FIPI

November 2018

Policy & Economic Report - Oil & Gas Market

Federation of Indian Petroleum Industry (FIPI)

3rd Floor, PHD House, 4/2, Siri Institutional Area,
August Kranti Marg, New Delhi - 110016

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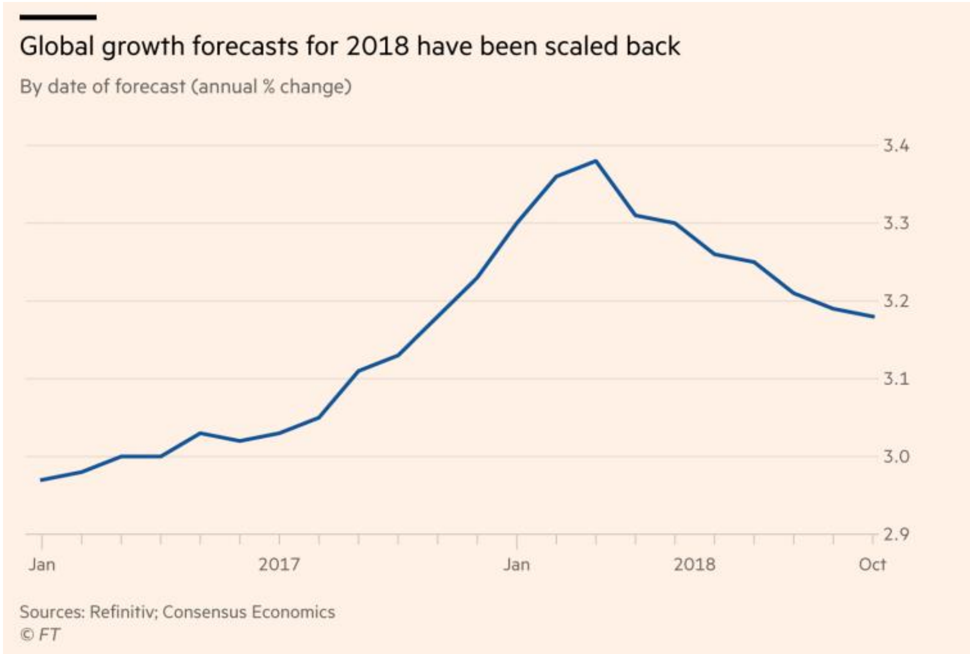
Policy & Economic report – Oil & Gas market

Economy in Focus

Darkening Outlook in the view of Global Economy

Global Economy May Be Slowing More Than Expected, Lagarde Says

The International Monetary Fund is worried that the global economic growth may actually be slowing down more than the forecast just a month ago. The third quarter shows dismal figures all around. The German economy took a hit of 0.2 per cent between June and September while Japan's GDP dropped 0.3 per cent. Eurozone saw the slowest growth rate of 0.2 per cent since 2014 and the Chinese growth rate fell to its lowest in the decade. Even the US, where the GDP rose 0.9 per cent aided by tax cuts, the growth was still lower than the second quarter rate of 1 per cent.

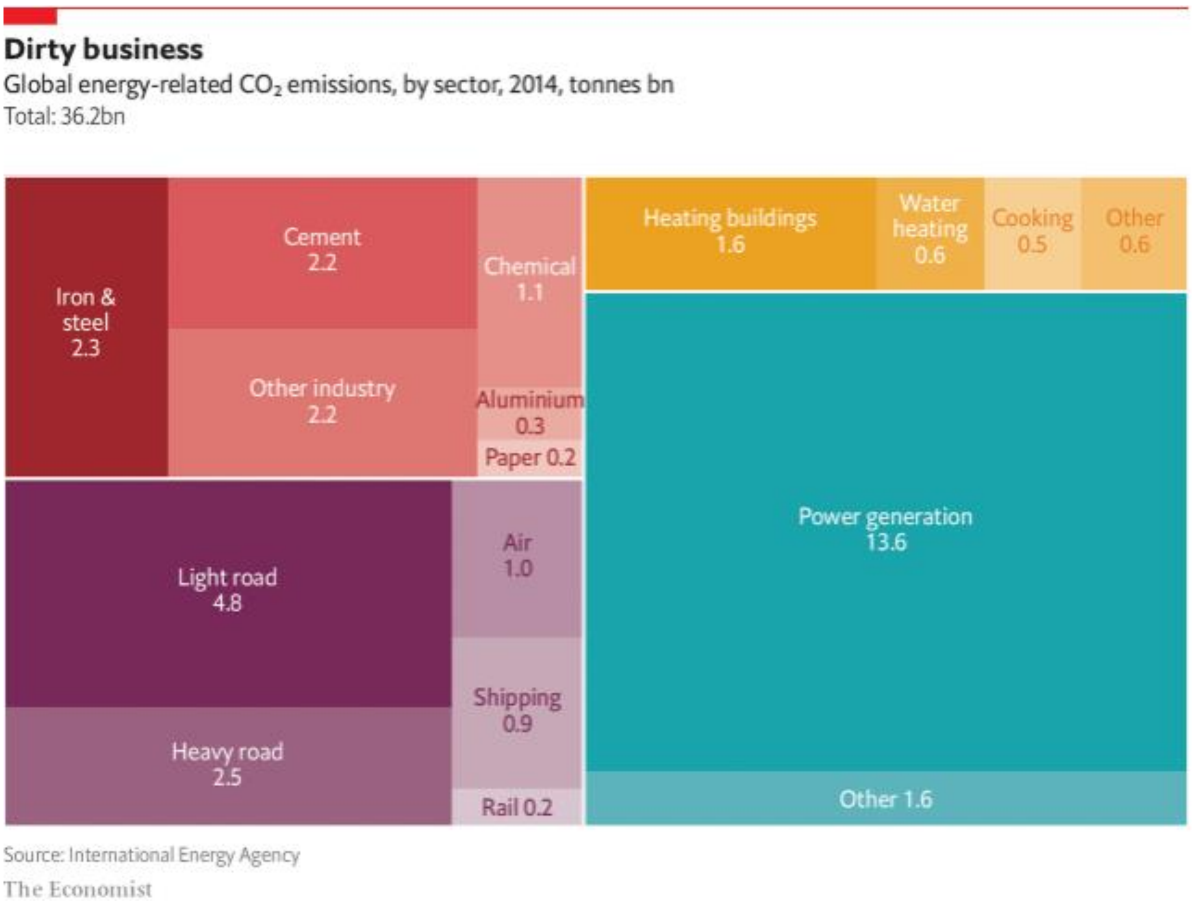


Decarbonizing the Global economy

The world seems to be torn between the desire to curb global warming and its dependence on fossil fuels. Even with implementation of the promises made under the 2015 Paris agreement on climate change, the world would be on the path to global warming at 3 degrees Celsius above pre-industrial levels by the end of this century, rather than the 1.5-2-degree Celsius countries agreed to strive for.

Inspite of the fact that renewables are advancing with absorbing investments twice as much for power generation as coal, gas and nuclear combined and rising sales of electric vehicles, International Energy Agency claims that the global energy system still derived 85% of its energy from fossil fuels. Estimates claim that power supply will increase four-fold over the next 30 years. The production of this scale of electricity will require a phenomenal increase in renewables and nuclear power as well as use of fossil fuels with carbon capture and storage.

The harder part is yet to come. The challenge lies in trying to decarbonize those sectors in which electricity and lithium ion batteries cannot be easily used such as heavy transport, heating and industry. 2014 saw these sectors produce about 15bn tonnes of Carbon Dioxide or 41 percent of the total compared with 13.6bn tonnes for the entire power sector.



