

FIPI

**March
2019**



Policy & Economic Report - Oil & Gas Market

Federation of Indian Petroleum Industry (FIPI)

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Policy & Economic report – Oil & Gas market

Economy in Focus

Reforms in International Corporate Tax Laws for Benefit of Low Income Countries

A recent paper by International Monetary Fund (IMF) underlined the need for reforms in Global corporate taxation as some of the low-income countries of the world are losing significant amount of revenues due to tax competition and profit sharing. The IMF paper further pointed out that Non-OECD countries are losing about USD 200 billion in revenue every year from corporate taxes. This is chiefly due to shifting of profits to low-tax locations by multinational companies.

Discussing the findings of the paper, Ms Christine Lagarde, Managing Director, IMF highlighted that the present situation of Corporate Taxes is especially worrying for low income countries, depriving them of much-needed revenue required to achieve higher economic growth, reduce poverty and meet the 2030 Sustainable Development Goals. She further questioned the fairness of the overall tax system since most multinationals are successfully avoiding taxes and the corporate tax rates have witnessed a steady decline over the last three decades. She also blamed the advanced countries for shaping the international corporate tax rules without considering the impact on low-income developing countries.

Increased Energy Demand Leads to Record Emissions in 2018

A report by the International Energy Agency (IEA) suggests that the global energy related emissions reached a record high in 2018, due to an increase in coal demand. The findings are particularly worrying as the Inter-Governmental Panel on Climate Change (IPCC) had warned last year that the average global temperature increase over the pre-industrial level will cross the 2-degree Celsius target, a level beyond which climate change will have devastating consequences.

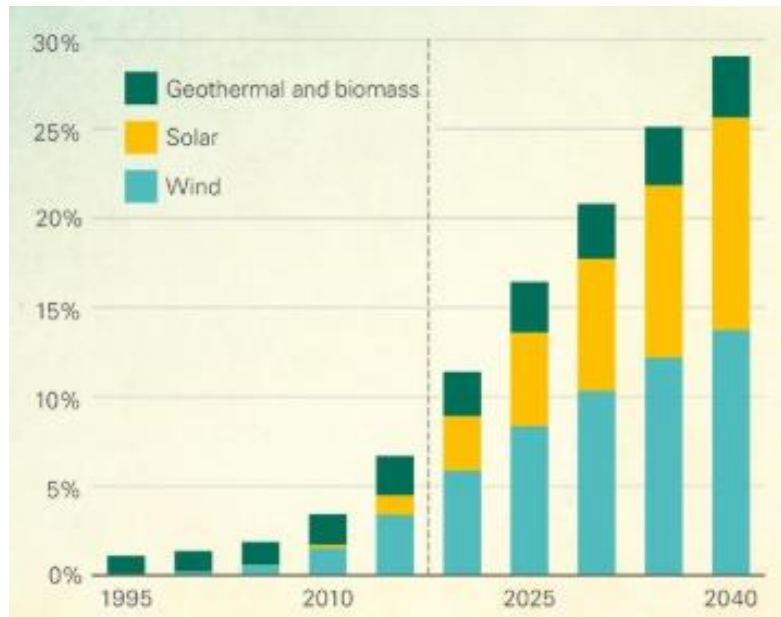
The energy related Carbon Dioxide emissions increased to 33.1 billion tonnes in 2018, registering a rise of over 1.7 per cent. Driven by the heating and cooling requirements arising from countries witnessing extreme temperatures, the energy demand rose by over 2.3 per cent in 2018. The power sector alone contributed to over two third of the total CO2 emissions from the energy sector last year.

The report further suggests that China, India and the United States collectively accounted for over 75 per cent of the net increase in emissions. It points out that as result of mixed signals coming from some of the largest energy consumers, the industry has gone back to business as usual, resulting in a rise in fossil fuel investments. However, the silver lining in the report remained the fall in CO2 emissions from countries like Germany, Japan, Mexico, France and the United Kingdom.

Renewables to Drive Energy Growth; Oil to Plateau after 2030: BP Energy Outlook 2019

The BP Energy Outlook published last month predicts that the renewable sources of energy will play an ever greater role in the world's energy mix and will emerge as the world's main source of power in the next two decades. The report mentioned that wind, solar and other renewables will account for over 30 per cent of the world's electricity supplies by 2040. In some parts of Europe the penetration of renewables in power generation could be as high as 50 per cent. By 2040, 85 per cent of the growth in energy supplies is expected to be generated from renewables.

Increasing Contribution of Renewables



Source: BP Energy Outlook 2019

However, the BP Energy Outlook maintains that hydrocarbons will continue to play an integral role in the world energy mix till 2040. It expects global oil demand to increase from present 100 Mmbbl/d to 130 Mmbbl/d by 2040. Some of the other major highlights of the BP Energy Outlook 2019 are as under:

- Driven by improvements in living standards global energy demand set to increase by a third by 2030
- Renewable will penetrate the global energy systems faster than any other fuel in the history
- Global oil demand will continue to rise during the first half of the forecast period (i.e. 2040) and will plateau thereafter
- Global carbon emissions will continue to rise. Comprehensive set of policy measures will be essential to achieve any substantial reduction in carbon emissions.

Troubles Continue for Manufacturing Industry in 2019

The recently released PMI indicators for manufacturing in the United States, Europe, and Japan by IHS Markit shows a considerable weakening in the global manufacturing sector in general and Europe in particular. The PMI indicator signals the direction of activity in the sector taking into account output, new orders, export orders, pricing, inventories, employment, and sentiment.

In the US, the PMI for manufacturing sector witnessed a fall between February and March due to weakening of price pressures and slow pace of input price rise. A separate PMI for Services sector in the US showed significant improvements indicating healthy sector.

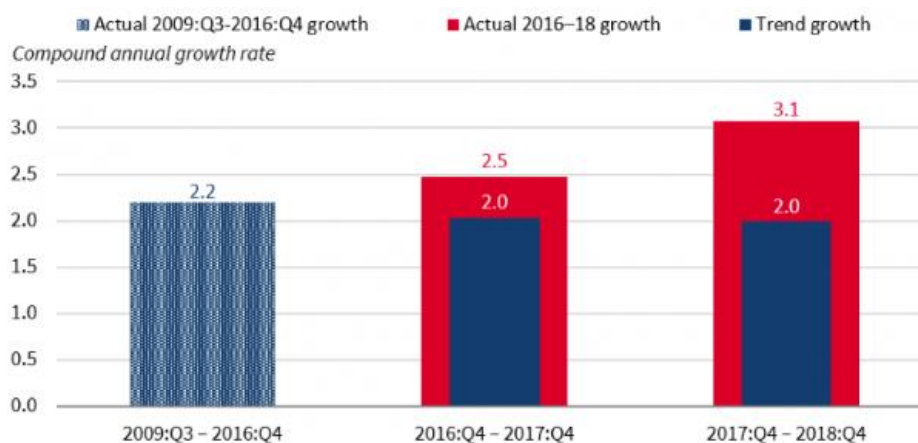
In the Euro-zone the Manufacturing PMI plummeted significantly, indicating a decline in activity. The sub-indices for new orders and export orders fell to their lowest since 2012. A weak backlog of orders suggested an even weaker growth in the next quarter. The weakening of manufacturing activity was most evident in Germany, where the order back logs had fallen to its lowest in ten years. In the Euro-zone France witnessed the most modest decline in activity.

The PMI indicator for Japan's manufacturing sector remained unchanged for the period February to March 2019, indicating a nominal decline in activity.

Favourable Tax Reforms Provide an Unexpected Fillip to the US Economy in 2018

For the second Consecutive year, the US is witnessing a robust economic growth. In 2018, exceeded the administration' forecast, registering a 3.1 per cent increase – the highest since 2005. The Gross private domestic investment increased from 17 per cent of GDP at the start of 2018 to 36 per cent by end of the year. During the year, Investment in intellectual property increased by 10.8 per cent.

Growth of Real GDP in the US

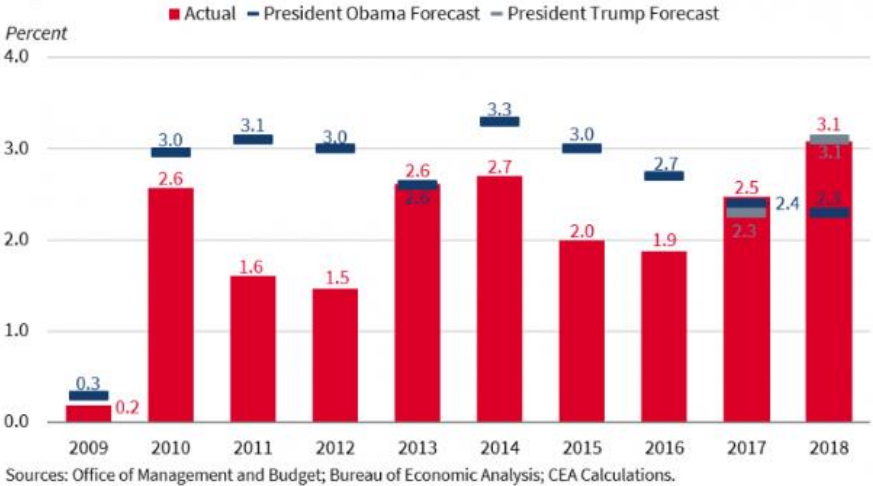


Sources: Bureau of Economic Analysis; CEA calculations.

Note: Data represent a compound annual growth rate over the given quarters. Trends are estimated over a sample period from 2009:Q3-2016:Q4 and projected into 2017-18.

The robust growth of the economy does not just represent a trend continuing from the previous years but also a stepping up of economic activity in the last year. A study of trends from 2009 suggests that had the previous trend continued the economy would have only been able to touch a 2 per cent growth mark. The 1.1 percentage point performance above trend is almost exactly in line with peer-reviewed estimates of an exogenous tax shock of the same magnitude as the Tax Cuts and Jobs Act. The achievement of a 3.1 per cent growth marks the second year when the US economy has either matched or narrowly surpassed administration’s expectations.

