

# H1-FY22 Domestic Natural Gas Price Revision Impact

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## Overview

The government usually revises the domestic natural gas price as per the New Domestic Gas policy, 2014 by the end of March and September. The gas price for locally produced fields has been kept unchanged at **USD 1.79/mmBtu** and the ceiling price for gas to be produced from difficult fields has been decreased to **USD 3.62/mmBtu** from USD 4.06/mmBtu resulting in a **10.8% decline**. The revised price will be prevalent from April 1 2021 to September 30 2021 i.e. H1-FY22.

For the first time since the inception of the New Domestic Gas policy, 2014, the government has kept the price of the domestic natural unchanged, which is already at its all-time low. In this report we will be discussing the impact on inflation, upstream players and on key end user industries.

## Inflationary Impact

Crude petroleum and natural gas has a 2.46% weight within which natural gas has a 0.46% weight. Since the gas price has remained unchanged we do not foresee any change in the WPI inflation index w.r.t. the natural gas component.

## Impact on Upstream Players

Since the domestic natural gas price has remained unchanged and the price applicable for gas produced from difficult fields has been reduced by 10.8%, upstream gas exploration companies are not to benefit at all, as this will further lead to a decline in the earnings due to a decrease in per unit realisations in the natural gas segment.

Depending on the location of the gas field, the cost of production for the upstream players may vary and thus fall in natural gas prices would either stymie their profits or even lead to losses if the cost of production is higher than the realization cost.

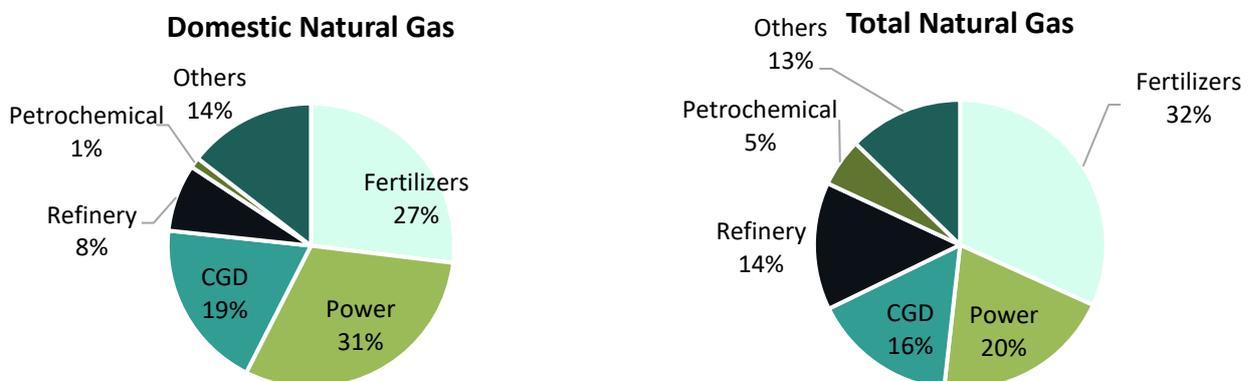
However, going forward, the gross production of domestic natural gas is expected to rise by 2% during FY22.

- E&P prospects in FY22 look promising on the back of scale up natural gas production from the KG basin block.

## Impact on End User Industries

The impact on end users is to be negligible considering there has been no change in the price of the natural gas. Broadly, 48% of natural gas is used as a feedstock and the remaining 52% is used for fuel and power.

**Chart 1: Sector- Wise Consumption Pattern of Natural Gas during FY21 (April-February)**



Source: PIB

\*Miscellaneous also includes usage Sponge Iron industries, in LPG shrinkage, Internal pipeline consumption, Tea plantations, Road transport and Manufacturing etc.

- **Fertilizer Industry**

Natural gas is used as a feedstock for the manufacturing of urea and out of 31 urea plants in India, 28 use natural gas as a feedstock. Natural gas accounts for 80% of the raw material cost for urea manufacturing. The price of urea is controlled by the government and is fixed at Rs 5,360/tonne. The government reimburses the fertilizer manufacture by the way of subsidies. The fertilizer subsidy for FY22 has been fixed at Rs 79,530 crore out of which Rs 58,767 crore is earmarked as the urea subsidy.

**The cost of the production of urea is to remain the same, as there has been no change in price of natural gas. Fertilizer manufacturers are to continue to reap the benefit of low gas price, which had improved the margins of the sector in the previous quarters. The stability in gas price also augurs well for the government w.r.t. the fiscal spending while disbursing the urea subsidy.**

- **Power Sector**

India is heavily dependent on coal-fired power plants for power generation and natural gas accounts for only 3%-4% of the total power generated (even though in terms of volumes most of the domestic natural gas is consumed by the power sector). Thus the impact of the price of domestic gas price usually does not affect the overall macros of the power sector given how gas based power plants only account for 6.7% of the total all India installed power capacity.

- **CGD Entities**

The stability in natural gas prices augurs well for the users of CNG and PNG as the government has been trying to convert India to a gas based economy. CGD entities supply gas for industrial, domestic, commercial and transportation needs. Gas supplied to industrial, domestic and commercial establishments is known as Piped Natural Gas (PNG), whereas gas dispensed through CNG refuelling stations to CNG vehicles (transportation) is known as Compressed Natural Gas (CNG).

