DISCUSSION PAPER

ANYBODY'S GAS

INDIA'S NEW NATURAL GAS MARKETING REFORMS

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Executive Summary

The Cabinet Committee on Economic Affairs chaired by the Prime Minister of India, Narendra Modi, on 7 October 2020 approved the **Natural Gas Marketing Reforms**. The idea is to move towards a gas-based economy. The stated objective of the new policy is to prescribe a standard procedure **to discover the market price of gas** to be sold in the market by producers through a competitive process, permit affiliates to participate in the bidding process for sale of gas, and allow **marketing freedom** to certain field development plans (FDPs) where the production sharing contracts **already provide pricing freedom**.

This document looks at the current scenario and different market outlooks, and subsequently outlines the claims and promises made by the Indian government.

The International Energy Agency (IEA) in its *India 2020* report released in January this year had remarked that India would be "vital for the future of the global energy markets." The IEA commended the country for "its continuous pursuit of market opening and greater use of market-based solutions through ambitious energy sector reforms." Noting that India is the world's third-largest consumer of oil, the fourth-largest oil refiner and a net exporter of refined products, the IEA said, "The rate of growth of India's oil consumption is expected to surpass that of the People's Republic of China in the mid-2020s, making India a very attractive market for refinery investment."

At an event organised by the IEA and the Indian ministry of petroleum and natural gas subsequently in July, minister Dharmendra Pradhan had indicated "in order to give a fillip to the gas-based economy, focus is being given to enhancing domestic gas production, expeditious development of gas infrastructure as well as development of (a) gas market by providing open access to gas infrastructure. The government was "progressively moving towards a marketing and pricing freedom regime in the country." The 7 October announcement is a step in that direction.

Many experts feel the government has rushed into the "reforms" process and much of the context has been largely ignored (detailed in *Section 4*):

- **Existing sources/producers of gas:** A large portion of the domestic natural gas output does not benefit from the reforms.
- **Market and price discovery in a system full of monopolies and formulae prices:** Formulae prices militate against a market price discovery, which needs a respectable volume to be traded. The measures proposed do not touch the fundamentals required for marketing and pricing freedom.
- **No freedom to market:** For 60% of India's gas production, there is not only an administrative gas price based on four benchmarks which have no relevance to India's market, but also no freedom for marketing it. That gas to be sold for customers is decided by bureaucrats. This promotes rent-seeking activity.
- **Understanding of energy mix:** The situation with respect to producing, raising share of gas in the energy mix, pricing gas or the Indian energy reality is not well understood. One cannot frame a policy or comment on it in the absence of such an understanding.
- **Cut off from global situation:** The global gas market prices are declining rapidly, but imported LNG purchases are locked up in rigid price-insensitive long-term contracts that do not yield the global price decline benefits to the domestic consumers of gas.
- **Prevalent distortions:** Domestic gas pricing is the key, and the two distortions are the tax structure and the transmission tariffs. If gas is brought under GST and tariff is unified, those are the ways forward there.
- **The question of gas imports:** Domestic producers have to compete with LNG suppliers. A gas price structure that protects domestic producers from cheaper imports stand outdated.

1. Natural Gas in India: The Backdrop

1.1 Exploration and Production: Financial Year 2018–19

Production

- 32.87 billion cubic metres (BCM) of domestic natural gas production;
- Against target of 35.6 BCM (92.34% of target met);
- Gas production increased by 0.68% compared to previous year;
- Production dominated by Krishna-Godavari and Mumbai Offshore;
- Oil and gas production at lowest since 2011–12;
- Gas production specifically at lowest since 2002–03.

