquefied petroleum gas) consumers between their agencies to expand the customer base for newly-appointed distributors and help make their business viable. The three state-run oil companies, which mainly distribute cooking gas in the country, have recently

agreed to inter-company transfer of customers to ensure even distribution among gas agencies. Usually, when a company appoints new distributors in an area, it also gives them some customers of that locality that had until then been served by older distributors. But this shift is generally limited to a company's own distributors. Under the new arrangement, the three oil companies will also pass on consumers to each other's distributors. Over the last few years, the pace of customer addition has far outstripped the appointment of new distributors, which meant older distributors had to lead the market expansion effort. New distributors are still being added, which is why there is a need to reallocate customers to new distributors. Total number of domestic consumers stands at 265 mn, which is about 95 percent of all homes in the country, while the number of distributors is 23,833.

Source: *The Economic Times*

Petrol, diesel cheaper in Delhi than UP as Yogi government raises taxes on fuels

21 August. Petrol and diesel are now cheaper in Delhi as compared to adjoining cities of Uttar Pradesh (UP) after the Yogi Adityanath government in the neighbouring state raised taxes on the two fuels. While petrol and diesel traditionally have been cheaper in Delhi than most states in the country due to lower local sales tax or VAT (Value Added Tax), the 5 October 2018, cut in the VAT by BJP-ruled states, including UP, resulted in both fuels turning cheaper in places such as Ghaziabad and Noida -- the UP towns that adjoin the national capital. Petrol in the national capital costs ₹71.84 per litre and diesel is priced at ₹65.11 a litre, according to daily price notification of Indian Oil Corp (IOC). In adjoining Noida, petrol costs ₹73.79 per litre and diesel is priced at ₹65.40. In Ghaziabad, petrol costs ₹73.65 per litre and diesel ₹65.26, according to IOC. The hike restores the duties BJP-led government in the state had cut following Centre's call to states in October last year to lower taxes to give consumers cushion against rising oil rates at that time. While AAP-ruled Delhi had not cut taxes, BJP-ruled UP followed suit. It cut VAT on petrol to 23.78 percent or ₹14.41 a litre, whichever is higher from 26.80 percent of

₹16.74, whichever is higher. In the case of diesel, VAT was reduced to 14.05 percent or ₹8.43 a litre, whichever is higher from 17.48 percent or ₹9.41 a litre.

Source: *Business Standard*

NATIONAL: GAS

India could review long-term LNG contract prices: Oil Minister

26 August. India will look at reviewing the pricing of its long-term liquefied natural gas (LNG) deals at an “appropriate time” due to a fall in spot prices, Oil Minister Dharmendra Pradhan said. The spot price of imported LNG into Japan, one of world’s biggest importers of the super-cooled fuel, has more than halved in the last year. India’s biggest gas importer Petronet LNG Ltd said that it would consider renegotiating its long-term LNG supply deals if spot prices remained weak for a prolonged period. Pradhan said India is investing up to ₹5 tn (\$70 bn) to boost its natural gas sector, including city gas distribution projects, setting up LNG liquefaction facilities and natural gas exploration. Prime Minister Narendra Modi has set a target to raise the share of natural gas in the country’s overall energy mix to 15 percent by 2030 from the current 6.2 percent.

Source: *Reuters*

India offers 7 oil, gas blocks for bidding under OALP-IV

26 August. India offered for bidding seven new areas for prospecting of oil and natural gas on revamped exploration terms that look to expedite cut in import dependence by raising domestic output. Five blocks offered are in little-explored Vindhyan sedimentary basin, while one block is in Bengal Purnea basin. The remaining block is the proven basin of Rajasthan, according to the Directorate General of Hydrocarbons (DGH). In all, 18,509.69 square kilometre of area for exploration of oil and gas has been offered in the fourth bid round of Open Acreage Licensing Policy (OALP). The government has under the previous three OALP rounds awarded 87 blocks covering an area of 1.18 lakh square kilometre. OALP-IV is the first round being held on revamped

terms approved in February 2019. DGH said the last date for bidding for OALP-IV blocks is 31 October.

Source: *Business Standard*

Jharkhand PNG pipeline hits forest clearance, land acquisition hurdle

26 August. GAIL (India) Ltd’s plan for supply of compressed natural gas (CNG) and domestic piped natural gas (PNG) in Jharkhand has hit the forest clearance and land acquisition hurdle. The company plans to commission 22 stations for supply of CNG to 1.25 lakh vehicles in Ranchi and Jamshedpur. It also plans to lay down a 551 kilometre (km) pipeline for supply of PNG to 10.46 lakh households across 12 districts, including Ranchi, Chatra, Giridih, Hazaribagh, Bokaro, Ramgarh, Dhanbad, Saraikela, Khunti, Gumla, Simdega and East Singhbhum.