Intergovernmental Panel on Climate Change states that in order to curb to global warming to less than 2-degree Celsius total emissions from global energy use across industry alone will have to be 50-80% lower by 2050 than they are now and as much as 75-90% lower if the rise in temperatures is to be capped at 1.5 degrees Celsius.

There are a number of alternatives technologies apart from electricity and batteries, that are fairly simple and finite such as hydrogen and ammonia, biofuels, synthetic fuels, ccs, and removal of carbon from the atmosphere. While they are some definite obstacles to in the usage of some of them such as making, moving and using hydrogen on a large scale, some are much closer to commercialization than the others. Statistics claim that 2025-35 could see long-distance lorries powered by battery and hydrogen. The 2030s may see synthetic hydrocarbons being developed for ships and planes and 2040s could realize the usage of CCS (Carbon capture and storage) being applied on a vast scale in the industry.

The decarbonization of energy sector has huge economic benefits. Estimates suggest that between 2015 and 2016, $2.4 trn, or roughly 2.5 % of world GDP would have been the annual cost of keeping the rise in temperature to 1.5-degree Celsius. Last year saw the total energy investment mostly in coal, oil and gas was $1.6trn.

What is promising about these technologies is that none of it is new and hence unlike fossil fuels, the more they are used, the more their costs will fall. Hydrogen could be the best alternative for mass electrification and could also be used in heavy transport, heating and industry and this would require vast quantities of low-cost, zero-carbon electricity and hence this would be the pressing priority of the coming decade.

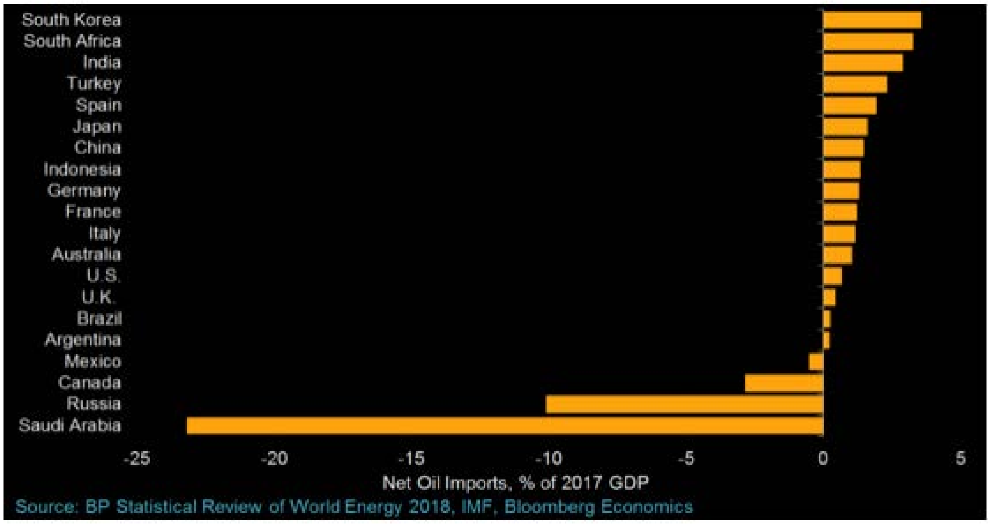
Staggering Economic Costs of BREXIT

Latest government analysis states that Brexit will mean that UK growth will be slower than if it hadn't voted to leave. Modelling suggests that it would reduce UK GDP by 2-4% in the next 15 years. If there is no-deal Brexit, the economy could very well shrink by 9.3%.

Brexit will lead to stagnancy for the UK economy due to a steep fall in foreign investment resulting into a disappointing level of overall investment. As more companies start moving investments outside of UK, there will be a sharp fall in employment levels due to relocation of jobs.

Globally, UK's exit from EU will lead to a more fragmented global economy resulting from less efficient economic interactions and more complicated cross-border financial flows. Tax and regulatory arbitrage will become common practice in economic policy formulation. Internationally, more countries will find being large and a relatively closed economy a more attractive option while smaller economies will tend to form tightly knit blocs.

The world in the face of $ 50 Oil



With the winter approaching in the northern hemisphere, the oil price slump is definitely expected to provide much sought relief to households and business during a period of slowing economic growth. Countries such as South Africa and China stand to gain especially, the latter in the amid a trade war with the US and domestic challenges.

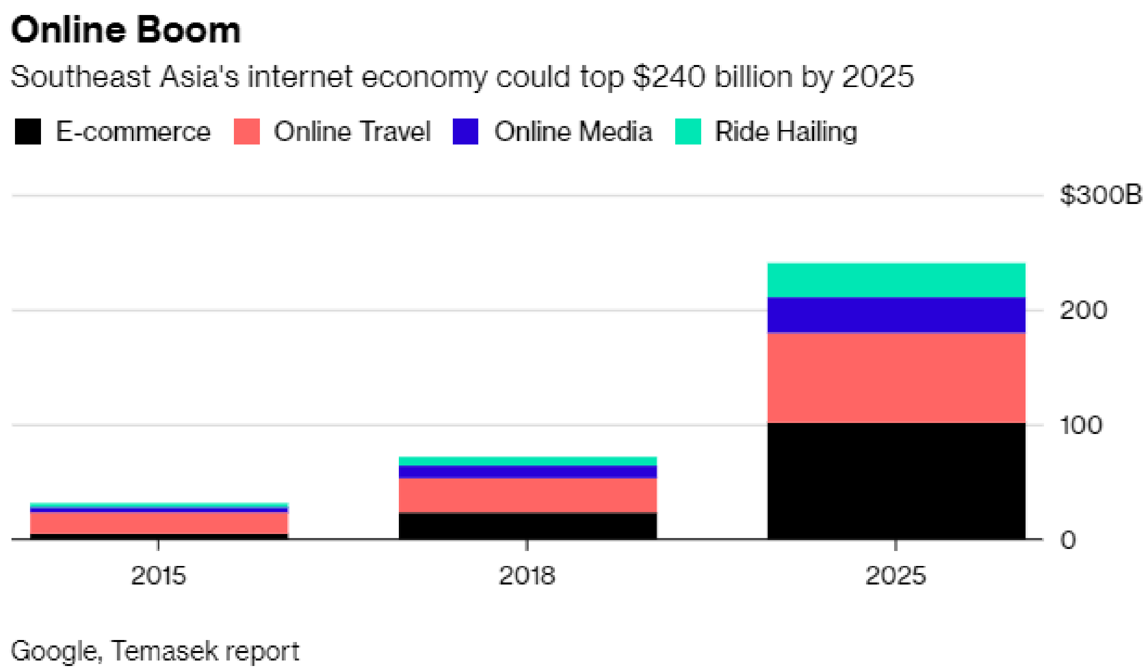
Inflationary pressures are bound to see relief with lesser pressure on central banks to raise interest rates.

Analysts estimate that with every $10 per barrel fall in prices, incomes are boosted by 0.5 to 0.7 per cent of gross domestic product in major emerging market oil importers. However, the same discount will result in a loss of 3-5 % of GDP IN Gulf nations and a slowdown of 1.5-2% in the U.A.E, Russia and Nigeria, all on an annualized basis.

South Asia's internet economy on the path to expansion

The internet economy of South Asia is set to expand 37 per cent this year to $ 72 billion, with projections to exceed $ 240 billion by 2025.

Smartphones of 350 million online users across Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam fuel this region's internet economy. Four pertinent sectors of e-commerce, ride-hailing, online media and travel are shown in the annual research report by Google and Temasek, Singapore's state investment company.



