



January  
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 - 110 016

# Table of Contents

---

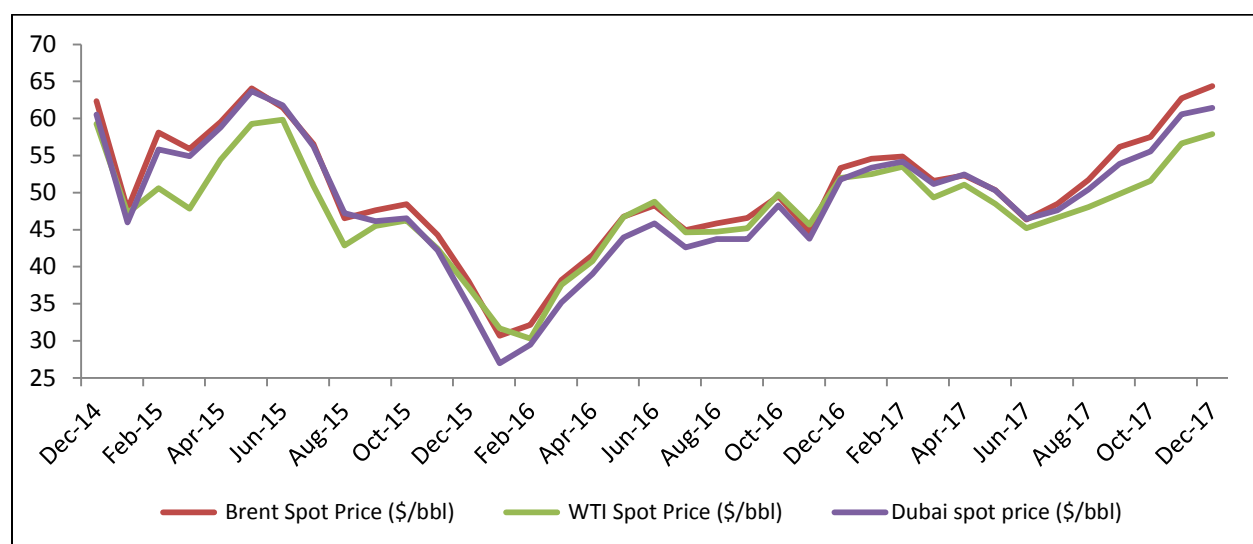
<a href="#">Crude oil price</a> .....	2
<a href="#">Indian Basket Crude oil price</a> .....	3
<a href="#">Oil demand &amp; supply</a> .....	3
<a href="#">Global petroleum product prices</a> .....	4
<a href="#">Petroleum products consumption in India</a> .....	5
<a href="#">Natural Gas Price</a> .....	6
<a href="#">Natural gas production, consumption and import</a> .....	7
<a href="#">Key announcements in oil &amp; gas sector during the month</a> .....	8

# Policy & Economic report – Oil & Gas market

## Crude oil price

Crude oil prices showed an increasing trend in the month of December 2017. Global benchmark crudes such as Brent, WTI and Dubai were trading at three year high in early January 2018 reflecting falling inventory levels, supply issues in North Sea and Libya and geopolitical tensions.

**Figure 1: Benchmark Crude oil Prices of Brent, WTI and Dubai crude**



Source: EIA, World Bank, OPEC

- Brent crude price averaged \$64.4 per bbl in December 2017, and was up 2.6% and 20.7% on a month on month (MoM) and year on year (YoY) basis, respectively.
- WTI crude price averaged \$57.9 per bbl in December 2017, and was up 2.2% and 11.4% on a month on month (MoM) and year on year (YoY) basis, respectively.
- Dubai crude price averaged \$61.4 per bbl in December 2017, and was up 1.4% and 18.6% on a month on month (MoM) and year on year (YoY) basis, respectively.