Source: *The Economic Times*

BPCL to invest ₹15-17 bn in floating LNG terminal in Andhra Pradesh

26 August. Bharat Petroleum Corp Ltd (BPCL) plans to invest ₹15-17 bn in building a floating liquefied natural gas (LNG) import terminal at Krishnapatnam in Andhra Pradesh by 2022, its chairman D Rajkumar said. BPCL is betting big on gas business in anticipation of energy consumption basket undergoing change as focus shifts to cleaner sources. The company will hold 74 percent interest in the project while the remaining 26 percent will be with Petronet LNG Ltd, he said. The project is likely to be commissioned by 2022. The global oil and gas market is going through a transformation as mounting climatic concerns drive changes in the energy mix in favour of natural gas and renewables. In India, natural gas demand is slated to grow at a rate much faster than oil as the share of environment-friendly fuel rises in the energy basket. To tap this opportunity, BPCL has made a foray into city gas distribution (CGD) and is now looking to set up an LNG import terminal of its own. Krishnapatnam will be the sixth LNG terminal to be announced, on the coast. Petronet had previously signed a firm and binding term sheet for developing a land-based LNG terminal at Gangavaram Port in Andhra Pradesh with an initial

capacity of 5 million tonnes (mt) with Gangavaram Port Ltd (GPL) but later dropped it. GAIL (India) Ltd too had planned a facility at Paradip in Odisha but it also dropped the plans. GAIL had also previously announced plans for setting up an LNG terminal at Kakinada in Andhra Pradesh but the project has not taken off. He said BPCL is transferring its gas business to a new subsidiary, Bharat Gas Resources Ltd (BGRL).

Source: *The Economic Times*

**Need more time, subsidy for PNG switch:
Gurugram factory owners**

25 August. A month after the Central Pollution Control Board (CPCB) ordered closure of industries that are not using PNG (piped natural gas), members of Gurugram's industrial association met Union Environment Minister Prakash Javadekar raising their concerns over making the use of PNG mandatory for industries. The members informed the minister that the cost of conversion of boilers from other fuel to PNG would cost them a huge amount and they needed at least a year's time to switch to PNG.

Source: *The Economic Times*

NATIONAL: COAL

**India biggest potential thermal coal market for
Australia**

26 August. India, the world's third largest coal consumer, is one of the most appealing market for Australia's thermal coal to meet its increasing energy requirements, according to "The Coal in India 2019" report. According to the report, prepared by the Australia's Office of the Chief Economist, Australia is not a significant supplier of thermal coal to India despite India's imports growing by 84 million tonnes (mt) in the past five years. The report said that India was the world's third largest coal consumer behind China and the United States; and the share of coal in India's electricity mix was rising. Indonesia was main supplier for India for thermal coal while Australian exports were going to China, Japan and South Korea, the report said. The report said that Adani's Carmichael mine and GVK's Alpha mine were two advanced projects could provide long term reliable supplies of coal to meet

the growing energy needs of India. The report also identified India's interest in Australia stating that Coal India Ltd (CIL) was already interested in working with Australian companies to upgrade the technology employed in their coal sector.

Source: *The Economic Times*

**India to bridge coal import gap by 50 percent in 3
yrs: CIL**

23 August. India is working on bridging the coal import gap by about 50 percent in the next three years, Coal India Ltd (CIL) Chairman A K Jha said. In the 2018-19 fiscal, the country produced 730 million tonnes (mt) of coal, while 955 mt was consumed, leading to a gap of 230-235 mt. He said CIL plans to produce 53 mt of more coal to 660 mt in the current fiscal, and a similar 50-55 mt incremental production every year will bridge the 115-120 mt gap. CIL had earlier pushed back its 1 billion tonnes (bt) production vision to 2025-26.

Source: *The Economic Times*

**West Bengal government seeks clarity on rules for
world's second largest coal block**

23 August. The centre is ready to officially handover Deocha Pachami coal block in Birbhum to West Bengal government, however, the state has sought greater clarity on performance guarantee calculations and implementation timeframe for the proposed mine which is believed to be a geologically difficult block. It is the world's second largest coal block and the state was looking at the possibility of selling a portion of its produce in the open market, if allowed by the centre, which, however, seem unlikely. State Finance Minister Amit Mitra had said they would seek centre's permission for selling coal in the open market after meeting captive demand. However, according to central government officials it may not be allowed since it was allotted for captive consumption only. During June last year the centre allotted Deocha Pachami to WBPDCCL (West Bengal Power Development Corp Ltd) as a captive block. Operations of the block will be undertaken by Bengal Birbhum Coalfields, a special purpose vehicle floated for purpose. Coal seams in the block lie beneath a 500 meter

thick layer of basalt rock that needs to be cracked first to extract coal through underground mining. Basalt is used for a variety of construction work including laying railway tracks and the company could sell it in the open market as well.

Source: *The Economic Times*

NTPC plans to become second largest coal producer in India

21 August. NTPC Ltd plans to become India's second largest coal producer after Coal India Ltd (CIL) to ensure long-term fuel security for its power plants. CIL had

QUICK COMMENT

A second large coal producer will introduce competition in the coal sector!

Good!

produced 606 million tonnes (mt) of coal and had targeted a milestone of 1 billion tonnes (bt) by 2025. NTPC had been allotted 11 coal blocks — Pakri-Barwadih, Chatti Bariatu, Kerandari, Dulanga, Talaipalli, Bhalumuda, Banai, Mandakani-B, Banhardih Kundanali-Luburi (in JV with Jammu & Kashmir State Power Development Corporation) and Badam Coal Block with geological coal reserves of more than 7.3 bt and a production potential of 113 million tonnes per annum (mtpa). NTPC needs over 160 mtpa of coal for fuelling its 41,580 MW power capacity. NTPC had received a supply of 176.10 million metric tonnes (mmt) of coal during FY19.