A record amount of capital from venture capitalists, private equity firms and corporate investors to the tune of $9.1 billion in the first six months of the year 2018 was raised compared $9.4 billion in all of 2017.

Mis-firing sectors bring down Indian GDP

The GDP growth is expected to be around 7.6%YoY in Q2. Agriculture and industry sector are considered to be the cause for the Indian economy to not touch the 8% mark.

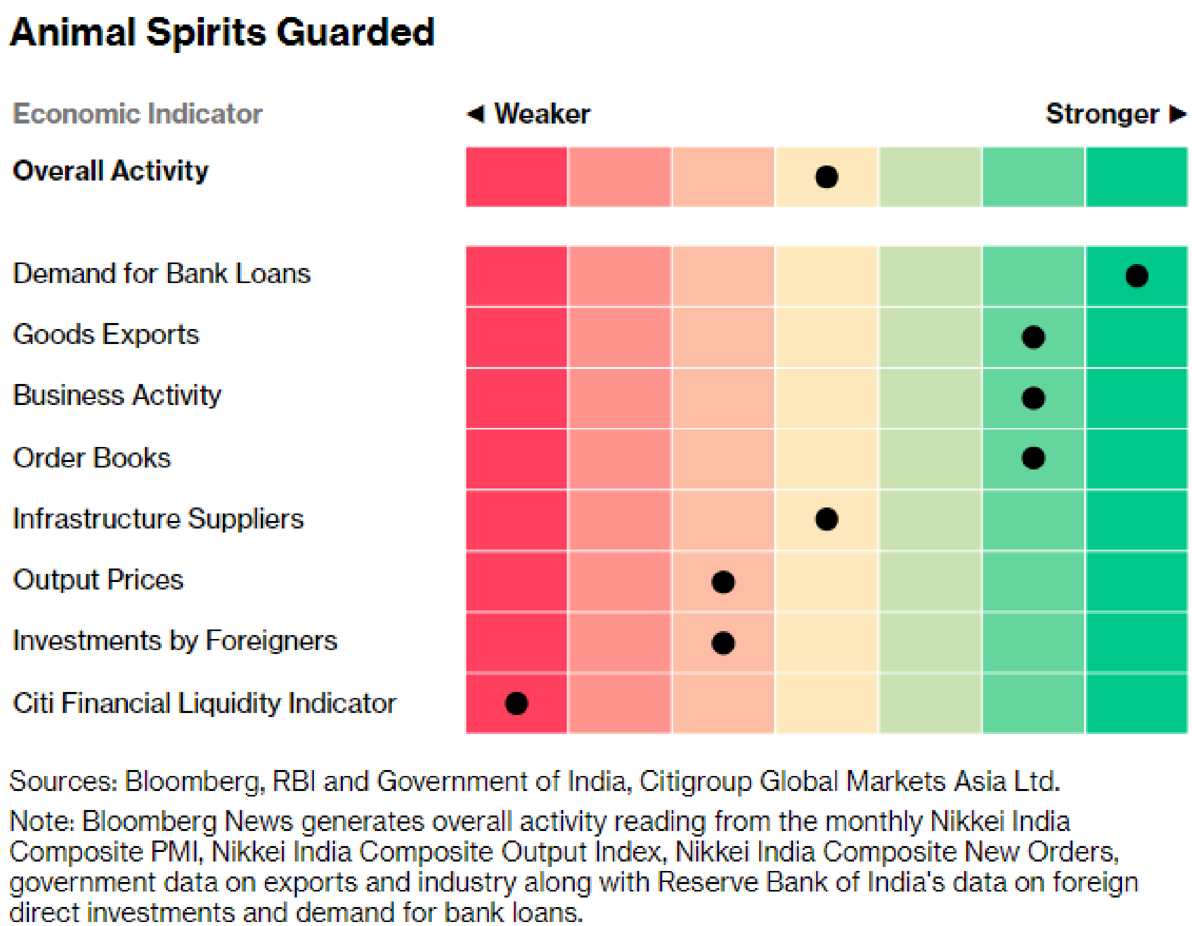
Growth estimates (% YoY)	Q1-FY2018	Q2-FY2018	Q1-FY2019	Q2-FY2019 (Exp)
Agriculture	3.0	2.6	5.3	4.8
Industry	0.1	6.1	10.3	6.9
of which:				
Mining & quarrying	*1.7*	*6.9*	*0.1*	*-1.2*
Manufacturing	*-1.8*	*7.1*	*13.5*	*7.8*
Electricity, gas,water supply & other utility services	*7.1*	*7.7*	*7.3*	*9.0*
Construction	*1.8*	*3.1*	*8.7*	*6.7*
Services	9.5	6.8	7.3	8.2
of which:				
Trade, hotels, transport & communication	*8.4*	*8.5*	*6.7*	*7.2*
Financial, real estate & professional services	*8.4*	*6.1*	*6.5*	*6.8*
Public administration, defence and Other Services	*13.5*	*6.1*	*9.9*	*12.5*
GVA at basic prices (% YoY)	5.6	6.1	8.0	7.4
GDP (% YoY)	5.6	6.3	8.2	7.6

Source: CSO, ICICI Bank Research

Sharp slowdown in the output of coal, crude oil and natural gas indicates a dip in mining in Q2 due to monsoons. A marginal improvement has been recorded in the manufacturing PMI while the Industrial Credit growth has picked up sharply over August and September.

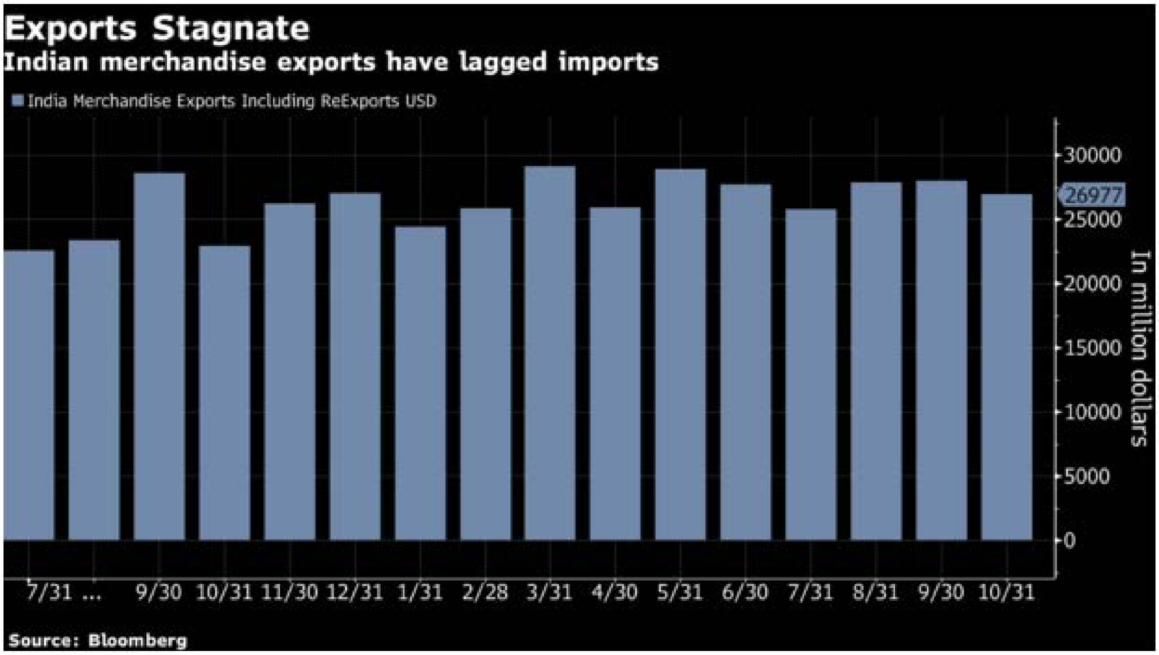
While kharif sowing for 2018 has been about 1 % higher with rice and oil seeds showing greater acreage as compared to last year, sowing of pulses and coarse grains has been on the lower side. With an overall 9% monsoon deficiency in July-September and spates of acute and moderate rainfall elsewhere, 250 districts of the country face monsoon deficit and drought like situation.