**Table 1: Crude oil price in December, 2017**

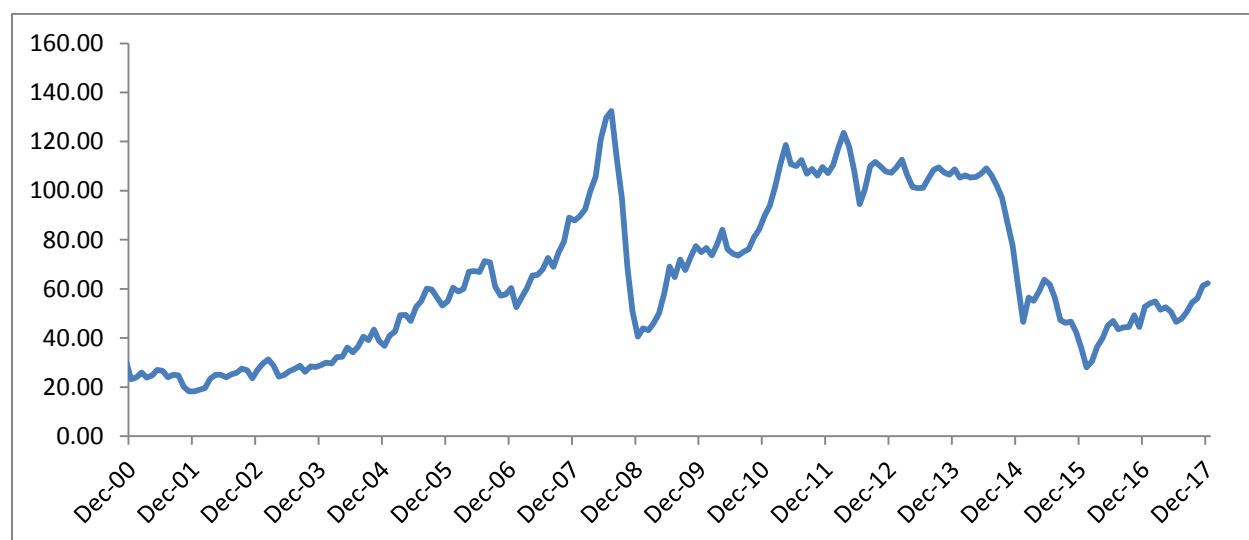
Crude oil	Price (\$/bbl) in Dec 2017	MoM (%) change	YoY (%) change
<b>Brent</b>	64.4	2.6%	20.7%
<b>WTI</b>	57.9	2.2%	11.4%
<b>Dubai</b>	61.4	1.4%	18.6%

Source: EIA, World Bank, OPEC

## 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 2: Indian crude oil basket price in \$ per bbl



Source: Petroleum Planning & Analysis Cell

- Indian crude basket price averaged \$62.3 per bbl in December 2017, and was up 1.6% and 18.1% on a month on month (MoM) and year on year (YoY) basis, respectively.

## Oil demand & supply

- According to OPEC, World oil demand grew by 1.64% in 2017 to 96.99 mbpd from 95.42 mbpd in 2016. India's demand for oil in 2017 was 4.47 mbpd.

Table 2: World Oil demand in mbpd

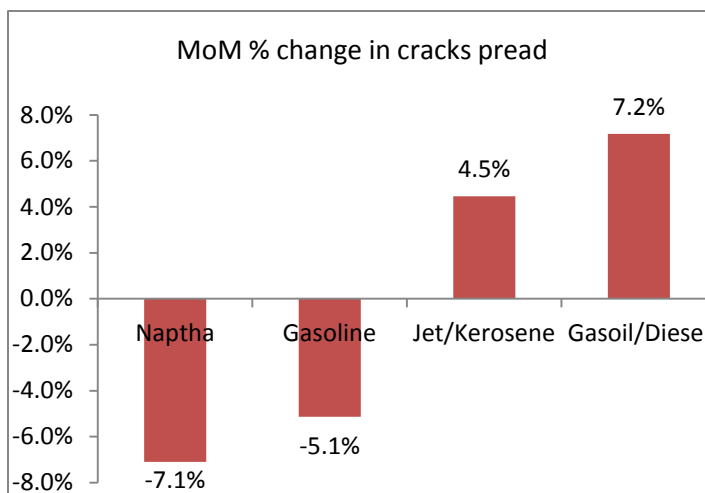
	2016	1Q17	2Q17	3Q17	4Q17	2017	Growth	%
<b>Total OECD</b>	<b>46.90</b>	<b>47.04</b>	<b>46.92</b>	<b>47.69</b>	<b>47.75</b>	<b>47.35</b>	<b>0.45</b>	<b>0.96</b>
<b>Dev. Countries</b>	<b>31.39</b>	<b>31.49</b>	<b>31.90</b>	<b>32.31</b>	<b>32.01</b>	<b>31.93</b>	<b>0.54</b>	<b>1.72</b>
~ of which India	4.39	4.43	4.42	4.20	4.81	4.47	0.08	1.8
<b>Other regions</b>	<b>17.13</b>	<b>17.14</b>	<b>17.46</b>	<b>17.77</b>	<b>18.44</b>	<b>17.70</b>	<b>0.58</b>	<b>3.36</b>
~ of which China	11.80	11.88	12.40	12.30	12.56	12.28	0.48	4.10
<b>Total world</b>	<b>95.42</b>	<b>95.67</b>	<b>96.28</b>	<b>97.77</b>	<b>98.20</b>	<b>96.99</b>	<b>1.57</b>	<b>1.64</b>