Source: *The Hindu*

NATIONAL: POWER

Noida installs dual meters to cut down power bill for consumers

26 August. The power department has started installing dual meters for residents of housing societies, a move that could drastically bring down electricity bills. The move follows a long pending demand from residents and an order last year by the Uttar Pradesh Regulatory Commission (UPERC) to install dual meters and provide

direct connections to each flat. As part of the plan, the newly installed meters will have two sections. The first part of the meter will display the units consumed by a flat owner directly from Pachimanchal Vidyut Vitaran Nigam Ltd (PVVNL), while the second one will calculate the charges for power backup provided by the builder. A consumer can pay the electricity bill to the power department and fee for backup to the builder.

Source: *The Economic Times*

MSEDCL tells Ganesh mandals to get legal power connections

25 August. The Maharashtra State Electricity Distribution Company Ltd (MSEDCL) has appealed all Ganesh mandals to get authorized temporary power connections for their pandals in order to avoid any untoward incident. The state power utility, this year, has decided to provide electricity to mandals at ₹4.55 per unit — lower than tariff charged for consumers in the commercial category. The MSEDCL said that temporary power connections will be provided to Ganesh mandals within 24 hours after a formal application is submitted. However, like every year, many Ganesh mandals in the city have chosen to draw electricity illegally instead opting for temporary connections. As per records available with the MSEDCL, in Aurangabad zone, only 73 mandals have so far opted for legal power connections while over 1,200 have ignored the state power utility's request. The law has a provision for charging tariff equal to twice the tariff applicable for the relevant category if the MSEDCL reach to a conclusion that unauthorized use of electricity did take place. The MSEDCL has also designated three helpline numbers 1912, 1800-102-3435, and 1800-233-3435 for Ganesh festival.

Source: *The Economic Times*

One-stop shop soon for availing all Escom services in Karnataka

25 August. Power consumers in the state will soon have a one-stop destination for a whole range of services, including applying for new connections, increasing load, paying bills, transferring ownership, and lodging enquiries and complaints related to all electricity supply

companies (Escoms) in the state. BESCO (Bangalore Electricity Supply Company) is currently in talks with Indian Institute of Information Technology, Bangalore (IIITB) to revamp the IT infrastructure and develop an integrated platform. With all Escoms on a single platform, customers can expect a more streamlined delivery of services, especially with regard to transfer of ownership, new connections and conversion of services.

Source: *The Economic Times*

**Power tariff will not increase in Delhi for 5 yrs:
Power Minister**

24 August. Delhi's Power Minister Satyendar Jain said the electricity tariff will not increase for another five years. Participating in a discussion in the assembly, Jain also

QUICK COMMENT
Power tariff should not be a subject for political pronouncements!
Ugly!

claimed that the Arvind Kejriwal government would have provided free electricity for all if it got ₹400 bn from the Centre as its share in central taxes as per the amount of income tax paid by Delhiites every year. Jain said Delhi is the only state in the country where power tariff has gone down. Comparing the rates of other states and cities with Delhi, Jain said the Delhi government has ensured round-the-clock supply of power to its people. A short-duration discussion on power reforms in Delhi was initiated in the House in which the ruling party MLAs lauded the government for providing free power to people consuming 200 units of electricity and bringing down power tariff. Jain said that the Delhi government is working on rainwater harvesting and assured that in next 3-4 years, Delhi people will get round-the-clock water supply.

Source: *The Economic Times*

UPPCL banned from buying power from exchanges on alleged lapses

24 August. In a severe blow to Uttar Pradesh Power Corp Ltd (UPPCL), Power System Operation Corp

(POSOCO) has blocked the company from purchasing any electricity from power exchanges due to alleged lapses. UPPCL has faced the action for deliberately keeping state power generating companies, including independent power producers, out of the ambit of the Union power ministry's order regarding implementation of a payment security mechanism-based scheduling of power at intra-state level. Faced with this piquant scenario, the cash-strapped UPPCL has asked its power distribution companies (discoms) to launch a drive to disconnect electric supply of consumers who have more than ₹10,000 dues and have not paid any bill since 1 April. UPPCL authorities are trying to persuade Bajaj Energy to withdraw its complaint and help lift the ban on it buying power from the exchanges by assuring it that a certain amount of payment would be made to them every day.

Source: *The Financial Express*

1984 anti-Sikh riot victims await free electricity in Delhi

21 August. Even as the Delhi government announced 200 units of free electricity for people in the national capital, it is yet to keep its promise of giving free power supply to victims of the 1984 anti-Sikh riots. According to data accessed by IANS, free electricity up to 400 units is being provided to only 368 households out of the total 2,274 victim families provided houses by the Delhi Urban Shelter Improvement Board. In his 2019-20 budget speech, Delhi Finance Minister Manish Sisodia had said that since the AAP (Aam Aadmi Party) came to power, 90 percent of households in Delhi were getting subsidized electricity. But government data suggests that only about 15 percent of the victims have benefitted till March. When contacted, Power Department said the process was underway and the scheme will be extended to all the families soon. On 1 August, Delhi Chief Minister Arvind Kejriwal announced that people in the city will not have to pay anything for consuming up to 200 units of power per month. For consumption of electricity between 201 and 400 units per month, about 50 percent subsidy will be provided on the electricity bill, Kejriwal had said.