A less than optimistic outlook for the World's fastest growing economy



Revival of consumer demand seems unaffected with a banking liquidity crunch and weak business sentiment. "Animal Spirits", more commonly referred to as investors' confidence in taking action has been unchanged since October.

Business sentiment has been seen taking a hit, with confidence dropping to a 20-month low in October according to IHS Markit.



While exports have grown by 17.9 percent in October from a year ago and was driven by sectors such as textiles, yarns and garments, in value terms, exports were lower than imports, hence putting an undesirable pressure on trade deficit.

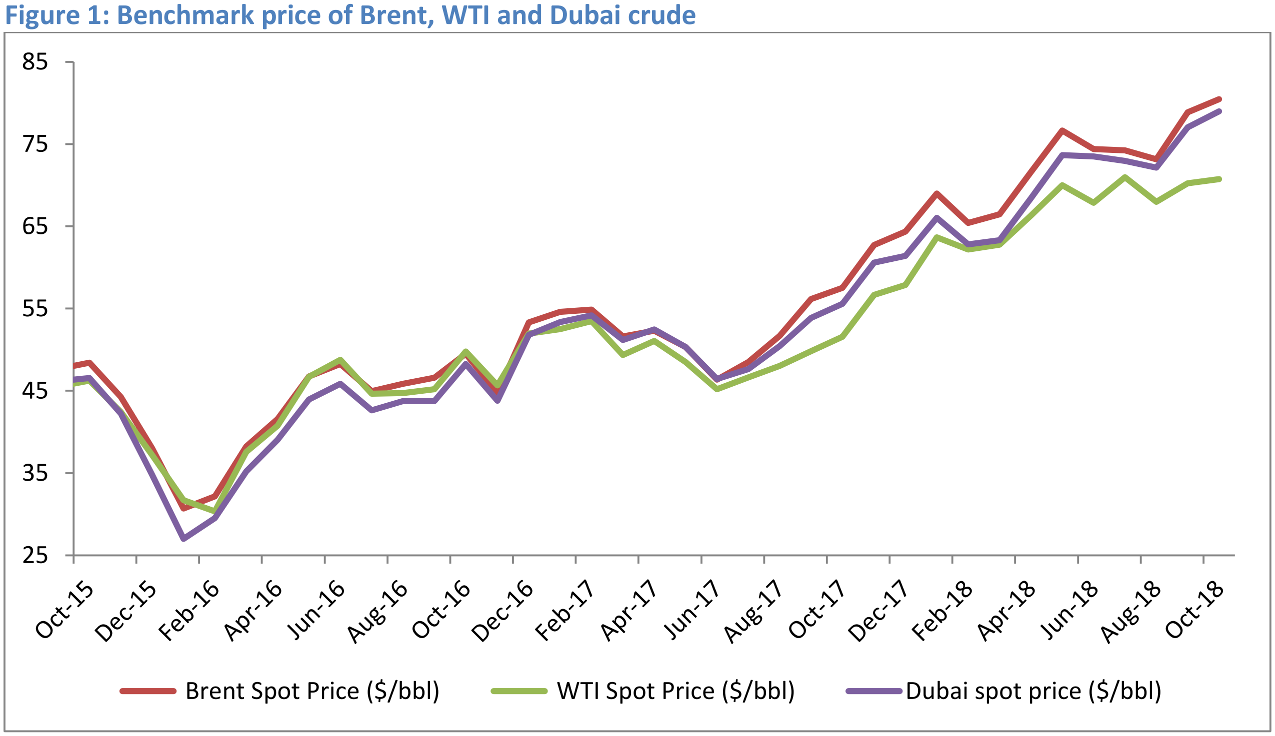
Oil & Gas Market

Crude oil price

At the start of October, oil prices were on an upward trend on signs that U.S. sanctions are shrinking Iran's crude exports faster than anticipated, potentially leaving the world with a shortage of oil. The sanctions are expected to cut crude exports from Iran by about 1 mbpd, but concerns over faltering demand and increase in output from OPEC and Russia my lead to a market with oversupply.

Along with increase in output and high oil inventory levels, the global fall in equities across major stock markets also resulted in fall in commodity prices. One of the main reasons that triggered this volatility was when concerns over rapidly rising U.S. Treasury yields fueled a steep drop in U.S. equity markets. This sent volatility to heightened levels which spread across all markets including currencies and commodities. Other factors contributing to the increase in volatility were lingering concerns over the U.S.-China trade dispute, and various geopolitical issues. Commodity traders and money managers liquidated their long positions in oil in October and cashed in on profit after the recent price rally, which led to a correction in prices. Brent, WTI and Indian basket crude prices declined by around 7%, 9% and 8% respectively from the prices at start of the month.

Figure 1: Benchmark price of Brent, WTI and Dubai crude



Source: WORLD BANK

- Brent crude price averaged $80.47 per bbl in October 2018, and was up 2.0% and 39.9% on a month on month (MoM) and year on year (YoY) basis, respectively.
- WTI crude price averaged $70.75 per bbl in October 2018, and was up 0.8% and 37.2% on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged $78.96 per bbl in October 2018, and was up 2.5% and 42.1% on a month on month (MoM) and year on year (YoY) basis, respectively.

Table 1: Crude oil price in October, 2018

Crude oil	Price ($/bbl) in October 2018	MoM (%) change	YoY (%) change
Brent	80.47	2.0%	39.9%
WTI	70.75	0.8%	37.2%
Dubai	78.96	2.5%	42.1%