Source: OPEC monthly report, January 2018

- According to OPEC, world oil supply in December increased by 0.40 mb/d m-o-m, to average 97.49 mb/d, representing an increase of 0.83 mb/d y-o-y.
- Non-OPEC oil supply in December 2017 rose by 0.34 mb/d m-o-m, mainly in Canada, Mexico, Norway, Brazil and Kazakhstan to average 58.62 mb/d, while production declined m-o-m in the US, and the UK.
- The share of OPEC crude oil in total global production was steady at 33.3% in December, compared with the previous month.

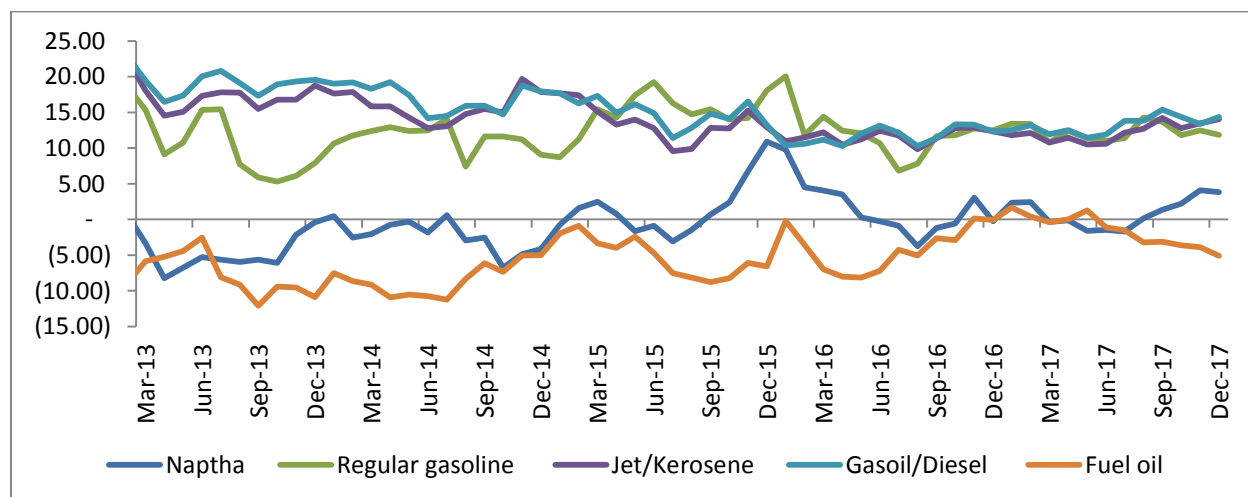
## Global petroleum product prices

Asian gasoline markets loosened a bit in December 2017 due to higher gasoline supplies from China resulting from higher refinery capacity additions as seen in late in 2017. Naptha prices continued to show strength backed by demand in petrochemical industry. Jet/kerosene crack spreads in Asia showed some improvement over the previous months due to strong regional demand from China and Japan. Gas oil crack spread in Asia also rose supported by strong export opportunities, robust regional demand and higher prices of diesel in Europe. Crack spreads for fuel oil continued to show a declining trend due to an oversupply in market driven by switching of power plants to natural gas due to environmental concerns.