Administration’s Real GDP Forecast Vs Actual

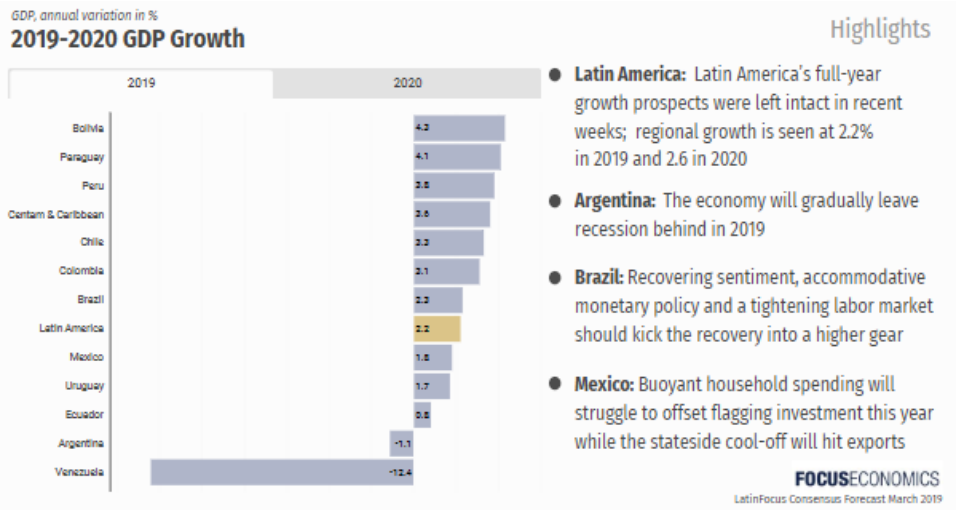


Not All Sunshine for Latin America in 2019

The Latin American region grew at 1.5 per cent in the year 2018. The growth in the region was driven by Brazil and Argentina. While in Brazil the new Government is introducing major economic reforms, boosting the overall growth of the country, implementation of IMF prescriptions in Argentina has resulted in a strong growth for the country. However, the future of growth in the Latin American region will be shaped by investors’ appetite for emerging-market risk and the impacts of the on-going trade war between the US and China.

In 2019, the region is expected to show a robust growth of 2.2 per cent. The growth in 2019 was driven by Argentina, Brazil, Mexico and Bolivia. Further in 2020, the regional growth is expected to reach over 2.6 per cent

Latin America Growth Outlook for 2019



The present projection for the region does not include economic data from Venezuela, due to unavailability of economic information from the country. The economic outlook for the country is not very bright in the short term. The on-going political crisis in the country along with financial sanctions has limited the Government's access to external financing. The falling oil revenues have only made the situation worse with high inflation and shortage of goods. As a result, the Venezuelan economy is expected to further shrink by 12.4 per cent in 2019.

Brexit Unlikely to End UK's Immigration Woes

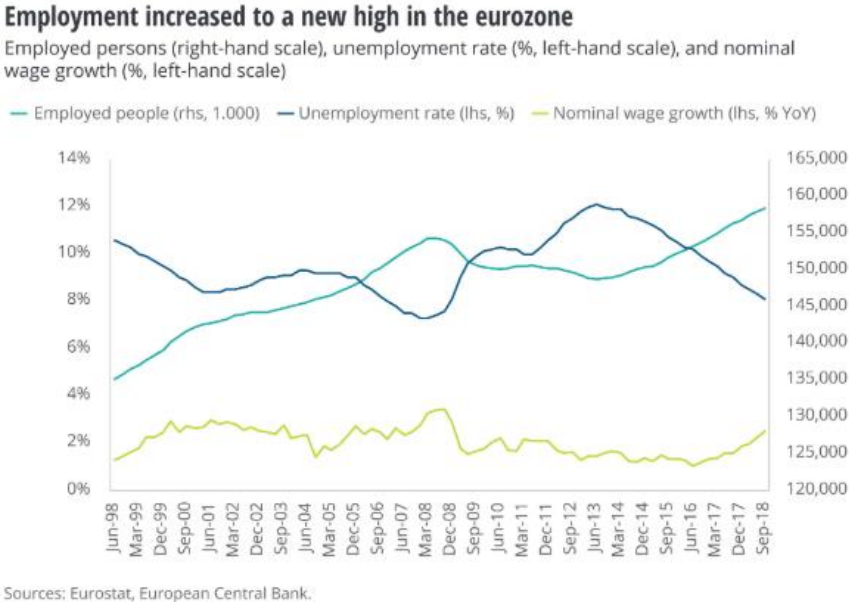
Immigration was one of the major issues of Brexit referendum campaign in 2016. Prime Minister Theresa May has already promised to act on the free movement of EU citizens in the UK, a fundamental principle of the Bloc.

Since 2016 Brexit vote, migration of EU nationals to the UK has fallen 70 per cent. However, immigration from Non-EU countries has increased remarkably during this period. Data from Office for National Statistics suggests that the migration of EU Nationals to UK has reduced to mere 57,000 in September, 2018 against 189,000 in June, 2016. A study suggests that the UK is not as lucrative to the EU immigrants in 2018 as it was in 2016. This could be because of Brexit-related political uncertainty, the falling value of the pound, making UK wages less attractive, or an improvement in job opportunities in the EU.

The 261,000 long-term arrivals from outside the EU in September 2018 represented an increase of more than a quarter on the previous 12 months and was the highest total for 15 years. Ms Caroline Nokes, immigration minister, UK has indicated that the country will continue to attract and retain highly skilled labours including doctors and nurses. In this regard, the Home Office has proposed for a comprehensive overhaul of the immigration regime post-Brexit, including significant new restrictions on future EU migrants.

EU Touches Its Lowest Ever Unemployment Rate

A February, 2019 report by Deloitte suggests that the Eurozone reached the highest employment level in its history in 2018. In 2018, the unemployment levels in the Euro cone reached 7.9 per cent. The unemployment levels in the region have been witnessing a slow but steady decline since 2014, but the wages in the region had stagnated after 2014. However, this trend now seems to be hanging as the wage growth picked up by 2.5 per cent early this year, marking the highest value since late 2008. The combination of growing employment and increasing wages in the region is expected to fuel private consumption in the region.

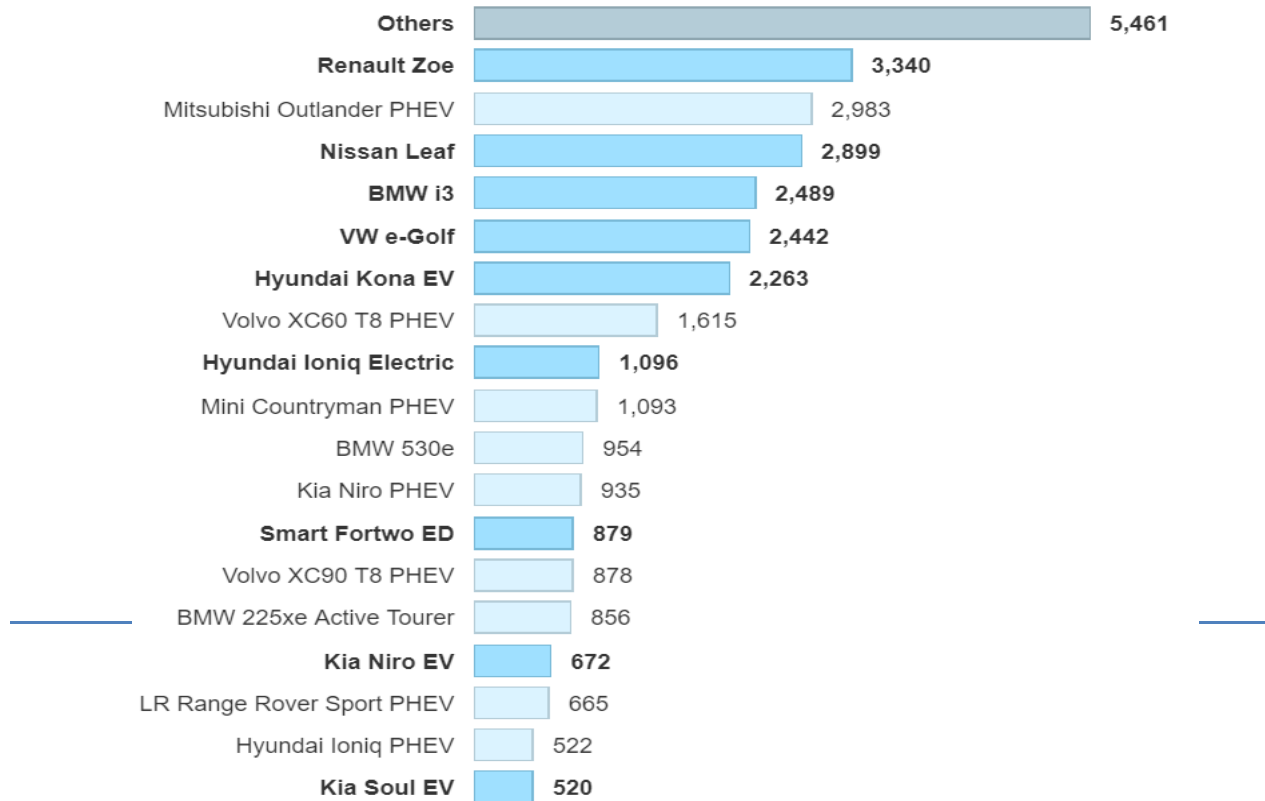


Amidst Falling Demand for Hybrid Vehicles, Europe Sees Record Sale of EVs

The Fully Electric cars (BEV) market in Europe has witnessed a robust growth in 2019. In January 2019, the BEV market recorded a Year on Year growth of over 67 per cent. BEVs now represent 62 per cent of all plug-in vehicle (PEV) sales, leading to a 1.7 per cent market share of EVs in the passenger vehicle segment. In January 2019, 33,000 new registrations were made for BEVs, a straight 28 per cent increase compared

to the same period last year. While the BEV market in Europe has been flourishing, the market for plug-in hybrids (PHEVs) has experience severe losses due to new WLTP-rules enforcement last year. Adding, PHEVs to the tally, PEV market share jumps to 2.8%, considerably above the 2.5% result of 2018.