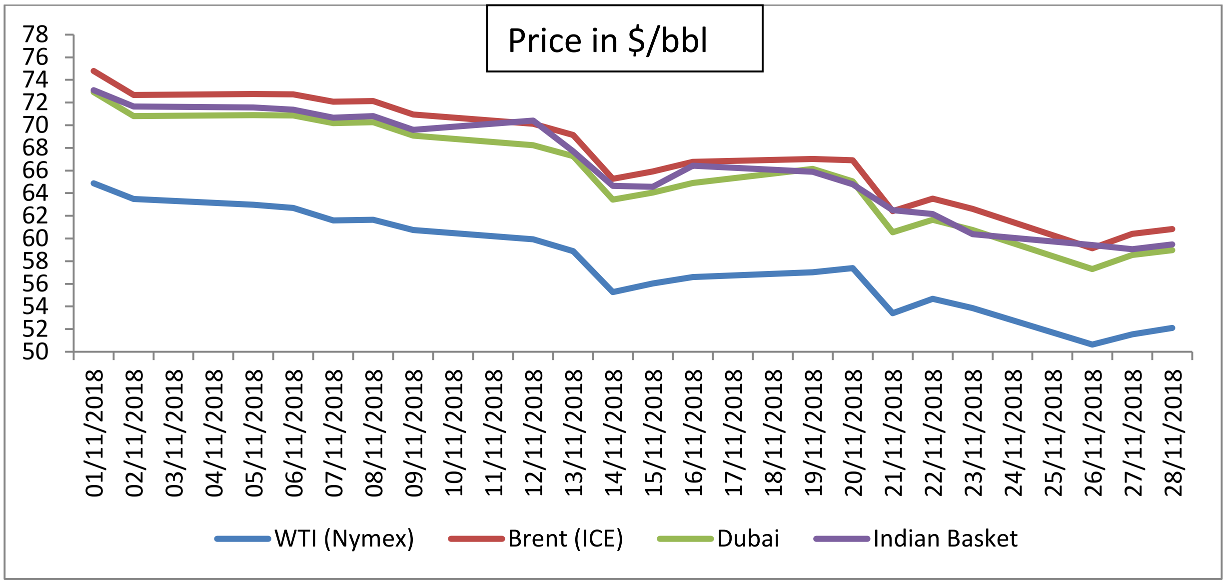
Source: WORLD BANK

Crude oil prices at 8-month low in November from 4-year high in October

At the start of November, oil prices were sliding down on account of waivers granted by the U.S to the 8 countries from its sanctions on Iran. As the imports from Iran didn't stop as expected, the market was left with surplus supply. Crude production from U.S and Russia hit all-time high in November 2018, leading to imbalance in the market. OPEC's forecast showed a decline in demand for crude in 2019. As a result, OPEC has suggested a production cut of about 1.4 mbpd to balance the oversupplied market.

With record production from U.S and Russia, and increase in oil inventory levels, the commodity prices across the globe declined. One of the main reasons that triggered this volatility was the waiver given by U.S in regards to Iranian crude imports for 8 countries. This sent crude supply and inventories to a higher level, causing the price crash. Uncertainty over the U.S.-China trade war, geopolitical situations and slowdown in global growth are other reasons that attributed to price fall. Brent, WTI and Indian basket crude prices declined by around 15.8%, 18.2% and 25.72 % respectively from the prices at start of the month. Balancing the demand-supply trends ramp up the pressure on OPEC ahead of its scheduled meet with the allies in Vienna on December 6, when they are expected to announce the production cut officially.

Figure 2: Crude oil price in November 2018

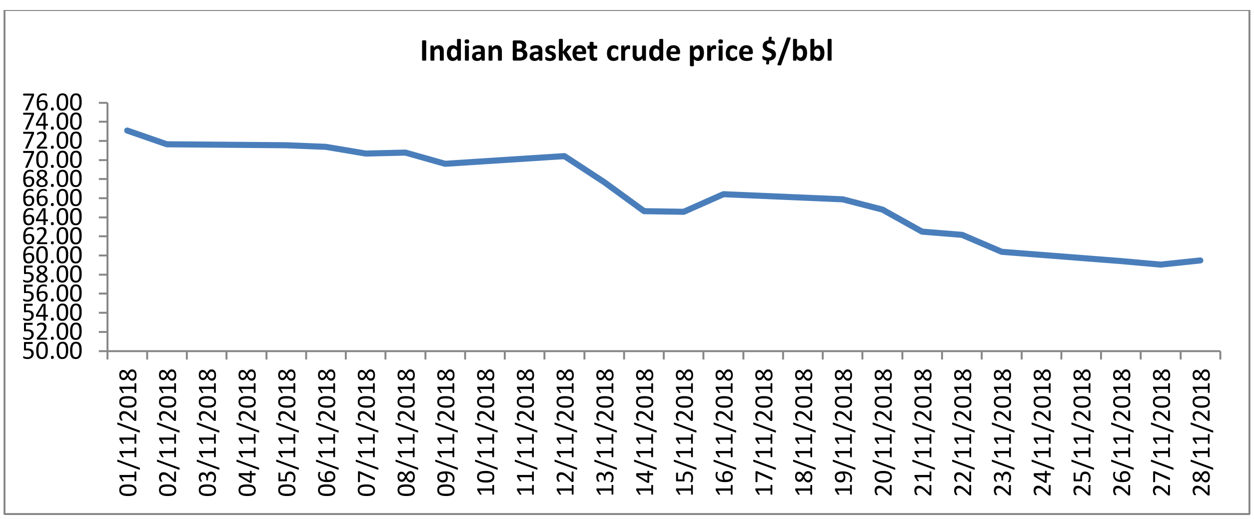


Source: EIA, PPAC

Indian Basket Crude oil price

- The Indian basket of Crude Oil represents a derived basket comprising of Sour grade (Oman & Dubai average) and Sweet grade (Brent Dated) of Crude oil processed in Indian refineries in the ratio of 72.38:27.62 during 2016-17.

Figure 3: Indian crude oil basket price in $ per bbl



Source: Petroleum Planning & Analysis Cell

- Indian crude basket price averaged $67.99 per barrel in November, down 15.1% Month on Month (MoM) basis and up 10.9% on a year on year (YoY) basis, respectively.

Oil demand & supply

Preliminary data indicates that global oil supply increased by 0.44 mb/d to average 99.76 mb/d in October 2018, compared with the previous month. An increase in non-OPEC supply (including OPEC NGLs) of 0.31 mb/d compared with the previous month was mainly driven by OECD Americas. Along with a rise in OPEC crude oil production of 0.13 mb/d in October, this equates to a total increase in global oil output of 2.67 mb/d, y-o-y. The share of OPEC crude oil in total global production remained unchanged at 33% in October compared with the previous month. Estimates are based on preliminary data from direct communication for non-OPEC supply, OPEC NGLs and non-conventional oil, while estimates for OPEC are based on secondary sources.

In 2019, non-OPEC oil supply growth was revised up by 0.12 mb/d from the October's forecast to stand at 2.23 mb/d and is now projected to reach an average of 62.09 mb/d. The upward revision comes despite a downward adjustment for oil supply in Canada, China, Brazil and Mexico. Demand forecasts for 2019 for non-OPEC supply growth indicate higher volumes outpacing the expansion in world oil demand, leading to widening excess supply in the market. In 2019, world oil demand growth is forecast to grow by 1.29 mb/d y-o-y, about 70000 b/d lower than October's projection, with total world consumption to reach 100.08 mb/d.

The recent downward revision to the global economic growth forecast and associated uncertainties confirms the emerging pressure on oil demand observed in recent month. OPEC and participating non-OPEC countries in the DoC will next meet at the beginning of December to assess market developments and consider how best to continue their cooperation over the coming period. The Declaration of Cooperation partners remain unwaveringly focused on supporting oil market stability for the benefit consumers, producers, and the industry, as well as the world economy, at large.

Table 2: World Oil demand in mbpd

	2017	1Q18	2Q18	3Q18	4Q18	2018	Growth	%
Total OECD	**47.42**	**47.69**	**47.24**	**48.13**	**48.37**	**47.86**	**0.44**	**0.94**
Dev. Countries	**32.13**	**32.44**	**32.60**	**32.86**	**32.71**	**32.65**	**0.53**	**1.64**
~ of which India	*4.53*	*4.83*	*4.74*	*4.40*	*5.02*	*4.75*	*0.22*	*4.76*
Other regions	**17.74**	**17.68**	**18.18**	**18.32**	**18.90**	**18.27**	**0.53**	**2.99**
~ of which China	12.32	12.28	12.84	12.65	13.07	12.71	0.39	3.18
Total world	**97.29**	**97.80**	**98.02**	**99.32**	**99.98**	**98.79**	**1.50**	**1.54**