Crack spreads for fuel oil continued to show a declining trend due to an oversupply in market driven by switching of power plants to natural gas due to environmental concerns.

Figure 3: Product crack spreads vs. Dubai crude



Source: OPEC, World Bank, FIPI

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

Products	Price (\$/b) in Dec 2017	MoM (%) change	YoY (%) change
Naptha	65.21	0.8%	26.6%
Premium gasoline (unleaded 95)	75.32	-0.4%	13.0%
Regular gasoline (unleaded 92)	73.26	0.3%	14.0%
Jet/Kerosene	75.45	1.9%	17.7%
Gasoil/Diesel (50 ppm)	75.75	2.4%	18.2%
Fuel oil (180 cst 2.0% S)	56.31	-0.6%	9.0%
Fuel oil (380 cst 3.5% S)	56.20	-0.8%	13.6%

Source: OPEC

## Petroleum products consumption in India

- With the push by government on promotion of LPG, its Consumption has steadily increased in India. In December, LPG consumption grew at 2.8% MoM and 6% YoY.
- Consumption of gasoline increased significantly (10% YoY) driven by higher demand from transport segment.
- Demand for diesel also witnessed robust growth of 8% YoY in the month of December.

**Table 4: Petroleum products consumption in India, December 2017**

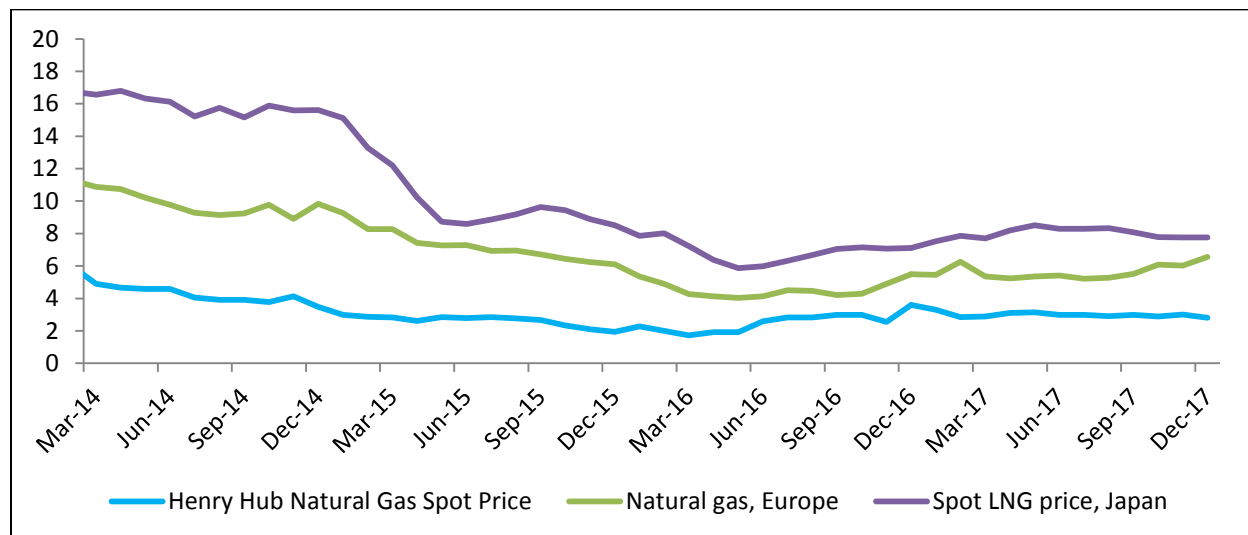
Petroleum products	Consumption in '000 MT Dec 2017	MoM (%) change	YoY (%) change
LPG	2,055	2.8%	6.0%
Naphtha	1,022	-3.9%	-1.3%
MS	2,168	2.0%	10.3%
ATF	675	5.0%	5.3%
HSD	7,116	-1.9%	8.3%
LDO	62	16.6%	57.3%
Lubricants & Greases	308	0.9%	4.4%
FO & LSHS	549	-2.4%	-10.2%
Bitumen	593	-3.5%	3.7%
Petroleum coke	1,882	-1.4%	14.1%
Others	638	0.6%	38.8%
<b>TOTAL</b>	<b>17,394</b>	<b>-0.5%</b>	<b>7.5%</b>