Europe Electric Car Sales in January 2019



Source: Clean Technica

Causing Much Anguish to Western Allies, Italy Joins China's Silk Road Project

Italy has become the first developed economy to join China's Silk Road Project. The signing of the Chinese Global investment programme has raised serious concerns amongst Italy's Western Allies, who have expressed concerns over China's greater influence in the region. Under the project, 29 deal amounting to USD 2.8 billion has been signed between the two countries.

The new Silk Road Project, also called the Belt and Road Initiative (BRI), aims to link China to Europe and involves a wave of Chinese funding for major infrastructure projects around the world, in a bid to speed Chinese goods to markets further afield. The project funds infrastructural development in trains, roads, ports and cities through lucrative contracts for Chinese construction firms and funded by loans from Chinese banks.

China's New Silk Road



The Umbrella deal makes Italy formally part of the Economic Silk Road and The Initiative for a Maritime Silk Road for the 21st Century. Under the project, a range of deals have been signed between the two countries including energy, finance, and agricultural produce. The deal also provides big Italian gas and energy, and engineering firms access to Chinese market.

Over the last few years Italian economy has slipped into recession and the country's national debt levels are among the highest in the Eurozone. In June 2018, the high spending plans suggested by the Italian Government were pegged back after a stand-off with the EU. Under such circumstances, China's Silk Road agreement is expected to alleviate the strains for the country.

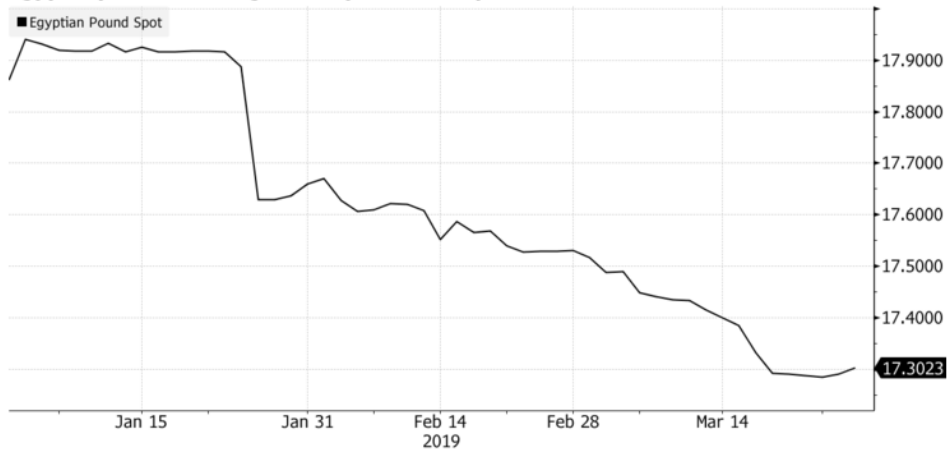
Egypt Beckons World's Deepest Series of Interest Rate Cuts to Encourage Investment

A recent analysis by Bloomberg predicts for a borrowing rate cut by Egyptian central bank to the tune of 100 basis points. This reduction, if implemented, will deliver a reduction in borrowing costs for the second straight month, making it the world's deepest series of interest rate cuts. The anticipated reduction is expected in light of the forecast for a no rate increase by the US Federal Reserve combined with a rapid appreciation in the Egyptian pound.

Over the two few years, Egyptian pound has emerged as the best performing currency in the Middle East. Egypt's currency is reaping the benefits of increased investor appetite for local debts.

Currency Rally

Egypt's pound has staged this year's best performance in Mideast

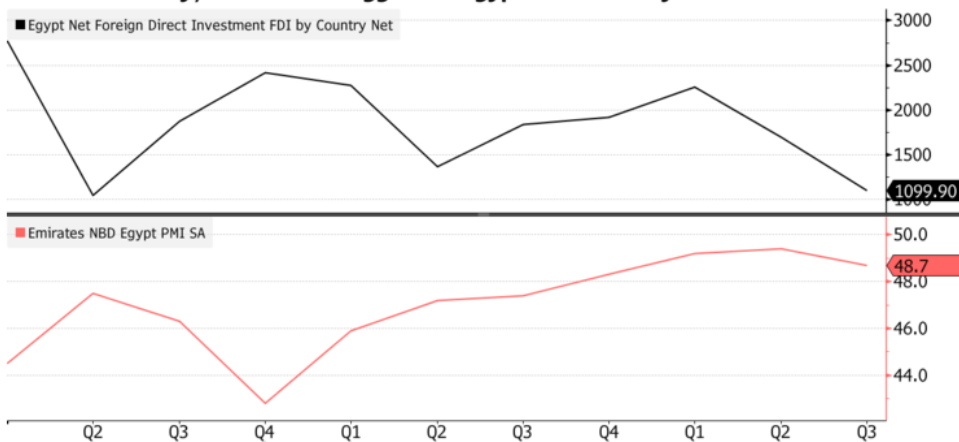


Source: Bloomberg

Egypt is most likely to see inflationary waves due to onset of Ramadan and the proposed re-pricing of 95-octane gasoline in April. The surge in pound has been successful in keeping the price pressure in check and has gained over 3.5 per cent against the USD since the start of 2019.

Corporate Blues

Business activity, FDI have struggled in Egypt as rates stay elevated



Source: Bloomberg, Emirates NBD

Egypt is among the very few nations to reduce official borrowing costs in recent months alongside India and Ghana. The expected rate cuts will support the country's debt control strategy and attract foreign investors to invest in Egypt's treasury investments in light of a stronger exchange rate and an attractive carry trade. Business activity and Foreign Direct Investment (FDI) in the Egyptian non-oil private sector was at its lowest in February since September 2017.

Trade War leaves Deep Scars on Chinese Exports

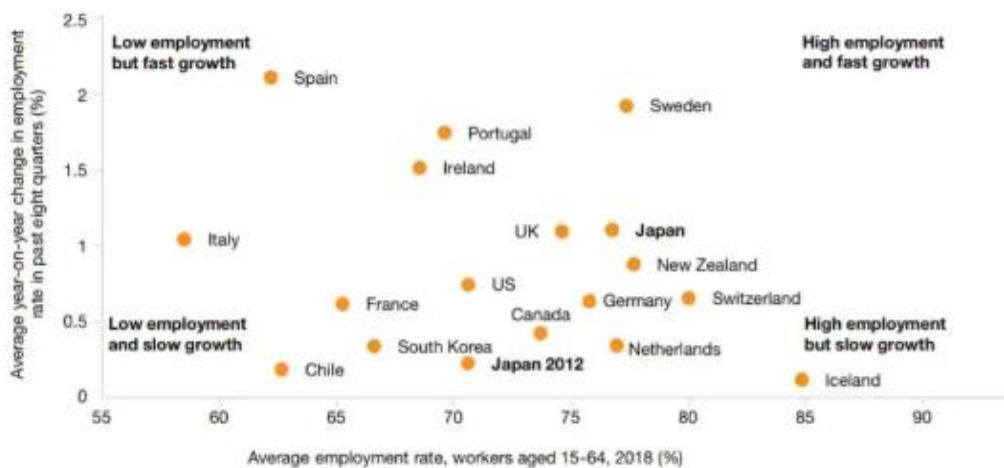
As a result of the ongoing trade dispute with the US and a slow-down in the Global economy, China's dollar denominated exports fall by 20.7 per cent in February compared to last year. Dollar-denominated imports in the country plunged by 5.2 per cent during the month. In February 2019, China had a trade balance of USD 4.12 Billion, significantly lower than last year. The country's trade surplus with the US has shrunk to USD 14.72 Billion in February compared to a robust 39.16 Billion last year.

There is an impending risk of recession on the Chinese exports due to trade disputes with the US. Some analysts are of the opinion that the fall in exports could also be due to the week-long Chinese New Year public holidays. Even in case of easing of the US tariff, it is unlikely to significantly improve Chinese exports until the second half of the year. Some experts believe that though the Chinese exports are shrinking, a robust domestic economy presents a plethora of opportunities for the country. Meanwhile, the Chinese Government has set an official growth target of 6 – 6.5 per cent in 2019, lowest since 1990.

Government Policies Strengthen Labour Market in Japan

In 2018, a curious phenomenon has been noticed in Japan, where, while the people aged above 15 years fall by 0.1 per cent, the number of working people rose by 1.7 per cent. This unexpected growth came not due to a fall in unemployment but due to further strengthening of an already strong job market. The employment rate in Japan has increased from an above average level in 2012 to amongst the highest in 2018.

