



Firm expands PNG push amid Gulf war

New Delhi, April 12: From police stations to fast-food outlets, Indraprastha Gas Ltd is expanding its push for piped natural gas connections in Delhi-NCR as it looks to rapidly expand its user base to ease pressure on cooking gas LPG, its chief executive Kamal Kishore Chatiwai said.

Following disruptions to energy supplies from the West Asia conflict, the government is pushing wider adoption of piped natural gas (PNG) as a convenient alternative to LPG, given its more diver-

sified sourcing and lower dependence on the Gulf region. "We were (before the West Asia crisis) providing 600-700 PNG connections per day, which have scaled up to 2,100-2,200 a day now. The ultimate target is to take them to 5,000 connections," Mr Chatiwai said.

Besides laying pipelines to household kitchens to provide them with a convenient cooking gas alternative, IGL is targeting fast-food chains that had faced the brunt of LPG supply disruptions after

▶ WE WERE (before the West Asia crisis) providing 600-700 PNG connections per day, now it has been increased to 5,000 connections, IGL MD said

the government prioritised the limited available cooking gas for households.

The country's largest city gas retailer has already connected over 100 outlets of two leading fast food chains with PNG, and a similar number is in the process of being con-

nected. In all, 400 such outlets are on IGL radar.

IGL is also in the process of providing PNG connections to every police station in Delhi. Police stations' cafeterias/canteens, currently running on LPG and PNG connections, eliminate the hassle of arranging refills after cylinders run out of gas.

Mr Chatiwai said India has enough availability of natural gas, which is piped into household kitchens, industries and commercial establishments. — PTI



ENERGY CO SHELL RAMPS UP GAS SUPPLIES TO INDIA

New Delhi, April 12: Global energy major Shell plc has ramped up natural gas supplies to India in the wake of disruptions triggered by the West Asia conflict.

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As imports grow, India pushes forward to diversify its LPG supplier base

Rishi Ranjan Kala
New Delhi

As LPG imports continue to grow, India is moving to diversify its import basket.

The country is likely to import around 20.82 million tonnes (mt) of liquefied petroleum gas (LPG) in FY27 as the world's third largest consumer procures more than 60 per cent of its domestic consumption.

The Petroleum Planning & Analysis Cell (PPAC) expects India to consume around 34.69 mt of LPG in FY27, a growth of roughly 4.5 per cent on an annual basis.

The cumulative LPG consumption rose by 6 per cent y-o-y to 33.21 mt in FY26 provisionally, which is the highest annual growth in us-



SUPPLY GAP. As per industry sources, India consumes around 80,000 tonnes per day of LPG and imports around 54,000 tpd

age since FY19.

There are 33.37 crore households using the cooking fuel, including roughly 10.55 crore PM Ujjwala Yojana (PMUY) beneficiaries.

In FY26, imports stood at 20.50 mt during April-February, accounting for 61.73 per cent of the total consumption.

Similarly, India imported almost 66 per cent of its LPG

demand (20.67 mt) in FY25 out of the cumulative consumption of 31.33 mt. In FY24, imports accounted for around 60.40 per cent (18.51 mt) of the total consumption (29.66 mt).

As per industry sources, India generally consumes around 80,000 tonnes per day (TPD) of LPG and imports around 54,000 TPD.

The conflict in West Asia has severely impacted In-

dia's LPG supplies considering that around 90 per cent of the imports, or roughly 60 per cent of the domestic consumption, comes from the Middle East Gulf region.

As per Vortexa, MEG (excluding Iran) is India's largest supplier of LPG, covering 92 per cent of the country's imports as of 2025.

LPG CARGOES

India has also been trying to diversify its import basket. For instance, it has increased its LPG importing sources from 10 to 15.

Since the closure of the Hormuz, India has been trying to arrange LPG supplies from the US, Russia, Australia, Saudi Arabia, the UAE and Iran. Procuring the commodity from the US requires around 45 days of travel time.