Exploration

TABLE 1.1 **Major Discoveries: 2018–19**

Location	Operator
K-G Onland Basin	OIL
K-G Offshore Basin – DW	ONGC
Assam Shelf Basin	OIL
A&AA Basin (Assam Shelf)	ONGC
A&AA Basin (AAFB)	ONGC
Kutch Offshore Basin – SW	ONGC
Vindhyan Onland Basin	ONGC
Bengal Onland Basin	ONGC

SOURCE: *India's Hydrocarbon Outlook 2018–19: A Report in Exploration and Production Activities*; Directorate of Hydrocarbons, Ministry of Petroleum and Natural Gas, Government of India

1.2 Exploration and Production: Financial Year 2019–20

Production

- 31.18 BCM of domestic natural gas production;
- Against target of 34.55 BCM (90.2% of the target met);
- Gas production decreased by 5.1% compared to previous year;
- Significant decline in Krishna-Godavari production under PSC regime;
- Mumbai Offshore continued to contribute significantly;
- Oil and gas production lowest in last 10 years;
- In recent years, production has seen a shift from offshore to onshore area (with coal bed methane (CBM) as a major contributor).

Exploration

TABLE 1.2 **Major Discoveries: 2019–20**

Location	Operator
K-G Basin	OIL
Assam Shelf Basin	OIL
K-G Onland/Godavari Onland	ONGC
K-G Offshore	ONGC
K-G Onland/West Godavari	ONGC
Mumbai Offshore	ONGC
AAFB/ Sundulbari-Agartala Dome PML	ONGC

SOURCE: *India's Hydrocarbon Outlook 2019–20: A Report in Exploration and Production Activities*; Directorate of Hydrocarbons, Ministry of Petroleum and Natural Gas, Government of India

1.3 Historical Trends: Consumption and Pricing

TABLE 1.3 **Gas Consumption Trends in India (all values in MMSCM)**

Year	Total LNG Import	Net Production	Total Consumption
2011–12	17997	46453	64450
2012–13	17614	39753	57367
2013–14	17801	34574	52375
2014–15	18607	32693	51300
2015–16	21388	31129	52517
2016–17	24849	30848	55697
2017–18	27439	31731	59170
2018–19	28740	32058	60798
2019–20	33867	30257	64124

SOURCE: Petroleum Planning and Analysis Cell

TABLE 1.4 **Gas Pricing Rates Over Time (in US$/MBTU)**

Period	Domestic Gas Price	Gas Price Ceiling
Nov 2014 – Mar 2015	5.05	
Apr – Sep 2015	4.66	
Oct 2015 – Mar 2016	3.82	
Apr – Sep 2016	3.06	6.61
Oct 2016 – Mar 2017	2.50	5.30
Apr – Sep 2017	2.48	5.56
Oct 2017 – Mar 2018	2.89	6.30
Apr – Sep 2018	3.06	6.78
Oct 2018 – Mar 2019	3.36	7.67
Apr – Sep 2019	3.69	9.32
Oct 2019 – Mar 2020	3.23	8.43
Apr – Sep 2020	2.39	5.61
Oct 2020 – Mar 2021	1.79	4.06

SOURCE: Petroleum Planning and Analysis Cell

2. Current Scenario: India and the World

2.1 Natural Gas in India

2.1.1 Ministry of Petroleum and Natural Gas: Annual Report 2019–20

- India is the **3rd largest energy consumer** in the world;
- In 2010, the **share of natural gas** in India's primary commercial energy basket (not including non-commercial energy sources) was **9.4%**;
- By 2017, natural gas had only a 6.2% share in the country's primary energy mix. It has been envisaged to increase the share of natural gas from the current level to **15% by 2030**;
- India is **dependent on exports for 47.3%** of total natural gas consumed;
- Two national oil companies had **84% share in gas production** (excluding private/joint venture companies) in the country in 2018–19: ONGC produces 75% and OIL produces 9%.

2.1.2 BP Energy Outlook (2020)

- In 2018, India imported approximately 50% of gas it consumed;
- It is estimated that India's combined oil and gas **imports will double by 2050**, driven by increased coal-to-gas switching.