Accelerated Growth in Japanese job Market Between 2012 - 2018

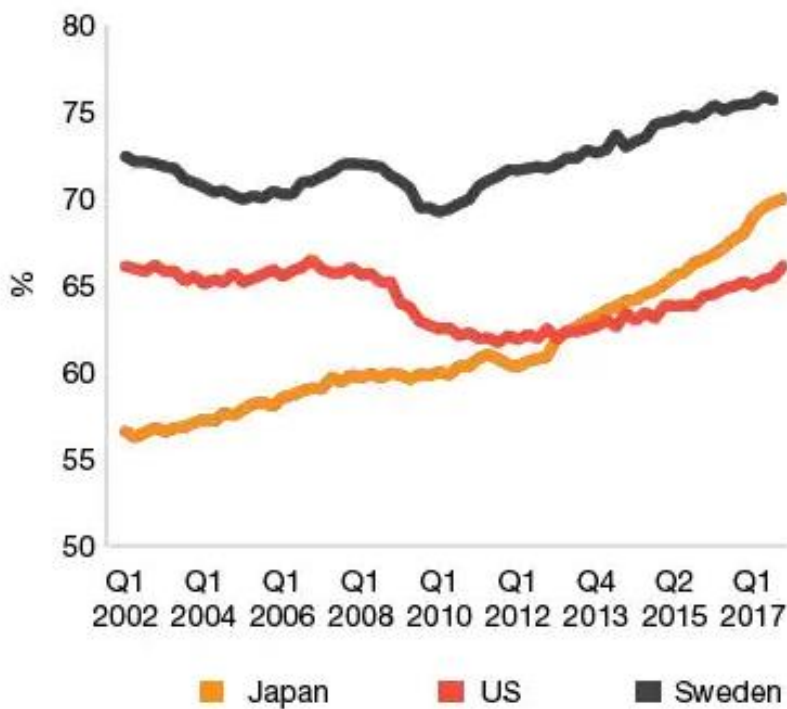


Source: OECD iLibrary

Japan's population has been shrinking at the rate of 1.3 million people, since it peaked at 128 million in 2010. The Government has warned that the population might further decline to 88 Million by 2065. Further, 28 per cent of the Japanese population is old against 18% in the UK and 15% in the US. An aging

population means fewer workers, which in turn indicates that the productivity has to rise every year just to keep the economy from shrinking. Also higher number of pensioners highlights that more people will be using public services without contributing to the economy.

One of the reasons for this unexpected growth in employment is an increased women employment. Female employment in Japan has been historically low due to various reasons including culture of long office hours, entrenched gender roles and a lack of flexibility in the labour market. However, in the recent years, female employment rate in Japan have surpassed those of the US. In this direction, the recent Government policies have played a major role. The Government has drastically increased the number of nursery place for children between the age of 5 – 7 years and further intends to make it free by 2021. Another, Government legislation limits overtime at 100 hours a month, preventing over work and generating new roles.

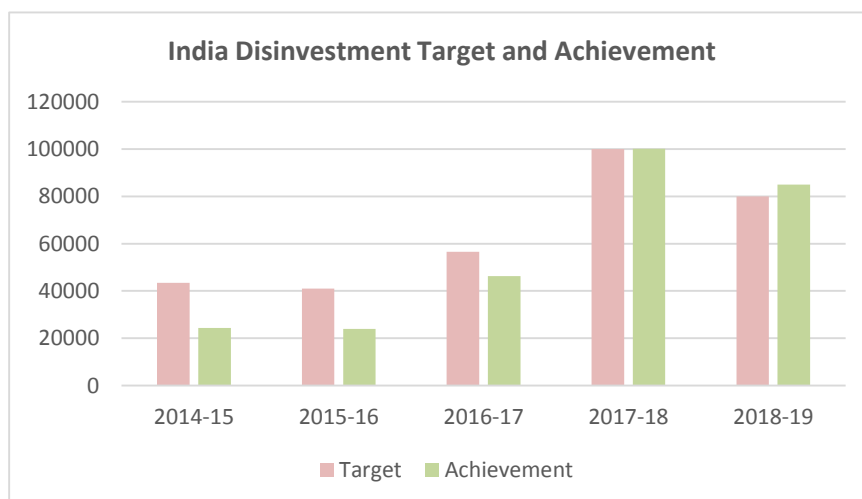


Source: Federal Reserve Bank of St Louis

India Overachieves Disinvestment Target

For FY 2018 – 19, the Government of India has not just achieved its disinvestment target of Rs 80,000 Cr but has also surpassed it by Rs 5000 Crore. Till early this year, the achievement of the disinvestment target seemed difficult due to uncertainties over some sell-offs. However, the merger of Finance Corporation-Rural Electrification Corporation (PFC-REC) and disinvestment of Pawan Hans Ltd. proved successful in providing the much needed fillip.

The merger of PFC – REC, by which PFC acquired the Government stakes in REC, generated disinvestment proceeds of over Rs 14,500 crore for the Government. Further, the disinvestment of Pawan Hans also successfully generated considerable interest among bidders.



Source: Department of Investment and Public Asset Management, Government of India

Over the last few years, the Government has provided an unprecedented push to the country's disinvestment drive. In the last financial year, the Government had managed to achieve its target disinvestment of 1,00,000 Crores through sale of its HPCL stakes to ONGC for Rs 37,000 Crores.

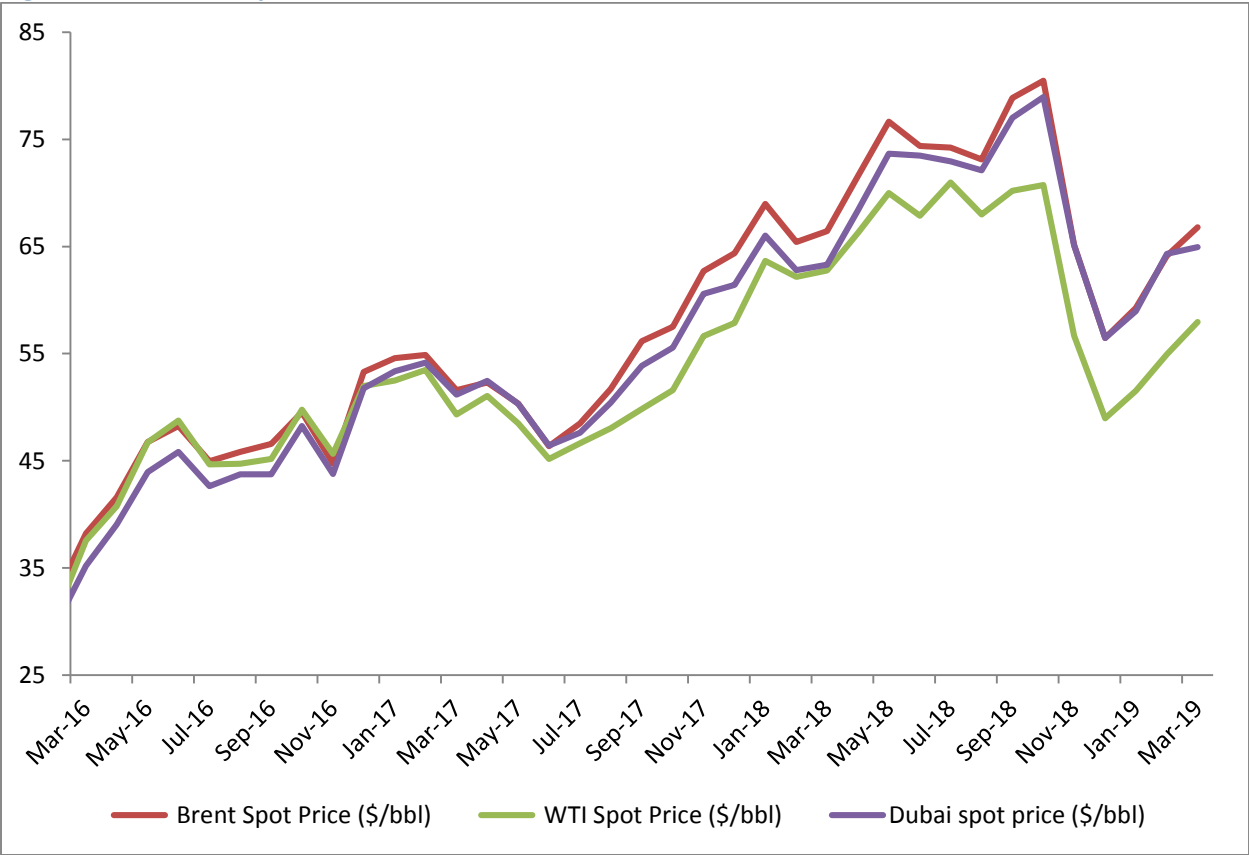
Oil & Gas Market

Crude oil price

In February, oil prices strengthened on the account of tightening market due to the product cut. Monthly gain was more than 10% as the crude supply market tightened. Crude prices rallied higher in February as OPEC and allies increased their quota of production cut. Tightening supply lead to removal of extra barrels of crude in the market and strengthened the price.

Despite crude prices attaining new a stronger price in February, fears of record US production global economic slowdown still looms causing the uncertainty over the crude price. Average Brent, WTI and Dubai basket crude prices went up by around 8.16 %, 6.48 % and 8.0 % respectively from the prices in the month of January.

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



Source: WORLD BANK

- Brent crude price averaged \$64.13 per bbl in February 2019, and was up 8.2% and down 2.0% on a month on month (MoM) and year on year (YoY) basis, respectively.
- WTI crude price averaged \$54.95 per bbl in February 2019, and was up 6.7% and down 11.6% on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged \$64.32 per bbl in February 2019, and was up 9.1% and 2.4% on a month on month (MoM) and year on year (YoY) basis, respectively.