Source: *The New Indian Express*

NATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

Annual addition of 4-5 GW to meet Gujarat's renewable demand: IEEFA

27 August. Gujarat will likely add 46 GW to its new renewable energy capacity by 2029-30, according to a new report by the Institute for Energy Economics and Financial Analysis (IEEFA). While Gujarat has already lifted its renewable energy target to 30 GW in July from 17 GW, the state could be more ambitious, with the ministry of new and renewable energy estimating its renewable energy potential to be 72.7 GW, equally balanced between solar and wind energy potential. According to the report, renewable capacity addition of 4-5 GW annually would ensure that Gujarat's incremental demand going ahead is supplied by renewables. This would be a dramatic shift in Gujarat's electricity sector composition, with renewables forming 70 percent of its capacity and 48 percent of generation by 2029-30. The IEEFA notes the incorporation of nearly 55 GW of intermittent renewable energy into Gujarat's electricity network would require investment and active measures on the grid integration and balancing front.

Source: *Business Standard*

Solar cell makers urge Centre to source only from them for Kusum scheme

27 August. Domestic solar equipment manufacturers have requested the Ministry of New and Renewable Energy (MNRE) to stick to the plan of using indigenously manufactured components in the Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan (PM-Kusum) scheme. In a letter written to Power Minister R K Singh, the Indian Solar Manufacturing Association (ISMA) said, in the wake of favourable market visibility stemming from the Kusum scheme, existing manufacturers (Adani Group's Mundra Solar, Jupiter Solar, Premier Solar, Euro Multivision and Renewsys) have short-term investment plans to set up 2,400 MW of solar cell-making capacity. The current installed cell manufacturing capacity is 3,164 MW. In the letter, ISMA has requested the government to "maintain the resolve to develop a solar manufacturing

base in India, which we are sure will happen in the next 15 to 24 months". It said the government's mandate on domestic equipment will increase solar-cell manufacturing base to 8-10 GW by 2021. The imposition of the safeguard duty in July last year on solar imports from China and Malaysia and 'developed countries' has not done much to domestic manufacturers. Though it reduced imports by 44 percent to \$2.2 bn in FY19, it was mainly on the back of slower solar capacity additions. The country added 6.5 GW of solar plants in the fiscal, recording an annual fall of 31 percent.

Source: *The Financial Express*

MNRE issues guidelines for series approval of Solar PV inverters for testing

27 August. The Ministry of New and Renewable Energy (MNRE) has issued guidelines for series approval of solar photovoltaic (PV) inverters for conducting testing in labs. The guidelines are meant to facilitate test labs to approve the product family including change in design and materials for the solar inverters for their compulsory registration with Bureau of Indian Standards (BIS) and for the implementation of the Solar Photovoltaics Systems Order. The guidelines are applicable for solar PV-based off grid, grid-tied and hybrid inverters of capacities up to 150 kilowatt (kW), the MNRE said. Under the guidelines, the manufacturer will submit a declaration about the series of the product while submitting the samples for testing.

Source: *The Economic Times*

India has long way to go on climate goals, PM's target 'unrealistic': Experts

27 August. It will take a long time before India achieves its Paris climate conference goals, environment experts said, terming as "unrealistic" Prime Minister (PM) Narendra Modi's statement on reaching the target set for 2030 in the next year and a half. They also said that PM Modi's endeavour to dispose of accumulated plastic before Diwali this year was difficult to achieve, as the

quantity of plastic waste was "huge". Recently at the UNESCO headquarters at Paris, Modi said that India will achieve most of the COP 21, also known as the 2015 Paris Climate Conference, goals set for 2030, in the next year and a half. In his monthly address 'Mann Ki Baat', he urged people to observe the 150th birth anniversary of Mahatma Gandhi this year as a day to make India plastic-free. He exhorted municipalities, NGOs and the corporate sector to come up with ways for safe disposal of accumulated plastic waste before Diwali on 27 October this year. India made several commitments under its Nationally Determined Contributions (NDC) in the 21st session of the COP 21 of the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris in November and December 2015. The country had set a goal to reduce greenhouse gas emission intensity of its GDP (Gross Domestic Product) by 33-35 percent below 2005 levels by 2030 and to better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region.

Source: *The Economic Times*

Rajasthan energy department and US ink deal to boost renewable energy cooperation

27 August. Rajasthan energy department and Utah, a state in western US (United States), signed a MoU (Memorandum of Understanding) to bolster state-level policy exchanges in areas of integration of diverse and renewable resources and technologies. Energy principal secretary Nareshpal Gangwar said focus areas are renewable energy integration, energy storage, scheduling and forecasting, electric mobility and strengthening of transmission networks.

Source: *The Economic Times*

BHEL wins ₹25 bn worth orders for emission control systems

26 August. Bharat Heavy Electricals Limited (BHEL) said it has secured two more orders worth ₹25 bn for emission control equipment for thermal power plants. The orders have been placed by power utility major

NTPC Ltd. They involve supply and installation of flue gas desulphurisation (FGD) systems for 13 coal-based units at 2,600 MW Korba STPS stage one, two and three in Chhattisgarh and 2,100 MW Ramagundam STPS stage one and two in Telangana. The public sector enterprise is a market leader in the emission control equipment segment and has contracted FGD orders for 54 thermal units from various customers. It has technology collaborations with Mitsubishi Hitachi Power Systems of Japan for FGD systems and with HLB Power of South Korea for large-size gates and dampers.