Juno Joule starts work on CBG plant in Telangana

Hyderabad: Juno Joule Bio Fuels commenced construction of its flagship compressed biogas (CBG) project at Narmetta, Siddipet district, Telangana. Ground-breaking was performed on Sunday. The project is a part of a larger cluster development comprising 10 CBG plants, each with a 10 tonne per day capacity, aggregating 100 TPD, with a total planned investment of ₹700 crore. OUR BUREAU

Are biomass stoves a cleaner, cheaper alternative to LPG?

Can modern cookstoves turn the return of firewood into a sustainable alternative during the LPG crisis?

Ankit Mathur

The story so far:

Owing to the LPG crisis, many areas—especially rural regions—have reported going back to firewood that are generally seen as increasing drudgery for women, while also causing pollution and health hazards.

Are today's firewood-based stoves less polluting and benign to human use?

Modern biomass stoves, often called improved cookstoves (ICS), represent a major step up from traditional cooking methods. Unlike old-fashioned mud stoves, they can cut fuel use by up to two-thirds while dramatically reducing smoke.

Traditional “chulhas” waste most of their heat through poor airflow and have an efficiency of barely 10%. By contrast, modern stoves reach thermal efficiency levels of 38% to 45%. Technologies such

as secondary aeration help to catch soot and harmful gases before they turn into smoke.

How can mass firewood-based cooking be made sustainable?

Cooking with firewood can be sustainable, provided the wood is harvested and used responsibly. Firewood is a renewable resource as long as the rate of extraction does not exceed the rate of regrowth. Since improved cookstoves burn fuel more efficiently, they can reduce the amount of wood needed for a meal.

Modern cookstoves can also run on alternative biomass fuels, including pellets and briquettes made from sawdust or agricultural waste. This widens the fuel base and takes some pressure off raw firewood.

Financing is key to achieving deployment at scale. Emissions savings enabled by improved cookstoves can be tracked and turned into carbon credits,

creating a funding stream that makes stoves more affordable for lower-income families.

What about the cost of equipment and fuel expenses?

Upfront costs vary significantly. Household models start below ₹2,000, while commercial systems can exceed ₹20,000, depending on the manufacturer and purchase channel (whether direct, through e-commerce, or via distributors). For low- and middle-income households, managing upfront costs can be made easier through financing partnerships involving microfinance, CSR programs, and carbon finance.

The principal operating cost is fuel, and modern cookstoves' high thermal efficiency can significantly reduce fuel requirements. Today's stoves have cut firewood consumption by more than 50%.

Firewood is highly cost-effective compared with LPG, especially during the

ongoing supply crunch when commercial LPG rates in major cities have exceeded ₹100/kg. From the wide range of prices available for different firewood types, it is possible to assume a rough average cost of around ₹10/kg (if firewood is being bought instead of being simply scavenged). Considering that 4 kilos of firewood deliver the same cooking energy output as 1 kg of commercial LPG (in an improved cookstove), firewood could potentially offer cost savings of well over 60%.

What supply chain would be needed for mass adoption? Will this be a massive investment?

Adopting biomass cookstoves on a large scale absolutely does not require a massive investment in fuel supply chains. Since the primary fuels - like firewood, crop waste, and dung cakes - are already widely available in rural and semi-urban areas, there is less need for expensive, centralised infrastructure.

Scaling up is therefore more about strengthening distribution networks. Success depends on improving logistics, last-mile delivery, and local partnerships. Just as importantly, building user awareness and providing reliable after-sales support are essential to making sure these stoves remain a permanent part of daily life.

(The author is co-founder and CEO, Greenway Grameen)

THE GIST

Improved Cookstoves (ICS) offer a sustainable solution by increasing thermal efficiency, reducing smoke, and cutting firewood usage by over 50%.

Mass adoption of efficient biomass stoves does not require massive infrastructure investment, as local, renewable fuels (wood, agricultural waste) are readily available.