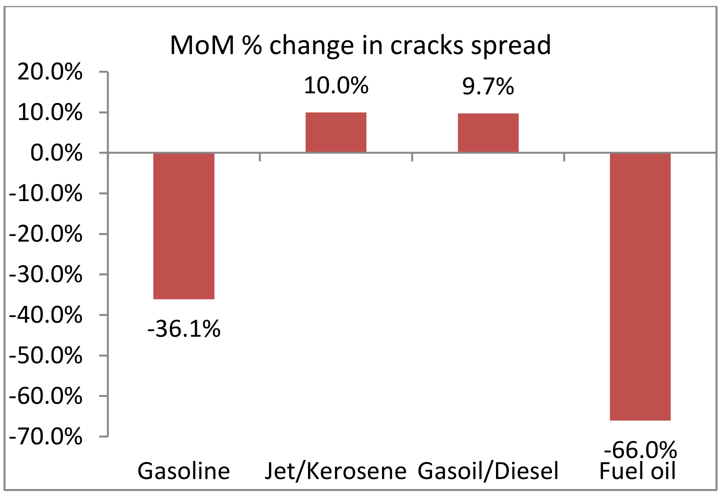
Source: OPEC monthly report, November 2018

*Note: *2018 = Forecast*

Global petroleum product prices

Prices in the Asian Gasoline-92 market saw a decline of 33% over the previous month. Retail price has fallen by significant smaller margin. Weaker refiner margin is likely to prompt South Korea and Japan to trim the gasoline exports. The fall in crude price hasn't helped the refiners to boost their profit margin. However, the demand has increased due to seasonality. As the refineries are

Jet/Kerosene is seeing cash discounts on weaker demand. Warmer winter months have likely impacted the demand for kerosene which is widely used in heating. On the back of ample supplies, there is a lackluster in buying the jet fuel with no major bids or deals. However, on the refining front, jet refining margins are currently at their strongest level for the first time since 2012. The markets are entering an unprecedented period of uncertainty due to the geopolitical instability.

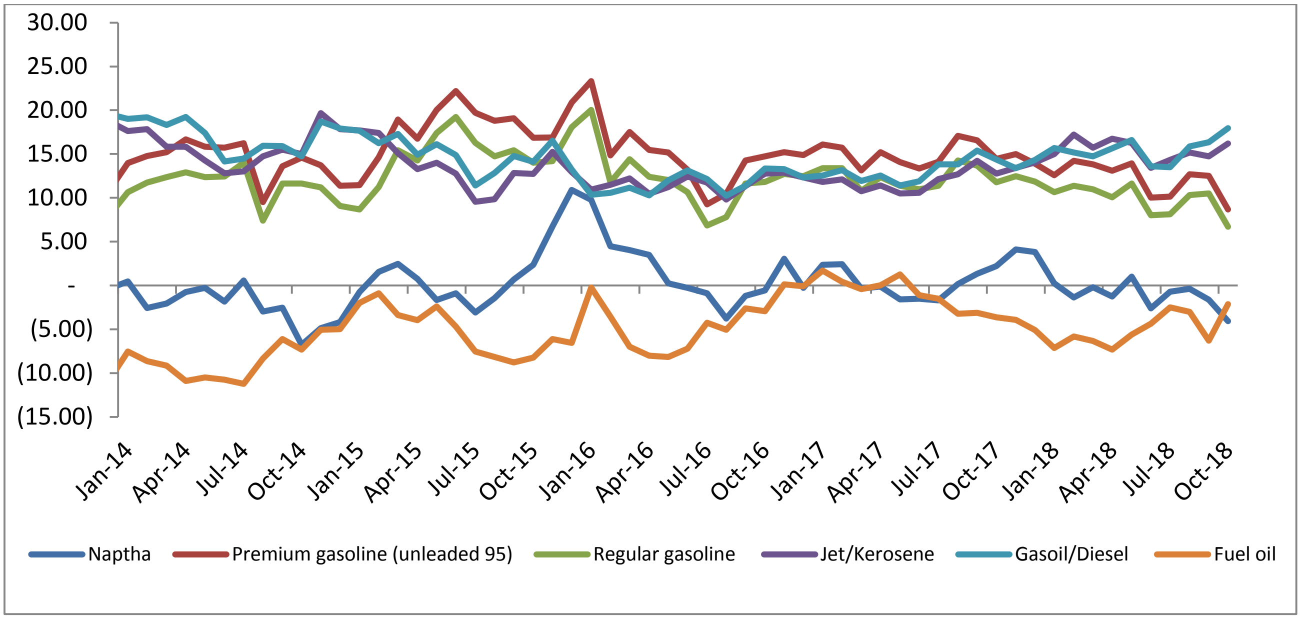


Source: OPEC monthly report

The Gasoil crack spreads declined by 36 % from October, where it was multi-year high. Completion of refinery maintenances in the East has eased out the supply market. Supply market in Singapore saw an increase in supply with the expectation of increased arbitrage flows. Despite the drop-in net imports, the inventory level was four weeks high. China, Malaysia and Qatar were the major destinations form Singapore for Fuel oil export.

The fuel oil market in Singapore received ample supply in the month of November and the inventory level jumped 13 % with regular deliveries coming from Iraq, Saudi Arabia, Netherlands, Malta and Russia.

Figure 4: Product crack spreads vs. Dubai crude



Source: OPEC, FIPI

Table 3: Singapore FOB, refined product prices ($/bbl)

Products	Price ($/b) in October 2018	MoM (%) change	YoY (%) change
Naptha	74.90	-0.6%	29.6%
Premium gasoline (unleaded 95)	87.64	-2.1%	25.1%
Regular gasoline (unleaded 92)	85.66	-2.1%	27.1%
Jet/Kerosene	95.16	3.7%	39.2%
Gasoil/Diesel (50 ppm)	96.91	3.8%	38.5%
Fuel oil (180 cst 2.0% S)	76.82	8.6%	47.9%
Fuel oil (380 cst 3.5% S)	76.59	8.6%	48.1%

Source: OPEC

Petroleum products consumption in India

- With the push by government on promotion of LPG, its Consumption has steadily increased in India. In October, LPG consumption increased 0.4% on MoM basis.
- Consumption of gasoline increased (4.9% YoY) driven by higher demand from transport segment.
- Demand for diesel also witnessed robust decrease of 6.8% on YoY basis in the month of October.