CNG is 60% cheaper than petrol and 45% cheaper than diesel and given the volatility in petrol-diesel prices more vehicle users are making a shift to CNG powered vehicles. PNG is gaining popularity amongst the masses as is cheaper by 40% when compared with the market price of LPG and the price of PNG almost matches with that of subsidised LPG (based on prices in Delhi). As of 31.02.2021, **India has 2,713 CNG stations and 74.62 lakh PNG connections (74.19 lakh domestic connections, 32,059 commercial connections and 11,010 industrial connections).**

**The stability coupled with low gas prices comes at a good time for CNG and PNG users as the price of petrol and diesel is extremely high at the moment due to the taxes levied while that of LPG too has been on a rise with the recovery in oil prices.**

### Annexure

The domestic natural gas price is determined by the formula which considers the volumes and price of natural gas in USA (Henry Hub), UK (New Balancing Point), Canada (Alberta Gas) and Russia (Russian Natural Gas). Prices of gas in these hubs are market linked.

**Table 1: Domestic Natural Gas Prices (USD/mmBtu) on a Gross Calorific Basis (GCV) Basis**

	Domestic Natural Gas Price	Change (+/-)
1 <sup>st</sup> Nov'14 – 31 <sup>st</sup> Mar'15	5.05	-
1 <sup>st</sup> Apr'15 – 30 <sup>th</sup> Sep'15	4.66	-7.7%
1 <sup>st</sup> Oct'15 – 31 <sup>st</sup> Mar'16	3.82	-18.0%
1 <sup>st</sup> Apr'16 – 30 <sup>th</sup> Sep'16	3.06	-19.9%
1 <sup>st</sup> Oct'16 – 31 <sup>st</sup> Mar'17	2.50	-18.3%
1 <sup>st</sup> Apr'17 – 30 <sup>th</sup> Sep'17	2.48	-0.8%
1 <sup>st</sup> Oct'17 – 31 <sup>st</sup> Mar'18	2.89	16.5%
1 <sup>st</sup> Apr'18 – 30 <sup>th</sup> Sep'18	3.06	5.9%
1 <sup>st</sup> Oct'18 – 31 <sup>st</sup> Mar'19	3.36	9.8%
1 <sup>st</sup> Apr'19 – 30 <sup>th</sup> Sep'19	3.69	9.8%
1 <sup>st</sup> Oct'19 – 31 <sup>st</sup> Mar'20	3.23	-12.5%
1 <sup>st</sup> Apr'20 – 30 <sup>th</sup> Sep'20	2.39	-26.0%
1 <sup>st</sup> Oct'20 – 31 <sup>st</sup> Mar'21	1.79	-25.1%
1 <sup>st</sup> Apr'21 – 30 <sup>th</sup> Sep'21	1.79	0.0%

Source: PPAC, CARE Ratings

Domestic natural gas price is determined as per the formula given below;

$$P = \frac{VHH \text{ PHH} + VAC \text{ PAC} + VNBP \text{ PNBP} + VR \text{ PR}}{VHH + VAC + VNBP + VR}$$

$$VHH + VAC + VNBP + VR$$

Where

- a. VHH = Total annual volume of natural gas consumed in USA & Mexico.
- b. VAC = Total annual volume of natural gas consumed in Canada.
- c. VNBP = Total annual volume of natural gas consumed in EU and FSU, excluding Russia.
- d. VR = Total annual volume of natural gas consumed in Russia.
- e. PHH and PNBP are the annual average of daily prices at Henry Hub (HH) and National Balancing Point (NBP) less the transportation and treatment charges.
- f. PAC and PR are the annual average of monthly prices at Alberta Hub and Russia respectively less the transportation and treatment charges.

The Government also implemented the decision to allow marketing and pricing freedom for gas produced from High Pressure High Temperature, Deepwater and Ultra Deepwater areas, with a ceiling price arrived at on the basis of landed price of alternative fuels with a view to incentivize monetization of domestic gas resources in difficult areas. This means the producers have a maximum amount/ ceiling price which they can charge for the gas produced from difficult fields.

**Table 2: Domestic Gas price for gas produced from difficult fields (USD/mmBtu) on a Gross Calorific Value (GCV) basis**

	Ceiling Prices for Gas from HP-HT/Deep/Ultradeepwater	Change (+/-)
1 <sup>st</sup> Apr'16 – 30 <sup>th</sup> Sep'16	6.61	-
1 <sup>st</sup> Oct'16 – 31 <sup>st</sup> Mar'17	5.30	-19.8%
1 <sup>st</sup> Apr'17 – 30 <sup>th</sup> Sep'17	5.56	4.9%
1 <sup>st</sup> Oct'17 – 31 <sup>st</sup> Mar'18	6.30	13.3%
1 <sup>st</sup> Apr'18 – 30 <sup>th</sup> Sep'18	6.78	7.6%
1 <sup>st</sup> Oct'18 – 31 <sup>st</sup> Mar'19	7.67	13.1%
1 <sup>st</sup> Apr'19 – 30 <sup>th</sup> Sep'19	9.32	21.5%
1 <sup>st</sup> Oct'19 – 31 <sup>st</sup> Mar'20	8.43	-9.5%
1 <sup>st</sup> Apr'20 – 30 <sup>th</sup> Sep'20	5.61	-33.5%
1 <sup>st</sup> Oct'20 – 31 <sup>st</sup> Mar'21	4.06	-27.6%
1 <sup>st</sup> Apr'21 – 30 <sup>th</sup> Sep'21	3.62	-10.8%

Source: PPAC, CARE Ratings

The sources from which data was obtained and the assumptions considered for the purpose of calculation/determination for gas produced from difficult fields are mentioned below:

1. Landed price of fuel oil.
2. Weighted average import landed price of substitute fuels: (I) Coal (II) Fuel oil (III) Naphtha.
3. Landed price of imported LNG.

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