Source: *Business Standard*

SECI extends deadline to bid for 6 GW solar projects till 11 September

26 August. Solar Energy Corp of India (SECI) said it has extended deadline to submit bids for 6 GW solar projects till 11 September. The techno-commercial bids for the 6 GW solar energy was scheduled to be opened. The auction was dragged further as no bidders submitted bid. No company submitted bids under the auction for the 6 GW manufacturing linked solar energy projects. According to the tender document, SECI had capped the tariff at ₹2.75 per unit in the auction. SECI had received similar response to its tenders for solar energy projects linked with manufacturing in the last fiscal as well. Under, this tender the developers would have to develop four projects of 1.5 GW each along with 0.5 GW solar equipment manufacturing capacities. The auction of solar energy projects assumes significance in view of India's ambitious target of having 100 GW of solar energy capacity by 2022.

Source: *Business Standard*

Discussion on Jaitapur nuclear project to come up later this year: French President

23 August. French President Emmanuel Macron said France and India will hold discussions on Jaitapur nuclear project by the end of this year. Prime Minister Modi is currently on a two-state visit to France for an official visit at the invitation of French President Macron for a bilateral summit on 22 August and 23 August in Paris and to participate in the G7 Summit on 25 August and 26

August in Biarritz. India and France agreed that oceans play an important role in combating climate change, preserving biodiversity, and development, and, acknowledging the link between environment and security, decided to enlarge the scope of their maritime cooperation to address these issues. For sustainable use of marine resources, the two sides agreed to work towards ocean governance, including through coordination in relevant international bodies.

Source: *Business Standard*

MNRE issues norms for second phase of rooftop solar programme

23 August. The Ministry of New and Renewable Energy (MNRE) has issued guidelines for implementation of the second phase of the grid-connected rooftop solar programme for achieving the target of 40,000 MW capacity from rooftop solar projects by 2022. The government has set a target of achieving 100,000 MW of solar power capacity in the country by 2022 of which 40,000 MW is likely to be achieved from rooftop solar systems.

Source: *The Economic Times*

Installation of pollution control technology in coal-based plants a challenge: CEEW

22 August. The installation of pollution control technology in coal-based power plants remains a challenge in the country, according to a report by Council

QUICK COMMENT
Pollution control in coal-based plants will remain a challenge as long as tariff is controlled!
Bad!

on Energy, Environment and Water (CEEW). The Ministry of Environment, Forest and Climate Change (MoEFCC) had in 2015 announced new standards to limit the concentration of sulphur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter and mercury in stack emissions for coal-fired power plants. According to CEA (Central Electricity Authority), flue gas desulphurization equipment account for around 80 percent of the cost of the retrofits. CEEW and International Institute for

Sustainable Development (IISD) have detailed the cost of compliance for coal-based power plants to meet air pollution standards. The total cost of electricity generated from coal-fired power plants is in a range between ₹1.86 and ₹7.5 per kilowatt hour (kWh), including the impact of pollution-control technology installation.

Source: *The Economic Times*

Hindustan Shipyard targets doubling of its solar power generation

22 August. After installing the State's largest-ever rooftop solar power plant with a capacity of two megawatts in September last year, Hindustan Shipyard Ltd is now going about doubling its capacity. Hindustan Shipyard has entered into a buyback arrangement for 25 years with Clean Max, one of the cost effective projects for any industry. The company will bear the expenditure incurred on the project and the only commitment for HSL is to provide its vacant roofs, offer administrative support and buy the power generated for its consumption at a fixed rate of ₹ 3.9 per unit.

Source: *The Hindu*

Environment ministry relaxes lease rent on wind power projects, aims to provide clean energy at cheaper rate

22 August. In a bid to boost investments in wind power projects and provide clean energy at cheaper rates, the environment ministry decided to relax the lease rent of ₹30,000 per mega watt charged mandatorily from wind power companies. Environment Minister Prakash Javadekar took the decision in a review meeting at the ministry headquarters, saying this move will encourage investment and help provide wind power at a cheaper rate. Currently, to establish wind power project over forest land the existing procedure requires payment of mandatory charges for compensatory afforestation and Net Present Value (NPV). The ministry said that promotions of such projects also strengthen the government's commitments towards international agreements, and one of the national commitment pledged in Paris in 2015 was to have 40 percent of the power from renewable resources by 2030.

Source: *Business Standard*

INTERNATIONAL: OIL

Gazprom Neft halts oil output at Arctic offshore field for planned maintenance

27 August. Gazprom Neft, the oil arm of the Russian gas giant Gazprom, said it had halted oil production at the Prirazlomnoye offshore Arctic field on 8 August for planned maintenance lasting four weeks. The company said the planned maintenance would not affect expected oil production levels.

Source: Reuters

Noble Energy makes oil discovery off Equatorial Guinea: Lima

27 August. Noble Energy has made a new discovery in Block 1 offshore Equatorial Guinea, with the US (United States) company expecting to produce new oil by tapping into existing infrastructure by October, Hydrocarbons and Mines Minister Gabriel Obiang Lima said. Lima said the Aseng 6P well was drilled to a depth of more than 4,000 meters and Noble was in the process of connecting it to existing infrastructure in the Aseng field, which has five subsea wells connected to a floating production storage and offloading (FPSO) vessel.