2.1.3 International Energy Agency: India 2020 Energy Policy Review

- Despite rapid growth, **domestic energy production** has not kept up with increase in energy demand;
- India has become increasingly dependent on imports, which raises questions about security of gas supply;
- Gas supply security mainly a **domestic supply issue**, caused in part by slower than expected development of exploration and production sector over past decade;
- Natural gas has not been able to satisfy growing demand for energy, and its share in power generation has decreased in the past five years;
- With the exception of 2009–12, when production peaked at around 50 BCM, India's production stable at just above 30 BCM per year since early 2000s;
- India has large **installed gas power capacity** which **is under-utilised**;
- Linking domestic gas prices to a basket of very low international reference prices (often taken from gas surplus countries) has **reduced incentives for domestic producers** to increase supply;
- Since natural gas does not fall under GST, gas consumption is taxed at several state and central government levels, in addition to gas transport tariffs;
- Gas used for power generation struggles to **compete with cheap coal** and renewables under the current contracted import prices;
- India has **no dedicated policy** or emergency response strategy to address an unexpected **shortfall in supply** of natural gas;
- However, India has increasingly **diversified its supply sources of LNG** in recent years. In 2014, 85% of imports came from Qatar, but this reduced to 60% by 2016. Other sources include Nigeria, Australia and Equatorial Guinea;
- Storage of natural gas can also help address shortages and disruptions to supply.

2.2. Global Outlooks

2.2.1 BP Energy Outlook (2020)

- The **outlook for gas is durable**, helped by broad-based demand and increasing availability of global supplies;
- Growth will be driven by developing economies in Asia as they switch away from coal.

2.2.2 Shell Outlook (2020)

- Global gas prices softened in 2019, as compared to 2018.
- Record supply investment in 2020, caused due to confidence in natural gas demand growth which is estimated to double by 2040.
- 80% of energy demand growth is to be met by renewables and gas.
- There is a need to drive cost reductions to make gas more affordable to customers, ensuring it remains competitive compared to other energy sources.

2.2.3 World Energy Outlook 2020: International Energy Agency

- The reduction in natural gas demand is **down by 3%** as a result of the COVID-19 pandemic;
- **Energy demand** in advanced countries is on **declining trend**, while increase comes from developing countries, led by India;
- The pandemic has catalysed a **fall in global coal demand**, but without policy implementations it is too soon to see a long-term decline of oil;
- A 30% rise in global natural gas demand is concentrated in South and East Asia;
- **Uncertain economic recovery** raises questions about the future of the record number of new LNG export facilities approved in 2019;
- The US shale industry has met nearly 60% of the increase in global demand for gas in the last 10 years. However, investment in oil and gas has fallen by 1/3rd compared to 2019.

2.3 Pandemic Trends in Gas Consumption

2.3.1 North America

- US natural gas consumption decreased by 2.8% for the period January–May 2020;
- However, natural gas has remained leading source of electricity March onwards;
- Natural gas demand in Mexico fell by an estimated 5% during first quarter;
- In Q1 2020, gas prices in the US fell by 33% to an average of $1.9/MBtu - the lowest price since 1999.

2.2.1 Europe

- In European gas markets, natural gas consumption fell by 7% in the first five months of the year due to lockdowns;
- Falling gas prices supported further coal-to-gas switching in Europe;
- Gas prices halved compared to last year to an average of $2.6/MBtu (reduced to a low of $1.5 immediately after lockdown).

2.3.3 Asia

- China experienced sluggish growth, as gas demand increased by just 1.6% in the first quarter;
- Japan, the world's largest importer of LNG, saw imports decline by 5% in the first five months of 2020 due to slowed down economic growth and

the decreasing share of natural gas in the country's electricity mix;

- In Korea, LNG imports increased by 14%, supported by the temporary shut down of 60 coal fired plants to reduce air pollution;
- In Pakistan, LNG imports decreased by 14% as a result of decreased demand caused by plant closures and restrictions on transport;
- In India, the **gap between coal and renewables** significantly narrowed after the first lockdown measures were taken;
- On average, gas prices in Asia were $3/MBTU. In India, Pakistan and Bangladesh, prices fell to a historic low of $2/MBTU on average.