Table 1: Crude oil price in February, 2019

Crude oil	Price (\$/bbl) in February 2019	MoM (%) change	YoY (%) change
Brent	64.13	8.2%	-2.0%
WTI	54.95	6.7%	-11.6%
Dubai	64.32	9.1%	2.4%

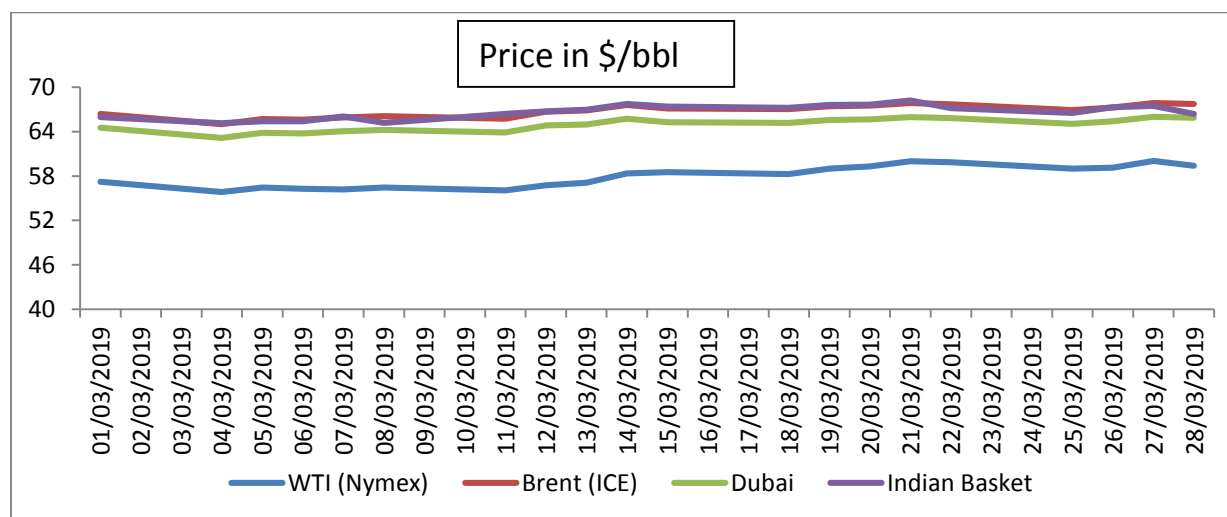
Source: WORLD BANK

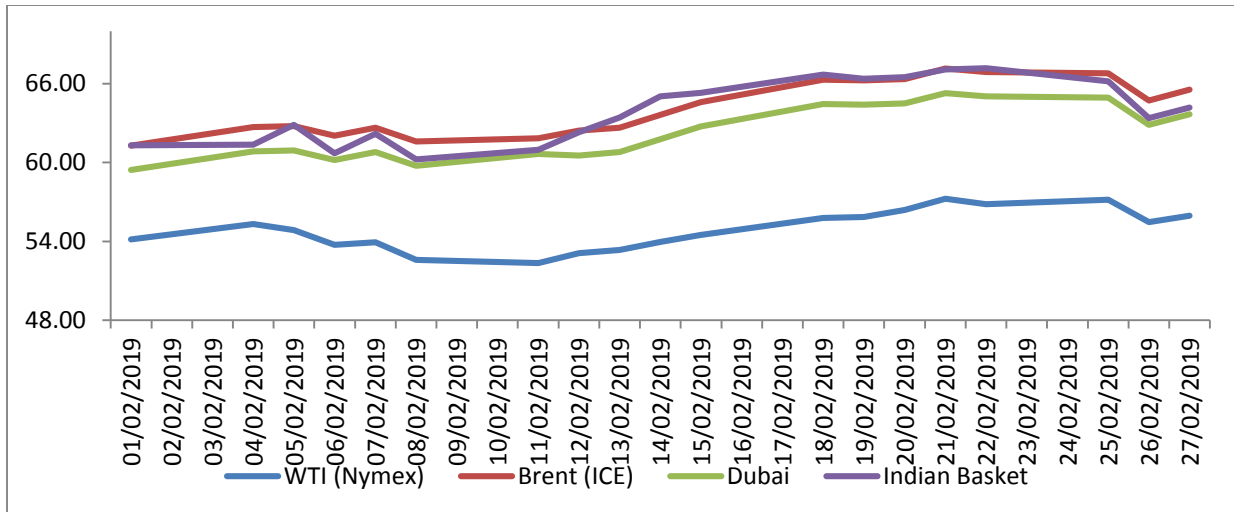
Crude oil price strengthens in March 2019

Crude prices stabilized in March as the excess supply from OPEC dried in the market. Tightening supply lead to removal of extra barrels of crude in the market and strengthened the price.

Oil prices are near four-month high as WTI crude crossed \$60 dollar mark in the last week of March. Average Brent, WTI and Dubai basket crude prices went up by around 4.16 %, 5.46 % and 0.96 % respectively from the prices in the month of February.

Figure 2: Crude oil price in March 2019



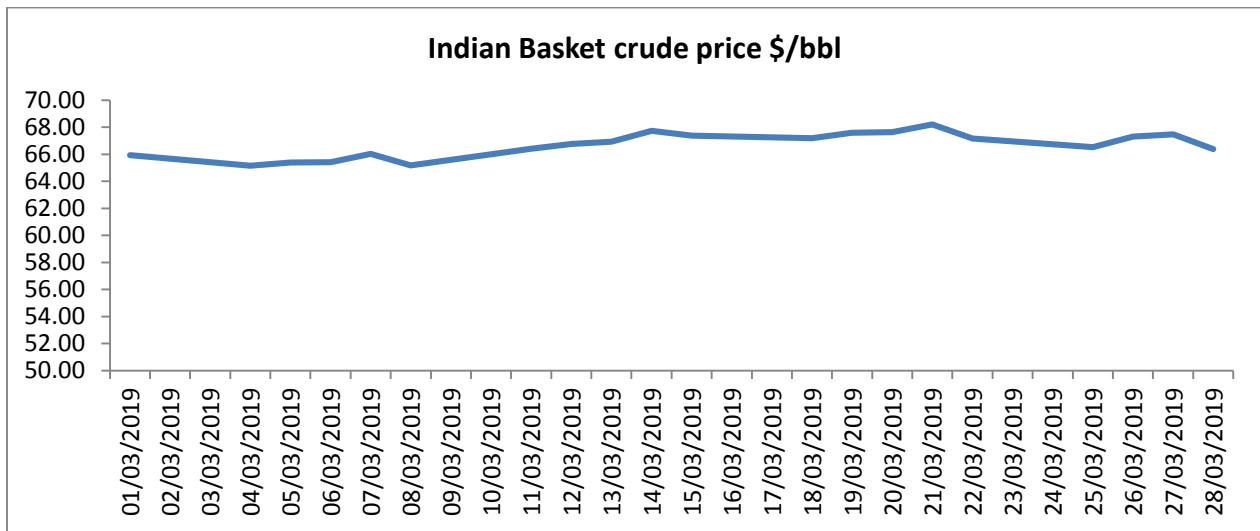


Source: EIA, PPAC

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 74.77:25.23 during 2017-18.

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



Source: Petroleum Planning & Analysis Cell

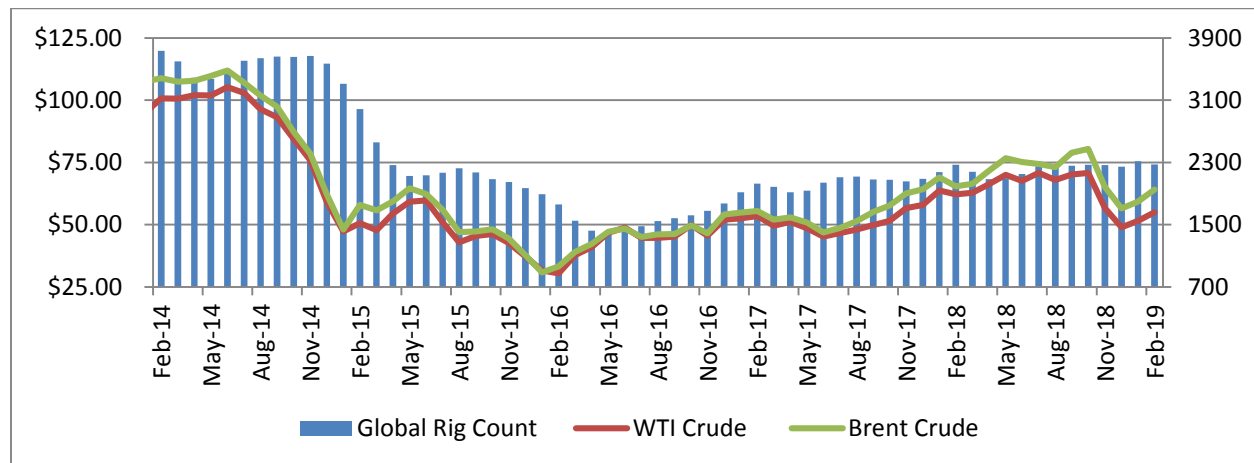
- Indian crude basket price averaged \$ 66.69 per barrel in March, up 4.43 % Month on Month (MoM) basis and 4.52% on a year on year (YoY) basis, respectively.

Upstream activity & Rig count

Global rig count

Rig count represents the total number of active drilling rigs in the world. Demand for drilling rig is highly dependent on crude oil price. When the oil price increases, demand for exploration activity increases, resulting in the increase in rig count. A lower oil price could trim the exploration budget of the oil companies, thereby reducing the demand for drilling rig.

Figure 4 Global Rig Count vs. Crude Prices



Source: Baker Hughes

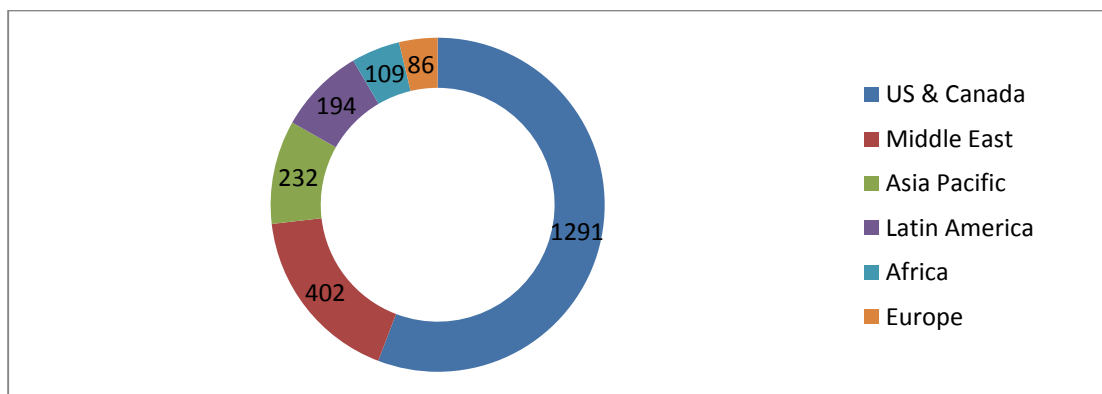
In February 2019, global drilling rig count stood at 2276, 38 less than January. Onshore rig count went down by 47, while offshore rig count went up by 9. Europe, Africa and Asia Pacific saw an increase in rig count, while rig count went down in Middle East and Latin America. Onshore rig count in North America decreased despite the strengthening oil & gas price. United States is the most active market for drilling industry with a rig count of 1038. 1016 were onshore rigs and 22 were offshore rigs. US & Canada and the Middle East count account close to 3/4th of the global rig count.