Source: Reuters

Kenya's first crude oil export sparks demands over revenue sharing

26 August. Kenya exported its first crude oil, amid pointed speeches by local leaders asking the government to stick to its commitment to share revenues from future shipments equitably. Although commercial production is years away, the discovery of oil has heightened expectations that citizens, especially those living adjacent to the deposits, will benefit. President Uhuru Kenyatta in March signed into law a long-awaited petroleum bill that regulates oil exploration and production and outlines how revenues will be shared between the government, local communities and companies. Of the revenues due

to the state, the law allocates 20 percent to local government, 5 percent to the communities living where oil was found and 75 percent to the central government. An earlier draft gave 10 percent to the communities. Tullow Oil estimates that Kenya's Turkana fields hold 560 mn barrels of oil and expects them to produce up to 100,000 barrels per day from 2022. Tullow said it and its partners had to date invested \$2 bn in Kenya. Mining and Petroleum Minister John Munyes said approval to pump water from neighbouring West Pokot County to pressurize oil wells had been granted.

Source: Reuters

BP, Chevron among approved bidders for Brazil October oil auction: ANP

26 October. BP, Chevron Corp and China's CNOOC are among 12 companies cleared to bid in an October exploration rights auction in Brazil, oil regulator ANP said. Exxon Mobil Corp, Colombia's Ecopetrol SA, Norway's Equinor ASA, Australia's Karoon, Qatar's QPI, Spain's Repsol SA, Royal Dutch Shell PLC, France's Total SA and Brazil's state-controlled Petroleo Brasileiro SA also won approval to bid in the auction.

Source: Reuters

China's July crude oil imports from Malaysia near record

26 August. China's crude oil imports from Malaysia stood near record levels in July, data from China's General Administration of Customs showed, with traders and a tanker-tracking analyst citing oil either transhipped from Venezuela or blended with Venezuelan crude for the unusual growth. Crude imports from Malaysia rose to 1.35 million tonnes (mt) last month, more than double from a year earlier, data showed. That was just below the previous record set in May of 1.38 mt, triple the average

monthly volume in the first four months of 2019. Emma Li, analyst with Refinitiv Oil Research, estimated that about 500,000 tonnes of the Malaysian supplies arriving in July were transshipped from Venezuelan crude supplied by Russian state oil firm Rosneft. The surge in Malaysian exports contrasted with a fall in total crude oil production by its dominant oil and gas producer Petronas, which recorded a 1.3 percent drop year-on-year to 2.4 mn barrels of oil equivalent per day in the first quarter.

Source: Reuters

New oil contracts depend on output, investment: Mexico's President

23 August. Mexico's President Andres Manuel Lopez Obrador said that no new oil and gas contracts will be awarded to private firms if companies already awarded contracts do not produce crude or invest. Lopez Obrador's administration has cancelled auctions designed to bring in private oil companies to work alongside Mexican state oil company Petroleos Mexicanos.

Source: Reuters

South Sudan makes minor oil discovery, first since independence

22 August. South Sudan has made a small oil discovery in Northern Upper Nile State, its first since independence in 2011 when exploration was interrupted by war and instability, Oil Minister Awow Daniel Chuang said. The new field in the Adar area of the state contains 5.3 mn barrels of recoverable oil and will be linked to the nearby Paloch oilfields, which are operated by Dar Petroleum Operating Company, Chuang said. The country gets almost all its revenue from oil and has boosted output, now at 180,000 barrels per day (bpd), as it struggles to rebuild its shattered economy after a five-year civil war. The government is keen to reach pre-war oil production levels of 350,000 to 400,000 bpd by mid-2020.

Source: Reuters

Canada's Alberta extends oil curtailments through 2020 due to slow pipeline progress

21 August. The government of Canada's main oil-producing province, Alberta, said it was extending mandatory curtailments on crude production by an extra year through 2020, because of uncertainty about when expanded pipelines may come online. Alberta's previous New Democratic Party government imposed production limits in January to drain a glut of oil in storage that built up due to congested pipelines. The government said it would raise the exemption in the curtailment formula for all oil producers to 20,000 barrels per day (bpd) from 10,000 bpd, effective in October. The move means that curtailment will apply to only 16 of Alberta's 300 oil producers, down from 29 companies currently. In October, oil production will rise slightly to 3.79 mn bpd from 3.76 mn in September, Alberta Energy Minister Sonya Savage said.

Source: Reuters

INTERNATIONAL: GAS

Peru natural gas production hit by leak at Pluspetrol plant

21 August. Argentine energy company Pluspetrol will reduce production from its Las Malvinas natural gas plant in Peru while it repairs a leak detected in one of its pipes, Peru's government said. The energy and mines ministry announced an emergency measure to allow it to prioritize domestic natural gas supplies for households while Las Malvinas produces a third less natural gas. Output will nearly resume the normal daily level of around 1.4 billion cubic feet (bcf), it said. It was unclear how long the pipe at Las Malvinas had been leaking gas. The ministry said it was detected during a routine internal inspection. Controlled by the Pluspetrol-led Camisea Consortium, Las Malvinas processes natural gas from blocks 88 and 65 in Peru's Camisea fields and feeds Pampa Melchorita, the country's sole liquefied natural gas (LNG) plant. Last year, Peru suspended exports of natural gas and imposed fuel rationing due to technical issues at Las Malvinas that impacted production.