3. Gas Reforms 2020

According to the official release issued by the government, "the policy aims to provide standard procedure for sale of natural gas in **a transparent and competitive manner** to **discover market price** by issuing guidelines for sale by contractor through e-bidding. This will **bring uniformity in the bidding process** across the various contractual regimes and policies to avoid ambiguity and contribute towards ease of doing business."

3.1 The Existing Pricing Models

3.1.1 Evolution of Pricing Models

India's gas sector was opened to private and foreign companies under the National Exploration and Licensing Policy (NELP).

TABLE 3.1 **Pricing Models Over Time**

Phase	Assessed Pricing	Market-linked Pricing	Profit Sharing
Pre 1999 (Pre-NELP)	Administered price set by government	Linked to global crude oil prices	Royalty + tax only
1999-2012 (NELP)	Through competitive bidding. Administered prices also continue.	Linked to global crude oil prices	Royalty + tax + portion of profits
Rangarajan Committee (Final Report 2012)	Discontinued	Linked to international 'exchange' traded prices in US, UK, Japan and import prices from Qatar, Nigeria, etc.	Portion of revenues
Kelkar Committee (Preliminarily Report 2013)	Discontinued		Royalty + tax + portion of profits

SOURCE: Akshay Mathur; Decoding natural gas pricing in India; Gateway House; 7 March 2014

3.1.2 Multiple Price Regimes

- The administered pricing mechanism (APM) price set by the government is an "assessed" price, while the price that Indian companies pay for imported gas is an example of the market-linked price;[1]
- The APM price set by the government deliberately **kept low for the poor** who benefit from subsidised rates. Such assessments have been based on **a complex method** that adds the cost of raw material, production, distribution, and marketing;
- The other method is to link India's natural gas prices to the **international market, to the benchmarks** of the US, UK, Japan, and those of countries such as Qatar and Australia;
- Despite Asia being the fastest-growing natural gas market in the world, more than 80% natural gas traded in Asia is **linked to global oil prices**;
- The creation of a **gas trading hub** would allow transparent price discovery on the basis of buyers and sellers interacting in an open market, and has potential to remove the multiple price regimes in India.

3.1.3 Gas Pricing: Current Status

- After three consecutive price reductions in 12 months, India's gas prices are at lowest since November 2014; government announced a 25% reduction in domestic natural gas prices to $1.79/MBTU from $2.39/MBTU;

1 Akshay Mathur; Decoding natural gas pricing in India; Gateway House; 7 March 2014

- The government-mandated rates are way below the cost of production of $3.5-3.7/MBTU;
- ONGC and OIL are already grappling with low oil prices and a further reduction in natural gas prices will exacerbate their earnings decline;
- According to the gas pricing formula introduced by the government, the price is revised twice a year;
- Prices have to be remunerative if the domestic output has to be raised.

3.2 The Gas Pricing Changes

3.2.1 Introduction of E-Bidding

- The director-general of hydrocarbons (DGH) will suggest new e-bidding platform to gas-producing companies for use as a methodology to determine fuel price in future discoveries;
- The Cabinet had approved the 'Natural Gas Marketing Reforms' that aim to prescribe a standard e-bidding procedure to discover the market price of gas through a transparent, competitive process;
- Price ceiling under present gas price formula will continue. New e-bidding process will govern discoveries which came on stream from February 2019 onwards;
- This is intended to help scale up domestic production and help create a uniform gas market; the regulator will suggest panel of e-bidding platforms to producers. Producers will have choice to opt for platform and get best market determined price for their gas; after auction, the natural gas volumes will have to be allocated based on predefined criteria and mechanism.

3.2.1.1 Salient Points from Notice Issued by DGH

- In order to facilitate discovery of market price for natural gas in a transparent and fair manner through a competitive bidding mechanism, DGH intends to empanel credible and qualified bidding agencies/e-bidding service provider to independently carry out auctions for the discovery of fair market price of natural gas through their electronic auction platforms for the producers (sellers) of natural gas in India;
- The sellers shall engage any one of the empanelled agencies for sale of their commodity as per business requirements and preferences. All the requisite technical and contractual information related to the process for discovery of market price of natural gas shall be provided by the seller.