Shell steps up LNG supplies to India

PRESS TRUST OF INDIA
New Delhi, April 12

GLOBAL ENERGY MAJOR Shell plc has ramped up natural gas supplies to India in the wake of disruptions triggered by the West Asia conflict, leveraging its global liquefied natural gas (LNG) portfolio to capture a larger share of spot and term demand, including key fertiliser sector tenders.

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from the Gulf.

With supplies from India's largest LNG supplier in Qatar disrupted by the West Asia conflict, Shell plc's India arm stepped in, importing its largest-ever monthly LNG volumes in March, they said.

Besides fertiliser, Shell India also supplied gas to other industrial users and retailers. In March, it became India's largest supplier of imported gas. Shell's ability to step up supplies is backed by its 5 million tonnes-per-year LNG import terminal at Hazira in Gujarat and associated storage infrastructure, along with its position as the world's largest LNG portfolio player, allowing it to source cargoes from multiple regions.

Sources said the company leveraged its LNG portfolio in several countries.



● FROM PLATE TO PLOUGH

FERTILISER SUBSIDIES MUST BE OPTIMISED TO ENSURE FOOD SECURITY IN UNCERTAIN TIMES

Fortifying fertiliser supply

THE WORLD HEAVED a sigh of relief as a two-week ceasefire was announced by President Donald Trump just hours before his deadline threat of "A whole civilization will die tonight, never to be brought back again." One can only hope that there is a lasting solution to the deadly conflict between Iran and Israel-US and civilians are spared from death and destruction.

What is the learning for India from this conflict, as well as the one between Russia and Ukraine? The world is heading towards greater uncertainty and more instability. Against this backdrop, the first and foremost task for the Indian government is to ensure food security; but that cannot be achieved unless India secures its fertiliser supplies. Natural farming, though desirable as a niche market, cannot feed India.

India's import dependence for chemical fertilisers (including their feedstocks) is roughly to the tune of 70%. Take for example the case of urea. India consumes roughly 40 million tonnes (MT) of urea, of which about 10MT is imported. But even the 30MT produced domestically is dependent on imported gas to the tune of almost 85%. During this 40-day war, global urea prices were up by almost 65%, up from \$482/tonne towards the end of February to \$795/tonne in the first week of April. Similarly, gas prices (Liquified Natural Gas, LNG) went up from \$12/Metric Million British Thermal Unit (MMBtu) to \$19.5/MMBtu over the same period—an increase of 63%. This is the biggest hit to India, on top of not getting enough supplies from the Strait of Hormuz. Realising this, the Cabinet has already approved higher subsidy on urea, indicating that its price may not be increased for the farmers.

Even prices of phosphatic fertilisers

are increasing, although not to the same extent as prices of urea and LNG are. Diammonium phosphate (DAP) rice, for example, has gone up from \$627/tonne to \$720/tonne—an increase of about 15%. But getting DAP, phosphate rock, or phosphoric acid from the Gulf countries, especially Saudi Arabia, is becoming increasingly difficult.

What should Indian policy makers do? Union Minister for chemicals and fertilisers JP Nadda has been on record stating that it is known that farmers need two bags of urea for their crops, but are availing of four. It clearly indicates that the government is aware that urea is being overused when compared to phosphatic and potassic fertilisers, and/or there is significant diversion of urea for non-agricultural uses or even to neighbouring countries. Urea in the country is being sold at less than \$70/tonne to the farmers when global prices are touching almost \$795/tonne, leading to inefficient use and opening up opportunities for large arbitrage in diversion. Why can't the government indicate that given the difficulty in procuring gas and urea as well as the major increase in their import prices, there will be a cut of 10-15% in

supplies for each state? States can be asked to work out the modalities—how they want to allocate restricted supplies to farmers based on their land records, crops grown, previous sales, and recommended doses by state agriculture universities. This quantitative rationing of urea under the Essential Commodities Act is very much possible and desirable to ensure better utilisation of nitrogenous fertilisers. This exercise needs to

be conducted jointly by the Centre and the states.