Source: Reuters

INTERNATIONAL: COAL

Putin orders review of Russian coal mining tax

24 August. Russian President Vladimir Putin has asked the government to review a mineral extraction tax for the Russian coal industry by 31 October. Russia is the world's third largest coal exporter after Australia and Indonesia. Putin has been a proponent of further expansion of the country's export infrastructure and seeking new coal markets, with China seen as a particularly important customer. Putin requested the review after a meeting with heads of Russian coal producing regions. It was unclear if the review would bring potentially lower or higher level of taxation for coal miners. The energy ministry said that the country's annual coal output was expected to rise to 550-670 million tonnes (mt) by 2035 from the current 440 mt. Putin also ordered the government to make sure by 1 February that the country's coal export plans are synchronised with the Federal Security Service (FSB)'s plans to develop border control check points and vehicle and railway access to them.

Source: Reuters

China's coal demand to peak around 2025, global usage to follow

23 August. China's coal demand will start to fall in 2025 once consumption at utilities and other industrial sectors reaches its peak, easing pressure on Beijing to impose tougher curbs on fossil fuels. The world's biggest coal consumer is expected to see total consumption fall 18 percent from 2018 to 2035, and by 39 percent from 2018 to 2050, the CNPC Economics and Technology Research Institute, run by the China National Petroleum Corp (CNPC), forecast in a report. Cutting coal consumption and replacing it with cleaner energy like natural gas and renewables has been a key part of China's energy strategy, but it has continued to approve new mines and coal-fired power plants and support new projects overseas. Though the share of coal in the country's total energy mix fell to 59 percent last year from 68.5 percent in 2012, overall consumption in 2018 rose 3 percent from a year earlier to 3.82 billion tonnes.

Source: Reuters

INTERNATIONAL: POWER

South Africa's Eskom could sell coal-fired power plants

27 August. South Africa's state power firm Eskom could sell its coal-fired power stations, possibly through a series of auctions, according to a policy paper published by the finance ministry. Eskom supplies more than 90 percent of the power in Africa's most advanced economy but is dependent on government bailouts. It is deep in crisis as its electricity sales are on the decline and its debt-service costs have soared. President Cyril Ramaphosa promised this year to split Eskom into different units for generation, distribution and transmission, as part of steps to make it more efficient.

Source: Reuters

Shell enters Australia power industry with \$419 mn bid for ERM Power

22 August. Royal Dutch Shell has made its first foray into Australia's highly competitive power sector with a A\$617 mn (\$419 mn) takeover offer for ERM Power Ltd, the country's no. 2 energy retailer to businesses and industry. The deal would instantly give Shell a power supplier with almost a quarter share of the commercial and industrial retail market in Australia, second only to Origin Energy in that space. Shell, already one of Australia's biggest gas producers, wants to use its global scale in oil and gas to build a power business, as the world rapidly shifts toward cleaner energy.

Source: Reuters

Nasdaq plans day-ahead power market launch in Germany, France, Nordics around April 2020

22 August. Nasdaq's commodities exchange plans to launch its day-ahead auction market for electricity in Germany, France and Nordics around April 2020, its head of European Commodities Georg Aasen said. Currently Nord Pool is alone in the Nordics in offering day-ahead electricity trading, but will be joined by EPEX SPOT at the end of the year.

Source: Reuters

INTERNATIONAL: NON-FOSSIL FUELS/ CLIMATE CHANGE TRENDS

Montenegro's Perucica hydropower plant to reconnect to grid on 1 September: EPCG

26 August. Montenegro's 307 MW Perucica hydropower plant will reconnect to the grid on 1 September after completing an overhaul which began on 29 July, its operator power utility Elektroprivreda Crne Gore (EPCG) said. The overhaul of EPCG's oldest hydropower plant is aimed at extending its lifespan and boosting output and reliability. EPCG operates 649 MW of installed hydropower capacity and 225 MW of coal-fired power generation capacity.

Source: Reuters

Bangladesh, China to sign MoU for renewable energy power plant

26 August. A Memorandum of Understanding (MoU) between North-West Power Generation Company Ltd and China National Machinery Import and Export Corp is set to be signed, with the aim of setting up a renewable energy power plant. In addition to implementing the project to generate renewable energy, the joint venture company will finalize the power generation capacity of the plant.

Source: Dhaka Tribune

Japan's TEPCO may mothball reactors at world's biggest nuke plant

26 August. Japan's Tokyo Electric Power Company (TEPCO) said it may start to decommission at least one nuclear reactor at its Kashiwazaki-Kariwa power plant, the world's biggest nuclear plant by capacity, within five years of restarting two of the reactors at the site. In 2017, TEPCO received initial regulatory approval from the Japanese government to restart the No. 6 and No. 7 reactors at Kashiwazaki-Kariwa, each with a capacity of 1,356 MW. The plant site has seven reactors with a total capacity of 8,212 MW, equal to 20 percent of Japan's nuclear capacity.