Source: PPAC

## Natural Gas Price

Natural gas prices globally have seen recovery and have been up by more than 10% over the previous year in December 2017, except in US. Henry hub natural gas price in December 2017 was around 20% lower than in December 2016 due to warmer winter and rising natural gas production in US. However, the trend started to reverse by the end of December due to colder weather, and the prices are expected to rebound back in January 2018.

Figure 4: Global natural gas price trends



Source: EIA, World Bank

Table 5: Gas price

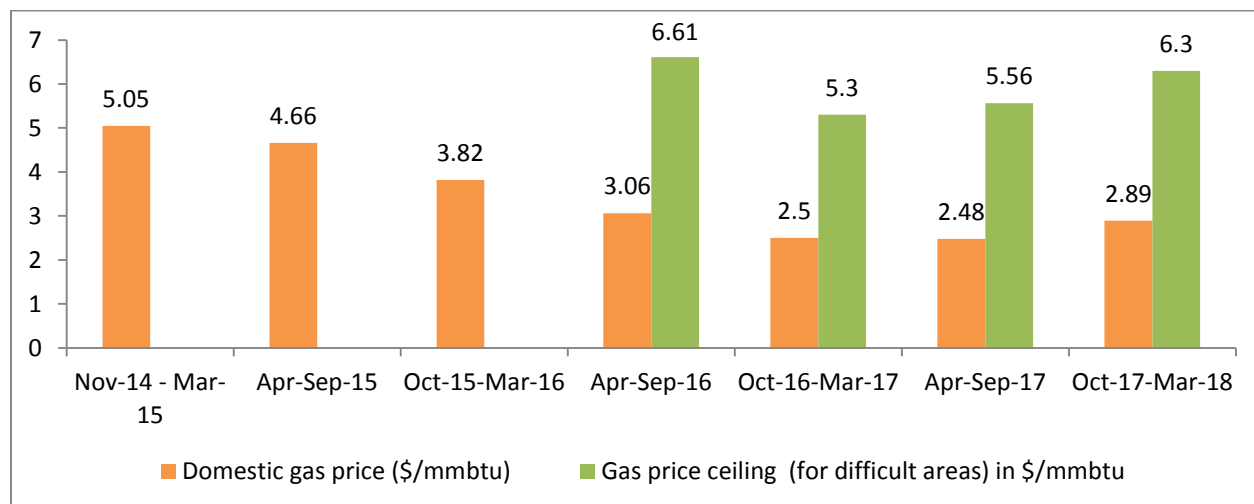
Natural Gas	Price (\$/MMBTU) in Dec 2017	MoM (%) change	YoY (%) change
India, Domestic gas price	2.89	0.0%	15.6%
India, Gas price ceiling – difficult areas	6.30	0.0%	13.3%
Henry Hub	2.81	-6.6%	-21.7%
Natural Gas, Europe	6.56	9.0%	19.3%
Liquefied Natural Gas, Japan	7.75	0.0%	9.2%

Source: EIA, World Bank, 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 16% as compared to a year before, thus capturing the international gas price trends.

A notification was issued by MoP&NG on 21<sup>st</sup> 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 Oct -17 to Mar-18 period, the price of gas from such areas was notified at \$6.30 per MMBTU.