3.2.2 The Claims and Promises

According to the government, "these reforms in gas sector will further deepen and spur the economic activities in the following areas:"

- The whole ecosystem of policies relating to production, infrastructure and marketing of natural gas **has been made more transparent** with a focus on ease of doing business;
- These reforms will prove very significant for Atmanirbhar Bharat **by encouraging investments in the domestic production of natural gas** and reducing import dependence;
- These reforms will prove to be another milestone in **moving towards a gas-based economy** by encouraging investments;
- The increased gas production consumption will help in improvement of (the) environment;
- These reforms will also help in **creating employment opportunities in the gas consuming sectors**, including MSMEs;
- The domestic production will further help in increasing investment in the downstream industries such as **city gas distribution** and related industries.

4. Observations and Analyses

4.1. Responses to Pricing Reforms in Media

- **Poorna Rajendran** (consultant at FACTS Global Energy): It is important to note that **a large portion of the domestic gas output does not benefit** from this reform. The bulk of the domestic gas is from legacy fields. Only output from newly discovered fields and coal-bed methane will benefit most from this reform in the near term. Additional reforms to India's current domestic gas price and ceiling price are needed to drive the increase in output. The "difficult gas" fields already enjoy marketing freedom but their prices are capped at fuel import prices—basket of LNG, coal, fuel oil, and naphtha—that were seen a year ago.[2]
- **K Ravichandran** (Group Head & Senior Vice President, ICRA): In the current tariff regime, farther a player is located from the natural gas source, more the consumer pays for the transportation of the natural gas, thus resulting in **concentration of gas-based industries near the natural gas sources**. For consumers located away from the natural gas sources, a significant portion of the natural gas cost comprises the transmission tariff due to higher approved tariffs and additive nature of the transmission tariffs. With the implementation of the unified tariff regime, this pricing linked dislocation in the natural gas pricing will be done away with.[3]
- ***Financial Express*** (editorial): Indeed, even after Wednesday's reforms, **over 70% of India's natural gas production doesn't get the benefit of the new marketing freedom** given. The reason for not freeing up prices of all natural gas, as in the past, is that if gas prices rise, so will the costs of fertiliser and electricity; but unless existing producers like ONGC are able to earn more from the gas they produce, how are they going to get the resources to invest in exploring/extracting more gas? And until that happens, the bulk of India's gas needs—right now, this is around 60%—will continue to be met through imports that cost more than locally produced gas.[4]
- **Shashi Shanker** (ONGC Chairman and Managing Director): The current **gas price does not cover cost** and the company has made representations to the Ministry of Petroleum and Natural Gas for suitable amendments to the formula. Ministry is seized of the matter. They are favourably inclined and a committee has been constituted to look into this. Prices have to be remunerative if the domestic output has to be raised. There is talk of a floor price and changes in the formula itself by linking the rate to relevant market benchmarks such as JKM (Japan Korea Marker). I cannot comment on what shape it will take but we are certainly hopeful. Every dollar reduction in gas price **leads to a revenue loss of about ₹5,200 crore** and a ₹3,500 crore on profit. ONGC's losses will be in the order of ₹6,000 crore to ₹7,000 crore in the current fiscal. The company has been incurring losses on the 65 MMSCM per day of gas it produces from domestic fields since November 2014.[5]

4.2 Responses from Experts (paraphrased)

- **TNR Rao** (former petroleum secretary): The policy is stated in a convoluted manner, and I presume it means to ensure ultimately a price discovery. After differentiating marketing freedom from pricing freedom, it says that marketing

2 Sambit Mohanty and Srijan Kanoi; Analysis: India's gas policy reforms need to gain speed to lift output, consumption; S&P Global; 15 October 2020
3 Anon; Price deregulation of natural gas key for success of unified tariff regime; India-Asian News Service; 14 October 2020
4 Anon; Gas 'reforms' show just how twisted Indian policy is; *The Financial Express*; 9 October 2020
5 Anon; ONGC sees Rs 6,000-7,000 crore loss on gas business; Press Trust of India; 9 October 2020

freedom is being given to achieve a price discovery. But it **does not say how to overcome self-imposed constraints** of various formulae prices and allocation policy which militate against price discovery. The government should **first look at the big picture of mandatory regulatory environment required for gas**, and then address the constraints militating against price discovery.