Source: Reuters

Russia's first seaborne nuclear power plant sets sail across Arctic

23 August. Russia's first floating nuclear power plant set sail from the Arctic port of Murmansk to provide power to one of the country's most remote regions, sparking environmental concerns. Developed by the Russian state nuclear company Rosatom, the plant, known as "Akademik Lomonosov", set off on a 5,000 kilometre (3,100 mile) journey through Arctic waters to reach the Chukotka region, which lies across the Bering Strait from Alaska. The plant, loaded with nuclear fuel, will replace a coal-fired power plant and an aging nuclear power plant supplying more than 50,000 people with electricity in the town of Pevek.

Source: Reuters

German, Dutch governments meet to discuss climate change

22 August. German Chancellor Angela Merkel and key Cabinet Ministers are meeting their Dutch counterparts to discuss ways of tackling climate change together. The meeting at Dutch Prime Minister Mark Rutte's official residence comes as Germany is set to miss its emissions goals for 2020 by a wide margin, even as Merkel's government acknowledges that it has to further ramp up its ambition by next year as part of its commitment under the 2015 Paris climate accord. The Dutch Ministers will explain how they reached broad consensus in June this year for a wide-ranging raft of measures, from a carbon tax to more bicycle parking at railway stations, to slash the country's emission of carbon by half by 2030. In a typically Dutch approach, that could appeal to the German government, sectors of industry and society that will have to implement changes sat down together for months to thrash out details of the climate package. Environmental groups welcomed parts of the Dutch deal, but said it was insufficient in the battle to halt the warming of the Earth's atmosphere.

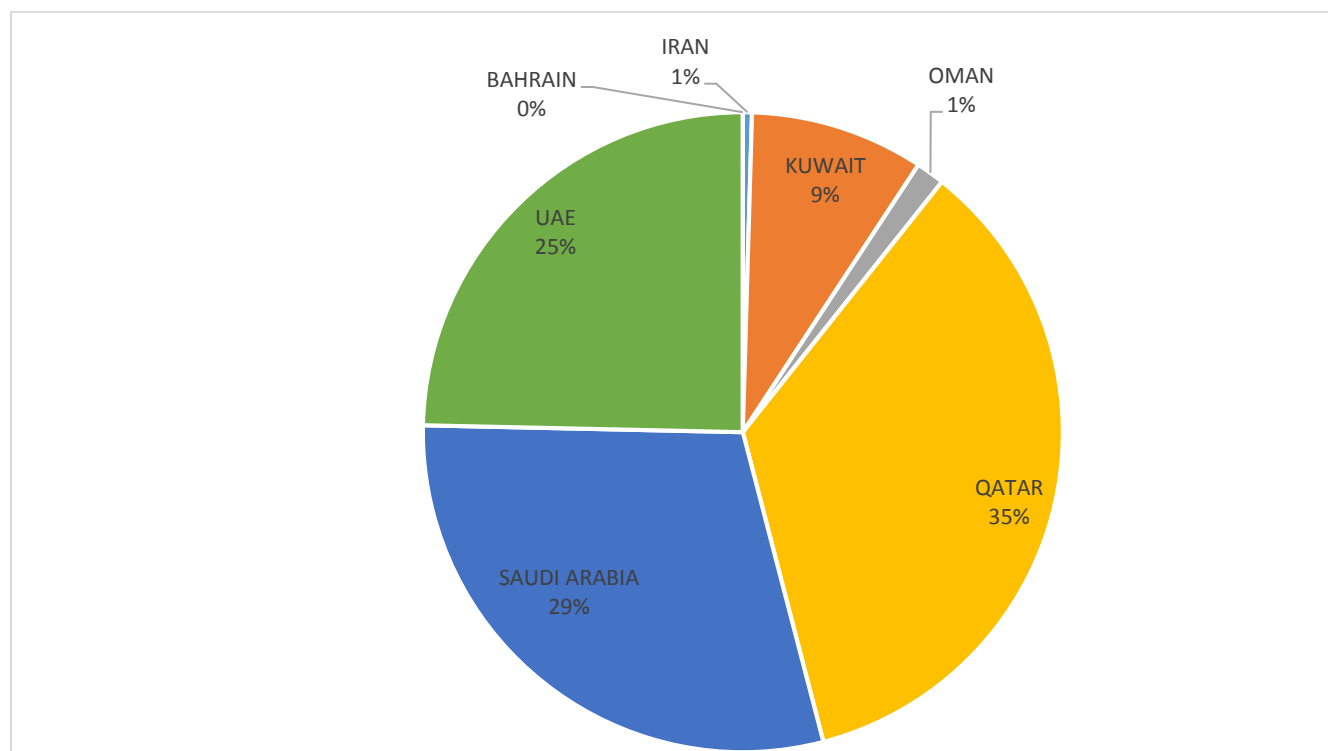
Source: The Economic Times

DATA INSIGHT

Countries wise LNG Imports of India

Countries	Quantity ('000 Tonnes)
Algeria	99
Indonesia	1.7
Malaysia	1.7
Maldives	26
Norway	12.6
Singapore	3.5
USA	29.8
Middle East	10923
Others	0.10

Distribution of India's LNG Imports from Middle East



Note: All above statistics corresponds to the year 2016-17

Source: Compiled from Lok Sabha Questions

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