Figure 5: Domestic natural gas price

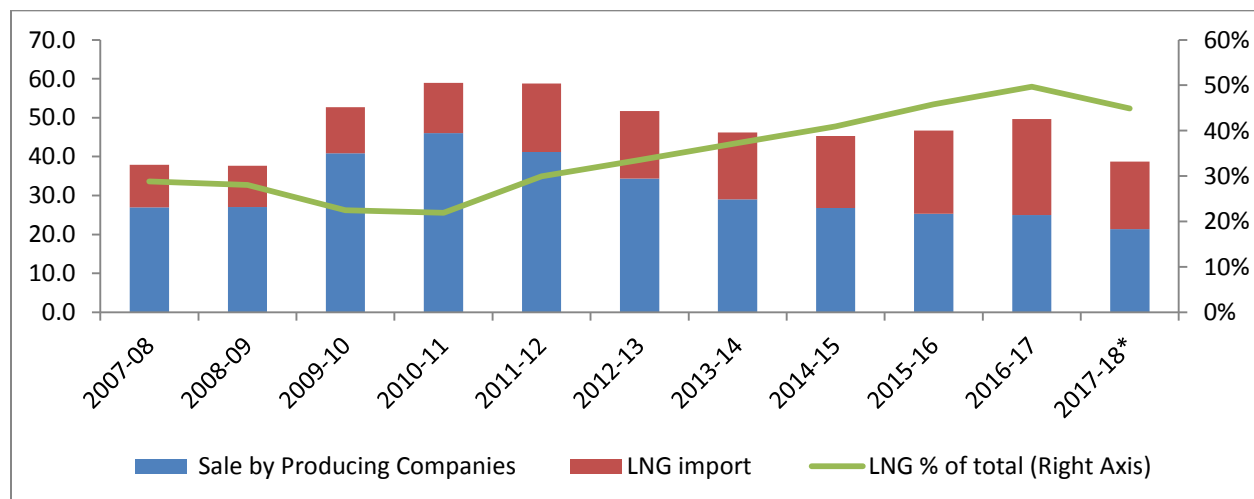


Source: PPAC

## Natural gas production, consumption and import

- 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 6: Domestic natural gas consumption, domestic production and LNG import in BCM



Source: PPAC

\*Figures for 2017-18 are for the period of April to November only. Sale by producing companies includes internal consumption



## Key announcements in oil & gas sector during the month

- **Cabinet approved MoU between India and Israel on Cooperation in the Oil and Gas Sector**

The Union Cabinet chaired by Prime Minister Shri Narendra Modi approved the signing of the Memorandum of Understanding (MoU) between India and Israel on cooperation in the Oil and Gas Sector.

The MoU is expected to provide impetus to India - Israel ties in the energy sector. The cooperation envisaged under the agreement will facilitate promotion of investments in each other's countries, technology transfer, R&D, conducting joint studies, capacity building of human resources and collaboration in the area of Start-ups.
- **Ministry of Petroleum and Natural Gas launched Bid Round I under the innovative Open Acreage Licensing Program**

With the objective to achieve Prime Minister's vision for Energy Security and Sufficiency, the Ministry of Petroleum and Natural Gas (MoPNG) launched the Bid Round I under Open Acreage Licensing (OAL) Programme for international competitive bidding on 18 January, 2018. For the first time in India, 55 bidder selected blocks, each carved out by prospective bidders themselves in promising basins with an area of 59,282 Sq. Kms were announced for bidding. This is the largest offering of acreages; the Government has announced in the past 8 years.
- **Commencement of work for the Rajasthan Refinery at Pachpadra, in Barmer, Rajasthan**

Work for construction of Barmer refinery commenced during the month of January 2018. The Rajasthan Refinery will be the State's first refinery. It is envisaged as a 9 MMTPA Refinery cum Petrochemical Complex. The product output from the refinery will conform to the advanced BS-VI emission norms. The estimated cost of the project is over Rs. 43,000 crore. The project is a Joint Venture of HPCL and Government of Rajasthan.
- **Acquisition of HPCL by ONGC**

Minister of Petroleum & Natural Gas and Skill Development and Entrepreneurship Shri Dharmendra Pradhan informed that the Government of India entered into an agreement with ONGC on January 20, 2018 for sale of its 51.11% equity shareholding in HPCL at a consideration of Rs. 36,915 crore. Shri Pradhan said this is in line with the Budget announcement 2017-18 to create oil majors in the country.

Shri Pradhan said ONGC-HPCL integration offers huge potential to attain economies of scale at various levels of operations and consolidation in petrochemical and refining business. The group company will leverage the financial strength and diversify business portfolio in upstream, midstream and downstream sectors.