Table 2 : Global Drilling Rig Count

Rig Type	Count in February 2019	MoM (%) change	YoY (%) change
Land	2004	-2.29 %	- 0.69%
Offshore	272	1.15%	27.1%
Total	2276	3.42%	0.57%

Source: Baker Hughes

Figure 5 Geography-wise Rig count - February 2019



Source: Baker Hughes

Indian Drilling Rig Count

Indian rig count remains unchanged in the month of February. Indian drilling rig count grew in 2018-19, albeit the volatile crude oil price. On YOY basis, Indian rig count was up by 10.1% in 2019 as compared to 2018. 101 drilling rigs are deployed in oil fields and 22 drillings rigs are deployed in gas fields.

Figure 6 Indian Rig Count vs. Indian Basket Crude Price

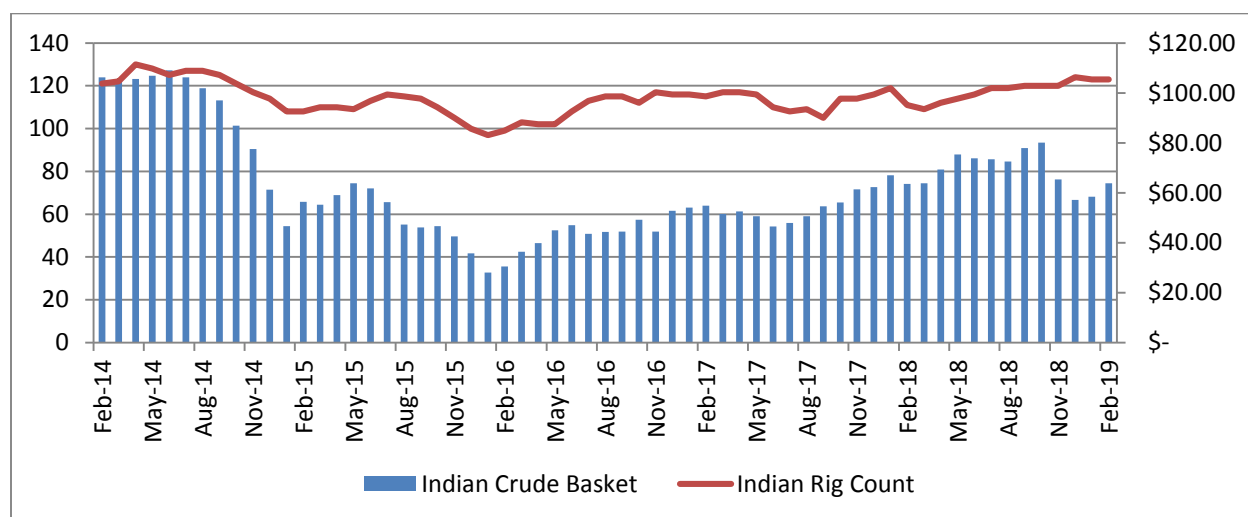


Table 3 : Indian Rig Count

Rig Type	Count in February 2019	MoM (%) change	YoY (%) change
Land	85	0 %	1.19%
Offshore	38	0%	40.7%
Total	123	0%	10.1%

Source: Baker Hughes

Oil demand & supply

Preliminary data indicates that global oil supply declined by 0.16 mb/d to average 99.15 mb/d in February 2019, compared with the previous month. An increase in non-OPEC supply (including OPEC NGLs) of 65 tb/d in February compared with the previous month was mainly driven by the US, the UK and Brazil. This was offset by a remarkable decline in OPEC crude oil production of 221tb/d in February, this equates to a total decrease in global oil output of 1.50 mb/d y-o-y. The share of OPEC crude oil in total global production declined by 0.2% to 30.8% in February 2019 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 crude production are based on secondary sources.

For 2019, non-OPEC oil supply growth was revised up by 0.06 mb/d from the February's forecast to stand at 2.2 mb/d due to expected production increases in Canada as of April, as well as higher-than-expected growth in North and South Sudan. Total non-OPEC supply is now projected to reach an average of 64.43 mb/d. The US, Brazil, Russia, the UK, and Australia are expected to be main drivers. Countries projected to see the largest declines are Mexico, Indonesia, Norway and Vietnam. In 2019, world oil demand growth is anticipated to grow by 1.24 mb/d y-o-y, unchanged from last month's projection. Total world consumption is anticipated to reach 99.96 mb/d, slightly lower than previous month's assessment.

Table 4: World Oil demand in mbpd

	2018	1Q19	2Q19	3Q19	4Q19	2019	Growth	%
Total OECD	47.42	47.69	47.24	48.16	48.22	47.83	0.41	0.87
Dev. Countries	32.13	32.44	32.60	32.86	32.56	32.61	0.49	1.52
~ of which India	4.53	4.83	4.74	4.40	4.96	4.73	0.20	4.43
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	99.35	99.68	98.72	1.43	1.47

Source: OPEC monthly report, March 2019

Note: *2018 = Estimate and 2019 Forecast

Global petroleum product prices

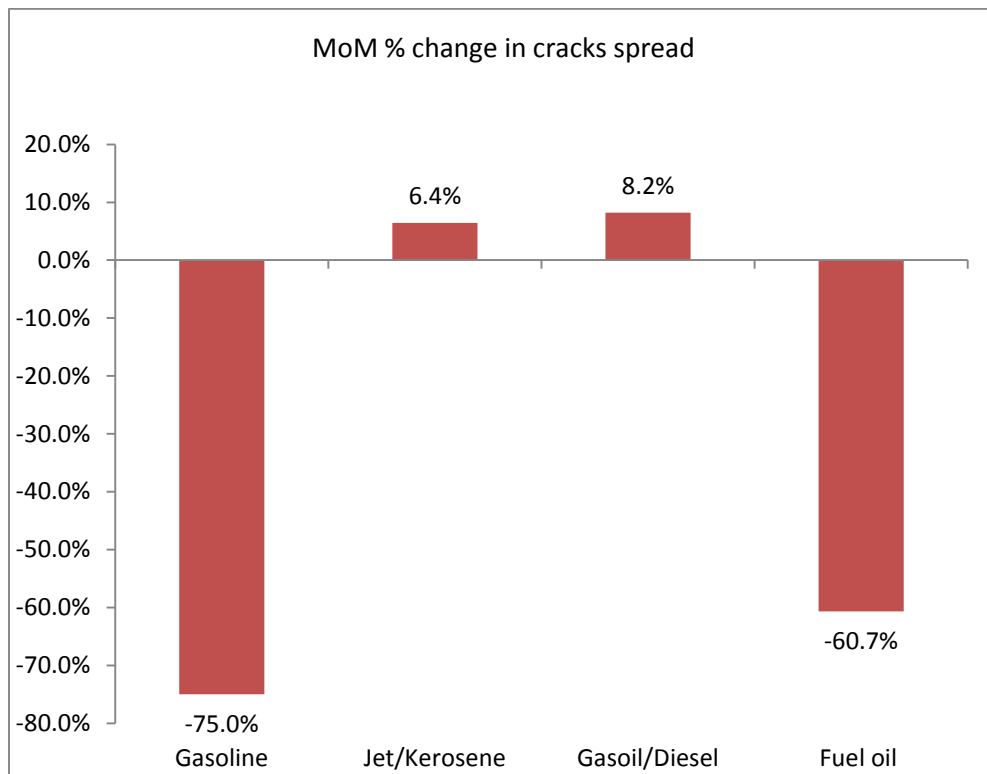
Prices in the Asian Gasoline-92 market saw an increase of 8.9% over the previous month. Refinery margins strengthened as strong gasoil exports and lower fuel oil imports exerted pressure on the corresponding stock levels. Gasoline cracks in Singapore declined by 11 cents/b, showing a minor recovery from the last month. Refinery utilization declined in February averaging 77.32% in selected Asian markets comprising of Japan, China, India and Singapore.

Jet/Kerosene prices increased by 8.6%, as compared to February. Earlier in January, Jet/kerosene increased by 0.8%. Jet/Kerosene spread recovered from, the losses seen in the previous month supported

by higher jet. The Singapore jet/kerosene crack spread against Oman averaged \$1351/b, up by 83 cents m-o-m and but down by \$3.81 y-o-y.