Table 4: Petroleum products consumption in India, October 2018

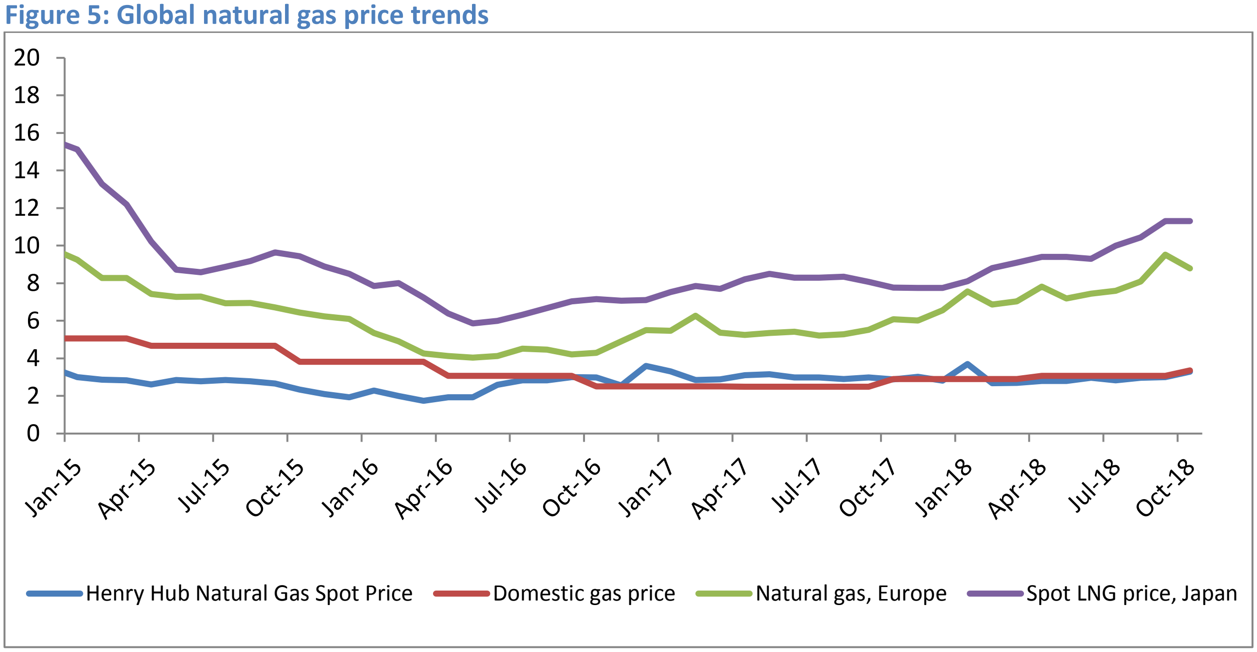
Petroleum products	Consumption in '000 MT October 2018	MoM (%) change	YoY (%) change
LPG	2,065	0.4%	4.8%
Naphtha	1,230	8.6%	5.2%
MS	2,331	4.4%	4.9%
ATF	689	3.8%	9.0%
HSD	6,988	15.9%	6.8%
LDO	49	12.9%	58.3%
Lubricants & Greases	328	-6.4%	-4.3%
FO & LSHS	555	-1.0%	-0.1%
Bitumen	566	42.8%	43.7%
Petroleum coke	2,048	2.4%	-13.1%
Others	854	8.6%	27.6%
TOTAL	**17,992**	**8.8%**	**4.6%**

Source: PPAC

Natural Gas Price

Natural gas prices in US remained low due to higher US production. LNG prices saw an upswing over previous year due to higher natural gas demand.

Figure 5: Global natural gas price trends



Source: EIA, WORLD BANK

Table 5: Gas price

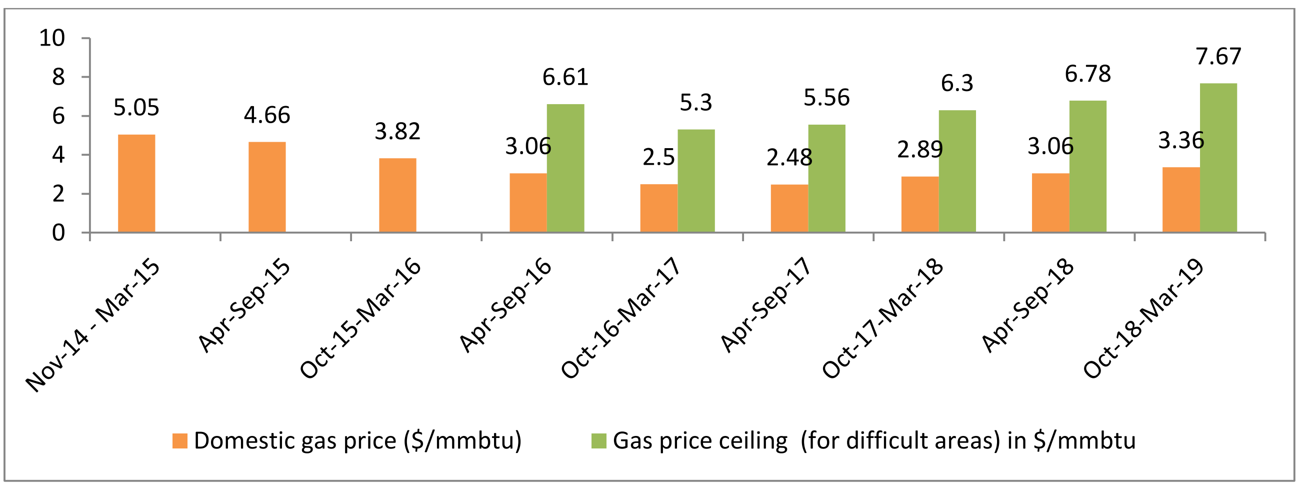
Natural Gas	Price ($/MMBTU) in October 2018	MoM (%) change	YoY (%) change
India, Domestic gas price	3.36	9.8%	16.3%
India, Gas price ceiling – difficult areas	7.67	13.1%	21.7%
Henry Hub	3.28	9.3%	13.9%
Natural Gas, Europe	8.79	-7.7%	44.6%
Liquefied Natural Gas, Japan	11.30	0.0%	45.4%

Source: EIA, PPAC,

Domestic natural gas price which takes into account international benchmarks including Henry Hub, Alberta hub, Russia and UK National Balancing Point, has increased around 23% as compared to a year before, thus capturing the international gas price trends.

A notification was issued by MoP&NG on 21st March 2016, for marketing including pricing freedom for gas to be produced from discoveries in deep water, ultra-deep water, and high-pressure high temperature areas. For the October to March 2019 period, the price of gas from such areas has been notified at $7.67 per MMBTU.

Figure 6: Domestic natural gas price

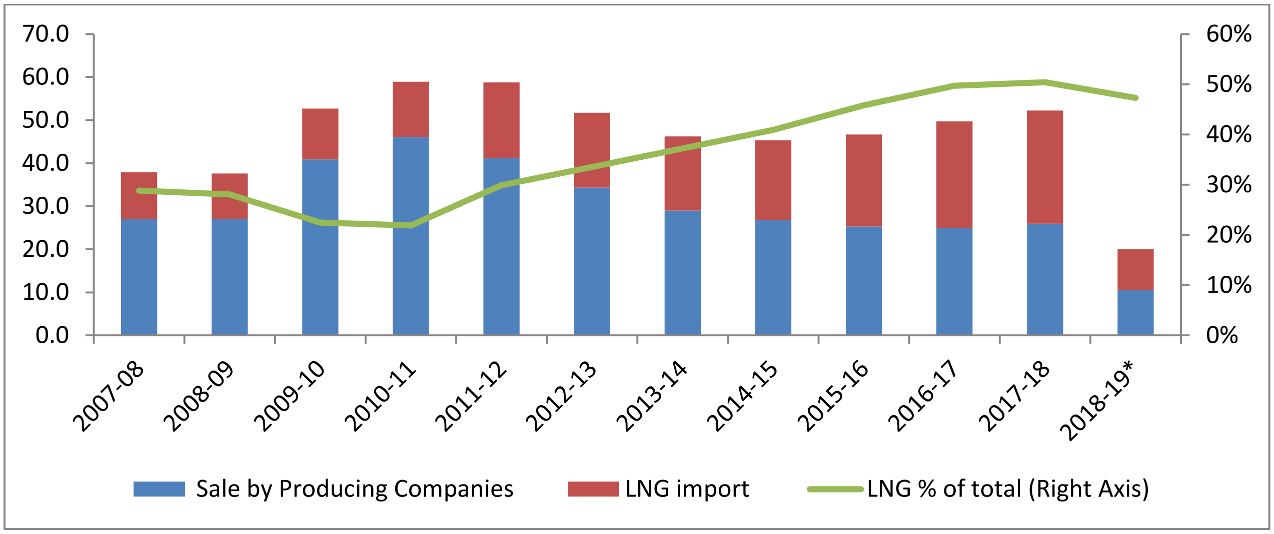


Source: PPAC

Natural gas production, consumption and import in India

- Natural gas constitutes for 6.5% of total energy primary mix of India
- Natural gas consumption in India has grown at a very slow pace in the past 3 – 4 years, with share of LNG imports increasing in the overall consumption mix