(i) All major trunk lines are natural monopolies and the regulation should ensure that at least two major pipelines meet. (ii) There should be separation of the content from the carrier. This unbundling principle should be enforced. (iii) Third party access (TPA) to the pipelines should be enabled by the regulator. (iv) Likewise, all LNG terminals also are monopolies, and TPA should be enforced there as well.

To think of a market and price discovery in **a system full of monopolies and formulae prices** is not feasible. There should be no formulae prices, as all these militate against a market price discovery, which needs a respectable volume to be traded. If for policy reasons power, fertilisers, etc, are to be subsidised, the subventions should directly be given to those plants. **Subsidising inputs is not the answer**. We should not forget that in the power sector, power trading and unbundling, etc, are in force and the impact of free pricing of gas should be borne in mind. One may remember that the initial reforms in 1991 started with free marketing of gas at prices arrived at by arms-length sales. We reversed it over all these years. The measures now proposed do not touch the fundamentals required for marketing and pricing freedom.

Bhamy Shenoy (oil and gas expert): Gas market reform is another baby step, though a good one on the path to total liberalisation of the gas sector. This is **marginally useful for the gas sector to achieve its full potential** in India. Way back in 2014, I was urging for total liberalisation of the gas sector when GoI was developing a new gas pricing formula and again in 2018.

When more than 50% of India's gas consumption is influenced by the world gas market, it does not make sense to liberalise just 20% of India's gas market to find a free market price and that too setting a ceiling. That is why I refer to it as a baby step. Even after the e-trade implementation to discover market price, it is applicable only for 40% of gas production, since the rest is still controlled under an irrational pricing formula.

If the real objective is to promote gas securing 15% of India's energy demand by 2030, it is imperative that the **entire gas sector be liberalised and allow the market to determine the price**. For 60% of India's gas production, there is not only administrative gas price based on four benchmarks which have no relevance to India's market, but also no freedom for marketing it. That gas to be sold for customers is decided by bureaucrats again. This results in **promoting illegal rent-seeking activity** which politicians like.

Only India's bureaucrats who have no appreciation of how a competitive market works can support this kind of political control of an important sector like gas in the name of helping the poor. They have made a total mess of every sector where gas is utilised (fertiliser, power, city gas distribution) as a result of controlling who gets the gas. One example is that of more than **50% stranded gas power plants**. Not only they do not have access to lower priced domestic gas, neither can they afford higher priced LNG. That is—many of the gas power plants are operating at low plant load factor or have been closed down. If only the entire gas sector was liberalised by both in terms of pricing and marketing, we would have had a fully functioning gas sector by this time.

On what basis can one fix a ceiling price? Does a bureaucrat know what should be the right price ceiling? This is what prevents both Indian and foreign investors from investing in India's oil and gas sector. Investors risking money to find reserves **cannot afford to take the price risk of this kind where bureaucrats set the ceiling on political basis**. Those who have heard of the US shale revolution know that it was possible only because the government did not control gas prices there. Even in the US when gas price was controlled, they faced gas deficit despite having all the resources. Only after total

liberalisation of the gas sector, the US succeeded in ushering in the shale revolution. The same is true in Western Europe where only because of total gas sector competition they are enjoying lower gas prices. We in India should learn from these experiences. Unfortunately, either the government of India is not getting proper advice or our politicians are having their own agendas.