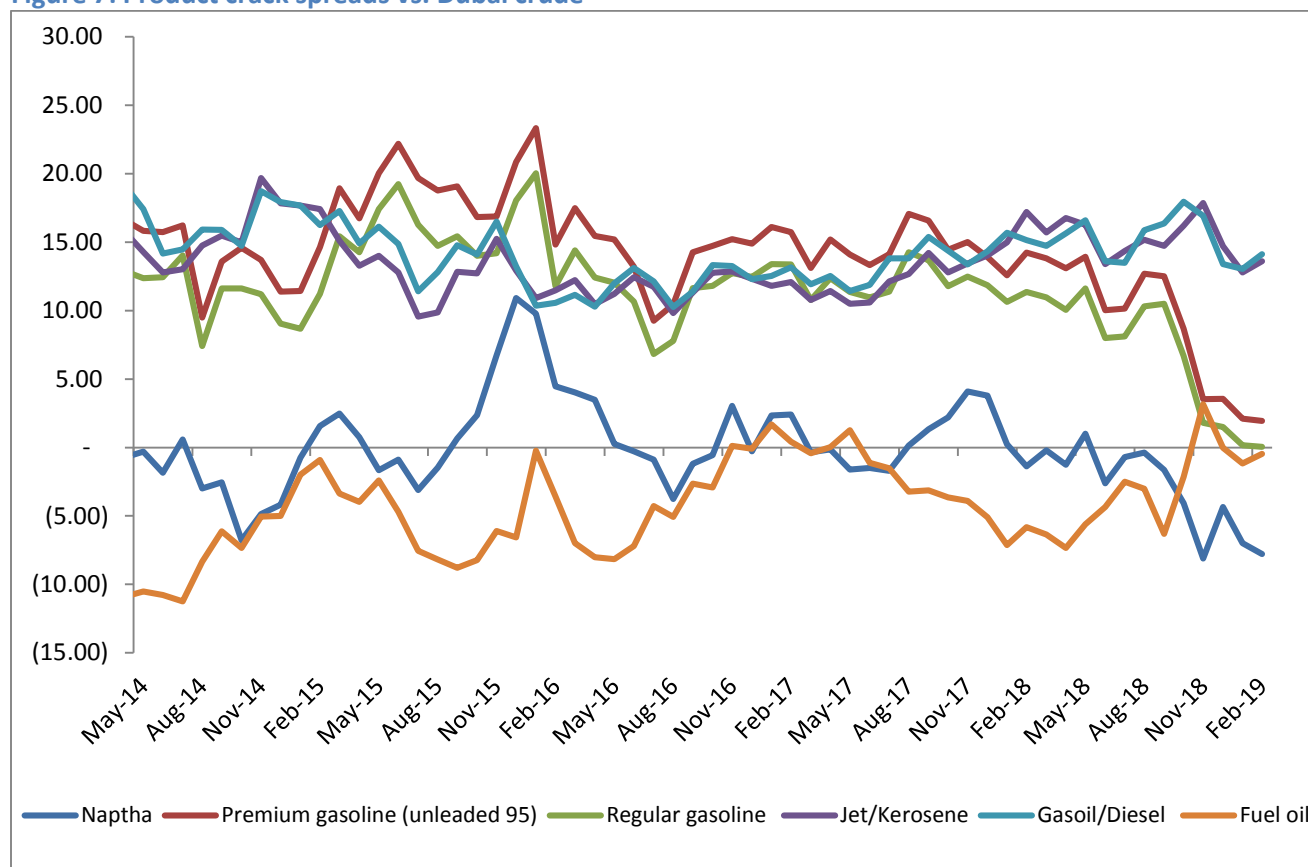
Singapore gasoil crack spread strengthened during the month of February on the back of strong export opportunities to Europe. A wider price differential between gasoil in Asia and Europe encourage trade flows from Asia to west, strengthening the regional market. In, February, gasoil crack spread increased by 8.9 %. Singapore gasoil crack spread against Oman averaged \$14.02/b, slightly up by \$1.08 m-o-m and but down \$1.24 y-o-y.

In February, the fuel oil market in Singapore increased by 10.15 %, supported by fall in arrivals from Northwest Europe, Russia and the US leading to 22% drop in total imports. Singapore fuel oil cracks against Oman averaged minus 56 cents /b, up by 72 ¢ m-o-m and by \$5.17 y-o-y.



Source: OPEC monthly report

Figure 7: Product crack spreads vs. Dubai crude



Source: OPEC, FIPI

Table 5: Singapore FOB, refined product prices (\$/bbl)

Products	Price (\$/b) in February 2019	MoM (%) change	YoY (%) change
Naptha	56.54	8.8%	-7.9%
Premium gasoline (unleaded 95)	66.27	8.5%	-14.0%
Regular gasoline (unleaded 92)	64.36	8.9%	-13.2%
Jet/Kerosene	77.93	8.6%	-2.6%
Gasoil/Diesel (50 ppm)	78.44	8.9%	0.6%
Fuel oil (180 cst 2.0% S)	63.86	10.5%	12.1%
Fuel oil (380 cst 3.5% S)	63.79	9.8%	12.8%

Source: OPEC

Petroleum products consumption in India

- In February, LPG consumption decreased 4.2% on MoM basis.
- Consumption of gasoline increased (8.7% YoY) driven by higher demand from transport segment.
- Demand for diesel increased by 2.9% on YoY basis in the month of February.

Table 6: Petroleum products consumption in India, February 2019

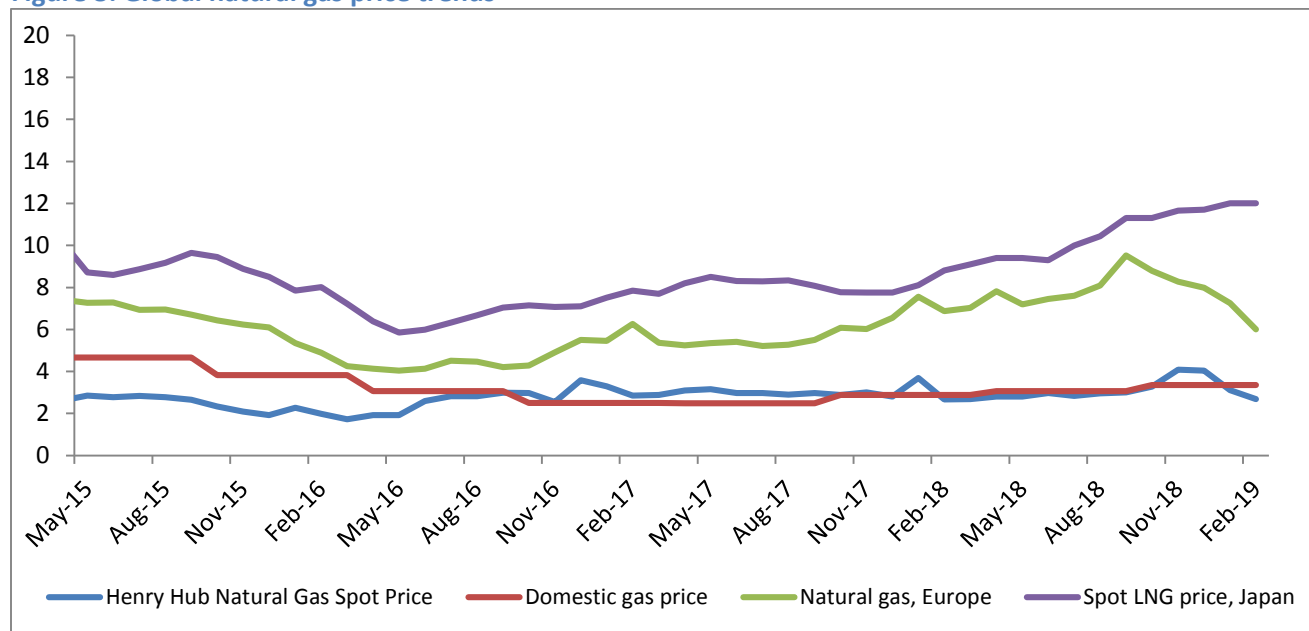
Petroleum products	Consumption in '000 MT February 2019	MoM (%) change	YoY (%) change
LPG	2,216	-4.2%	13.9%
Naphtha	1,285	2.1%	34.5%
MS	2,255	-5.0%	8.7%
ATF	680	-7.7%	8.8%
HSD	6,719	-4.9%	2.9%
LDO	57	-12.8%	21.5%
Lubricants & Greases	335	1.2%	14.5%
FO & LSHS	532	-9.0%	0.9%
Bitumen	652	-0.7%	3.1%
Petroleum coke	1,580	-9.4%	-28.2%
Others	837	-11.4%	41.5%
TOTAL	17,419	-5.0%	4.1%

Source: PPAC

Natural Gas Price

In February, the Henry Hub natural gas index decreased on average by 13.5%, to \$2.67 3.08/MMBtu. The index was 13.5% below the January 2018 level. Prices witnessed a fall because of the robust storage and lack of sustained cold push.

Figure 8: Global natural gas price trends



Source: EIA, WORLD BANK

Table 7: Gas price

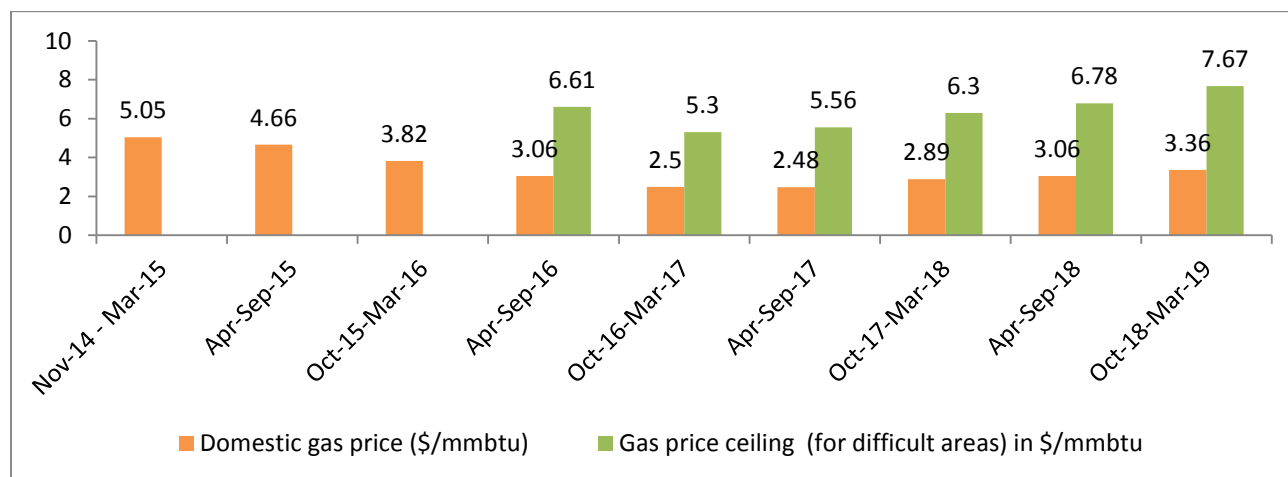
Natural Gas	Price (\$/MMBTU) in February 2019	MoM (%) change	YoY (%) change
India, Domestic gas price	3.36	0.0%	16.3%
India, Gas price ceiling – difficult areas	7.67	13.1%	21.7%
Henry Hub	2.69	-13.5%	0.7%
Natural Gas, Europe	6.01	-17.2%	-12.5%
Liquefied Natural Gas, Japan	12.01	0.1%	36.5%