Figure 7: Domestic natural gas consumption, domestic production and LNG import in BCM



Source: PPAC

**Figures for 2018-19 are for the period of April – September only. Sale by producing companies includes internal consumption*

Key developments in Oil & Gas sector during the month

- **MoU signed between OMCs and CSC SPV for collaboration in LPG Services**

A Memorandum of Understanding (MoU) for collaboration in LPG services was signed on 3rd November between Oil Marketing Companies (IOCL, HPCL & BPCL) and CSC e-Governance Services India Limited in presence of Mr. Ravi Shankar Prasad, Minister of Law & Justice and Electronics & Information Technology (MeitY) and Mr. Dharmendra Pradhan, Minister of Petroleum & Natural Gas and Skill Development & Entrepreneurship. CSC SPV and OMCs have agreed to facilitate their distributors to avail the following services through Common Services Centers: booking new LPG connection (Ujjwala & General category), booking of LPG refills (14.2 Kg cylinders), supply & distribution of LPG cylinders (storage up to 100 Kgs,) through CSCs. Common Services Centre will help beneficiaries to provide the above OMCs service near to their home, accessing through Digital Seva Portal.

Mr. Pradhan said that this MoU will help in filling the gaps in reaching the rural and far-flung areas, by appropriate use of the technology and harnessing the enterprising spirit of the people of India. He said that digital platforms have been successfully used in the schemes of DBTL in de-duplication of the LPG connections and Pradhan Mantri Ujjawala Yojana (PMUY) in release of 5.75 Crore Ujjawala connections in just two and half years. Describing the CSCs as the change agents, he said that they will help in booking and delivery of LPG cylinders and booking of new connections. He informed that in the PMUY, 80% refilling are being done.

- **Cabinet approves filling of Padur Strategic Petroleum Reserves at Padur, Karnataka by overseas National Oil Companies**

On 8th November, the Union Cabinet chaired by Prime Minister Mr. Narendra Modi has approved the filling of Padur Strategic Petroleum Reserves (SPR) at Padur, Karnataka by overseas National Oil Companies (NOCs). The SPR facility at Padur is an underground rock cavern with a total capacity of 2.5 million metric tonnes (MMT) having four compartments of 0.625 MMT each. The filling of the SPR under PPP model is being undertaken to reduce budgetary support of Government of India.

The Indian Strategic Petroleum Reserves Ltd. (ISPRL) has constructed and commissioned underground rock caverns for storage of total 5.33 MMT of crude oil at three locations namely Vishakhapatnam (1.33 MMT), Mangalore (1.5 MMT) and Padur (2.5 MMT). The total 5.33 MMT capacity under Phase-I of the SPR programme is currently estimated to supply approximately 9.5 days of India's crude requirement according to the consumption data for FY 2017-18. Government has given 'in principle' approval in June 2018 for establishing additional 6.5 MMT SPR facilities at Chandikhol in Odisha and Padur in Karnataka, which is expected to augment India's energy security by 11.5 days according the consumption data for FY 2017-18.Government of India's key initiative towards energy security of the country - the strategic petroleum reserves program, envisions creation of additional crude oil reserves facilities in Private Public Partnership (PPP) mode and the road show for the same was launched by Mr. Pradhan, Minister, Petroleum and Natural Gas and Skill Development and Entrepreneurship.

- **ISPRL Signs Memorandum of Understanding with ADNOC to explore storage of Crude Oil at Padur Underground Facility in Karnataka**

On 12th November, Indian Strategic Petroleum Reserves Ltd (ISPRL) signed a Memorandum of Understanding (MoU) in Abu Dhabi with the Abu Dhabi National Oil Company (ADNOC) to explore the possibility of storing ADNOC crude oil at ISPRL's underground oil storage facility at Padur in Karnataka, which has a 2.5 million tonne capacity. Under the MoU, ADNOC is expected to store crude in compartments at Padur. The MoU with ISPRL, an Indian government-owned company mandated to store crude oil for emergency needs, follows the arrival, on November 4, of the final shipment of the initial delivery of ADNOC crude to be stored in another ISPRL underground facility at Mangalore, also in Karnataka, which will store 5.86 million barrels of ADNOC crude oil.

The MoU was signed by Mr. Abdulla Salem Al Dhaheri, Director of Marketing, Sales and Trading at ADNOC and Mr. HPS Ahuja CEO & MD ISPRL on the sidelines of the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC). The signing was witnessed by H.E. Dr. Sultan Ahmed Al Jaber, UAE Minister of State and ADNOC Group CEO, and Mr. Dharmendra Pradhan, Minister of Petroleum and Natural Gas & Skill Development and Entrepreneurship, Government of India. ADNOC is the only foreign oil and gas company, so far, to invest by way of crude oil in India's strategic petroleum reserves program.

Mr. Pradhan said "This Memorandum of Understanding will allow ISPRL to explore, with ADNOC, opportunities related to the possible storage of ADNOC crude at Padur, which would help to significantly strengthen the country's strategic petroleum reserves. This agreement reflects the strong bonds of cooperation between India and the UAE and provides a foundation for strengthening and expanding our strategic energy relationship." The existing and newly announced strategic reserve facilities put together will provide around 21 days of emergency coverage for India's crude oil requirements

- **Prime Minister lays Foundation Stones of City Gas Distribution Projects under the 9th CGD bidding Round; 10th bidding round launched**

On 22nd November, Prime Minister Mr. Narendra Modi laid the Foundation Stones of City Gas Distribution (CGD) Projects in 65 Geographical Areas (GAs) in 129 Districts under the 9th CGD Bidding Round, remotely from Vigyan Bhawan, New Delhi. During the event, PM also launched 10th CGD Bidding Round in 50 GAs spread over 124 districts in 14 states. Speaking on the occasion, the Minister of Petroleum and Natural Gas & Skill Development and Entrepreneurship Mr. Dharmendra Pradhan said that the Government is working to move towards the gas-based economy. Presently the share of gas in the country's energy mix is just over 6% and the aim is to reach the 15% figure, while the world average is 24%.

Till September 2018, 96 cities/Districts in different parts of the country were covered for development of CGD networks. About 46.5 lakh households and 32 lakh CNG vehicles are availing the benefit of clean fuel through existing CGD networks. To boost the expansion of PNG/CNG network, PNGRB launched 9th CGD bidding round in April, 2018 for 86 Geographical Areas (GAs) covering 174 districts in 22 States/ Union Territories. Subsequent to processing of received bids, grants of authorization have been issued to the successful bidders to develop CGD network for 84 GAs at present. As per commitment made by various entities in this bidding round, around 2 Crore PNG (Domestic) connections and 4600 CNG stations are expected to be installed in next 8 years across the country. This has expanded the potential coverage of CGDs to about 50% of country's population spreading over 35% of India's area. Various pre-project activities for these GAs have already commenced and efforts are being made to commence the physical works at the site. In addition, PNGRB has also initiated the process of 10th CGD bidding round for additional 50 new GAs covering 124 districts in 14 States to increase the potential coverage to about 53% of the country's area covering 70% of country's population

Research, analysis & compilation by:

Praveen Rai, Deputy Director (Economic Policy & Planning)

Email: prai@fipi.org.in

Kaushiki Sinha Ray, Senior Assistant Director (Economic Policy & Planning)

Email: Kaushiki@fipi.org.in