- **Surya Sethi** (former principal advisor for power and energy, government of India): I **do not believe** that the situation with respect to producing, raising share of gas in the energy mix, pricing gas or **the Indian energy reality is well understood** (I am being polite—the truth is that it is not understood). I am appalled by the comments of the so-called experts. **You cannot frame a policy** or comment on it **in the absence of such an understanding**.
- **Anon A** (an expert on energy/oil/gas who did not wish to be named): Pricing of oil/gas produced by private companies is governed by the respective PSCs entered into by the government with the producers. In most of them, the **price applicable is the "arms-length price" discovered through an unrestricted market**. The only case of such a price discovery took place when RIL (Reliance Industries Limited) bid $2.34/MBTU in response to an international enquiry floated by NTPC (National Thermal Power Corporation) around the time when RIL was about to start production of gas from the KG Basin. This offer was linked to the prevailing high oil price in the global markets. Since then, the global oil market prices have steeply declined, implying that the so-called arms-length price for gas from the KG Basin would work out to a much lower price. The question of the government revisiting this in the guise of gas price reform cannot arise as any such attempt will imply violating the PSC in favour of RIL.

  Contrary to the above basis for gas pricing, the government adopted a formula that allowed a higher price of $4.20/MBTU in favour of RIL (corresponding to $2.34 cited above) which has since been contested. In the context of the prevailing low global oil prices, on the basis of this formula, the government has allowed a gas price of $1.79/ MBTU. If the discovered price of $2.34/ MBTU were to be adjusted for the fall in global oil prices, the gas price as on date should work out to a much lower level. Even at that level, considering that the unit cost of gas production is less than $1/MBTU, **it should yield good returns to the producer**.

  The two major consumers of natural gas in India are the electricity and the fertiliser industries.

  In the case of electricity, the central and the state regulatory authorities regulate the utilities' tariffs on a cost-plus basis. The two important downstream consuming sectors for electricity are agriculture and domestic consumers who may not be able to afford high tariffs. For farmers, though the Swaminathan Committee recommended a liberal price structure, both the Centre and the states are reluctant to adopt the same as it will impose a heavy subsidy burden on the PDS (public distribution system) which caters to the low-income groups of consumers down the line. If the price of gas increases, indirectly, it will impose a heavy subsidy burden on the states.

  In the case of fertilisers also, the existing administered pricing is based on a cost-plus basis. If the gas price goes up, it will in turn impose a heavy subsidy burden on the public exchequer.

  In other words, to talk of any gas price reform upstream without understanding its downstream subsidy implications indicates that the **government has not been properly advised on the subject**.

  Strictly, there is no free market for domestic gas in India. The global gas market prices are declining rapidly, but imported LNG purchases are locked up in rigid price-insensitive long-term contracts that **do not yield the global price decline benefits to the domestic consumers of gas**. At present, there is no regulation for gas prices. To say that low gas prices around $2/MBTU are not remunerative enough in India and therefore the gas prices need an upward adjustment may not entirely be appropriate.

The **unit cost of gas production for ONGC** which has undertaken hydrocarbons exploration and development across the length and the breadth of the country over the decades, as a part of the national effort to reduce import dependence, irrespective of the cost, **cannot be taken as the benchmark cost** for determining the price of gas for those companies who consciously bid for new E&P blocks, fully aware of the risks/returns. The latter should be subject to the pricing system already agreed to in the PSCs. If such licensees are yet to relinquish portions of license areas in violation of the PSCs, the PSC provisions should be enforced strictly and the unrelinquished areas taken back by the government for re-auctioning.

Anon B (an expert on energy/oil/gas who did not wish to be named): (1) Domestic gas pricing is the key, and the **two distortions are the tax structure and the transmission tariffs**. If gas is brought under GST and tariff is unified, those are the ways forward there. The sooner the government gets these policies executed, the better. (2) Domestic producers *have* to compete with LNG suppliers. A **gas price structure that protects domestic producers** from cheaper imports **is as outdated as the infant industry arguments** of the 1960s and 1970s. (3) A higher share of imports in domestic consumption is not a problem. If Japan had a policy of not importing gas in March 2011 when the Fukushima disaster struck, lights would have gone off in Tokyo. (4) India needs to balance long-term LNG contracts and short-term purchases, and **a policy chasing quick wins may not lead to long-term gains**.

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