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 9: Domestic natural gas price

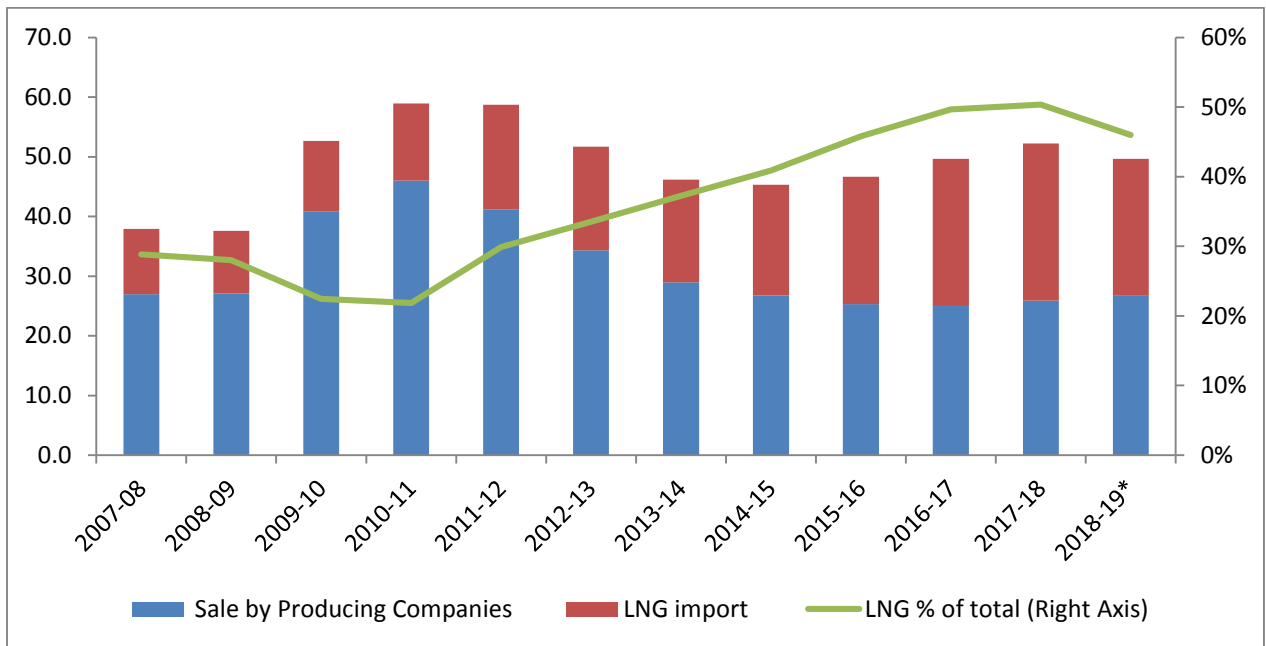


Source: PPAC

Natural gas production, consumption and import in India

- Natural gas constitutes for 6.2% 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 10: Domestic natural gas consumption, domestic production and LNG import in BCM



Source: PPAC

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

Key developments in Oil & Gas sector during March 2019

- **Mr. Dharmendra Pradhan distributes Letter of Intents to 12 successful entities for 50 Geographical Areas (GAs) under the 10th CGD Bidding Round**

On March 1st, Minister of Petroleum & Natural Gas and Skill Development & Entrepreneurship Mr. Dharmendra Pradhan today distributed the Letter of Intents (LOI) to 12 successful entities for 50 Geographical Areas (GAs) under the 10th CGD Bidding Round, recently awarded by PNGRB. This will herald new era with respect to the availability of convenient, environment-friendly and cheaper natural gas to more than 70 % of the country's population, spread across 27 States and Union Territories upto 10th round. Over 2 crore PNG connections are envisaged to be provided by these entities and 3,578 CNG stations will be put up in the area. As per provisions of the CGD authorization Regulations, authorization shall be granted to the successful bidders after receipt of the requisite Performance Bank Guarantee from the concerned entities within a specified period of 30 days.

Speaking on the occasion, Mr. Pradhan said that Indian oil and gas market, helped by progressive and conducive policy environment, have become mature and lucrative. Two international entities have bid in the 10th round and won 10 GAs. He said that the Present Government has been able to achieve historic and unprecedented results, within the same system and resources. He said that within 5 years, the coverage of City distribution area has gone up from 20% of population to 70%. He said that there is large potential in the CGD business, as we are exploring the use of LNG in heavy commercial vehicles, use of gas in steel and other industries. The Minister said the availability of cheap, clean and convenient gas will safeguard our poor from diseases. Congratulating the PNGRB for its proactive role in bringing more areas under the CGD, and completing the process in the record time, he said that besides certain small states/ UTs, big states like Haryana, Gujarat and Punjab will now be fully covered under the CGD

- **Contracts signed for 23 contract areas under DSF Bid Round-II**

On 7th March, Government of India today signed the contracts of the blocks awarded under the Discovered Small Fields (DSF) Bid Round-II with the awardees at New Delhi. The event was presided by Shri Dharmendra Pradhan, Minister for Petroleum and Natural Gas & Skill Development and Entrepreneurship, along with Dr. M. M. Kuttu, Secretary (P&NG), Dr. V. P. Joy, Director General-Directorate General of Hydrocarbons. Shri Dharmendra Pradhan congratulated the awardees and assured them of complete support and assistance from the Government.

Earlier on March 1st, the Empowered Committee of Secretaries (ECS) and Group of Ministers approved the award of 23 contract areas to Highest Ranked Bidders as part of the Discovered Small Field (DSF) Bid Round – II. The bid submission process under DSF Bid Round – II was successfully completed on January 30, 2019. The bidding under DSF bid Round-II started on 9th August 2018, and 25 contract areas were on offer covering 59 discovered oil and gas fields, spread over 3,000 Sq. Kms with prospective resource base of over 190 MMT (O+OEG).

Under DSF Bid Round-II, a total of 145 bids were received in 24 Contract Areas. As many as 40 companies (Individually or as member of the bidding consortium) have participated in the bid round. 6 foreign companies also participated in the bidding round. This bid round saw more than anticipated participation from new entrants from India and foreign countries like USA, UK, Australia, Singapore and UAE.

The bids (online first envelopes and hardcopies) were opened on 30th January 2019 at DGH's Noida office in the presence of the bidders. The evaluation of the bids was undertaken in a time bound manner and the commercial bids (second envelopes) were opened on 14th February 2019. Subsequently through detailed process of evaluation, 14 Companies (singly or in Consortium) have been shortlisted for award in 23 Contract Areas. Out of there 14 Companies, eight are new entrants in the E&P Sector.

- **7Croreth LPG connection handed over under PMUY**

On March 8th, Minister of Petroleum and Natural Gas & Skill Development and Entrepreneurship Mr. Dharmendra Pradhan today handed over the Seven Croreth LPG connection under the Pradhan Mantri Ujjwala Yojana (PMUY). Under the scheme, deposit free LPG connection is provided to a poor household and the connection is released in the name of an adult woman. The scheme was launched on 1st May, 2016 by Hon'ble Prime Minister with an initial target of five crores, which was later revised upward to eight crores connections.

The Seven Croreth connection has been released within just 34 months of the scheme's launch, which is a spectacular achievement for the Ministry of Petroleum and Natural Gas. Nearly 69,000 connections are being released per day. There has been huge jump in the LPG coverage in the country, having gone up from 55% in 2014 to 93%. 42% of the total beneficiaries belong to SC/ST. As per the recent data, 82% PMUY beneficiaries are going for refilling their cylinder and average refilling is about 6.5 cylinders per beneficiary..

- **Mr. Dharmendra Pradhan meets Minister of Energy, Industry and Mineral Resources, Kingdom of Saudi Arabia**

Union Petroleum and Natural Gas & Skill Development and Entrepreneurship Minister Mr. Dharmendra Pradhan held a meeting with Minister of Energy, Industry and Mineral Resources of Saudi Arabia and Chairman of Saudi Aramco, H.E. Eng. Khalid A. Al-Falih in New Delhi on 9 March, 2019. The meeting is a follow-up to the first State visit of His Royal Highness Crown Prince Mohammed bin Salman bin Abdulaziz Al Saud, Deputy Prime Minister and Minister of Defence of the Kingdom of Saudi Arabia in February this year.

This visit also reflects the intensifying engagement between the two countries in the hydrocarbon sector. Saudi Arabia is the second largest supplier of crude and LPG to India. In 2017-18, India's crude oil imports from Saudi Arabia were 36.8 MMT, accounting for 16.7% of our total imports. During the meeting, Mr. Pradhan referred to Saudi Arabia's pre-eminent role as a leading producer of crude oil in the world, and in maintaining global oil market balance. He raised concerns about increasing trend

in global crude oil prices. He also pointed to the need for uninterrupted supplies of crude oil and LPG to India in view of the OPEC+ cuts. Both Ministers also discussed about possible adverse impact of recent geopolitical developments on global oil market.

The Ministers also reviewed various Saudi investment proposals in the Indian oil and gas sector, including the urgent steps to be taken to expedite the implementation of the first Joint Venture West Coast Refinery and Petrochemical Project in Maharashtra, estimated to cost US \$ 44 billion, which will be the largest greenfield refinery in the world. Saudi Arabia's participation in Indian Strategic Petroleum Reserve (SPR) Program was also discussed. Both the Ministers agreed to take concrete steps for early implementation of the decisions taken in the oil & gas sector during the visit of His Royal Highness Crown Prince Mohammed bin Salman bin Abdulaziz Al Saud to India last month.



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