It may be noted that granular urea, the way it is being applied in India, has a very low Nutrient Use Efficiency (NUE), roughly 35-40%. The plant does not consume more than 40% of nitrogen

being applied. The rest is going in the environment as nitrous oxide, which is 273 times the carbon dioxide, or leeching into groundwater and increasing its nitrate content, causing blue baby syndrome, thyroid, or even diabetes. It is ironic that liquid urea (N) is not subsidised, even as its NUE is almost 90% through drip irrigation (fertigation). This indicates a highly irrational urea pricing policy. The prime minister's efforts to promote natural farming cannot really scale up unless fertiliser pricing or quan-

ties are rationalised.

Union Minister for agriculture and farmers' welfare Shivrang Singh Chouhan has stated that direct cash transfers to farmers equivalent to fertiliser subsidy would be preferable. But when will this happen, and how will the issue of tenants vis-a-vis cash transfers be resolved? The PM-KISAN scheme suffers from this lacuna and the most vulnerable section of peasantry—the tenants—remains devoid of this scheme. Why not consider clubbing the PM-KISAN money and fertiliser subsidy and directly giving that to farmers (landowners and tenants) on a per acre basis, freeing up prices of fertilisers? It can be done and would be most desirable. But it needs due preparation to identify real cultivators. The PM needs to prioritise this issue as the gains would be very significant.

DAP supply is another issue. If India is already using urea (N) in excess in relation to phosphorus (P) and potassium fertilisers, why put 18% N even in DAP, which has 46% P? Why not simply use Triple Super Phosphate (TSP) with 46% P? We have no plant in the country producing TSP, but we have more than 100 plants producing Single Super Phosphate (SSP) with only 16% P. Why not incentivise the production of TSP at home or in collaboration with phosphate-rich countries? The bottom line is that we need to increase consumption of P in relation to N, and the best product for that would be TSP in place of DAP. It will also help the government to save at least 18% N while also cutting down the subsidy bill on urea.

To sum up, the government needs to reform the fertiliser policies either through the direct benefit transfer route or by rationing quantities. Only then it can reduce its misuse and diversion as well as ensure food security.

Views are personal

ASHOK GULATI

Distinguished Professor, ICRIER



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New Delhi, 12 April

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Indian fertiliser firms, securing a supply of 4 trillion British thermal units out of 6 TBtus volumes tendered, as the Centre moved to ensure feedstock availability for urea production amid constrained supplies from the Gulf. With supplies from India's largest LNG supplier in Qatar disrupted by the West Asia conflict, Shell's India arm stepped in, importing its largest-ever monthly LNG

volumes in March, they said. Besides fertiliser, Shell

India also supplied gas to other industrial users and retailers. In March, it became India's largest supplier of imported gas.

Shell's ability to step up supplies is backed by its 5 million tonnes-per-year LNG import terminal at Hazira in Gujarat, along with its position as the world's largest LNG portfolio player, allowing it to source cargoes from multiple regions beyond West Asia to meet demand.

Sources said Shell leveraged its LNG portfolio in countries ranging from Oman to Australia and Nigeria. It also

operates one of the largest LNG shipping fleets (over 65 chartered carriers), helping deliver gas when India's main supplier declared *force majeure*. India imports roughly half of its natural gas requirement, which is used as feedstock for fertiliser production, power output, CNG for transport, piped cooking gas for households and across a range of industrial applications.

As much as 45-50 per cent of LNG imports come from Qatar. These supplies stopped after Iran's sweeping retaliation to US.

ENERGY PRICES MAY SURGE WHEN MARKETS REOPEN TODAY

OMCs face renewed pressure as US-Iran peace talks collapse

Indian vessel carrying nearly 20,400 tonnes of LPG crossed Hormuz on April 11

SHUBHANGI MATHUR
New Delhi, 12 April

The profitability of India's oil-marketing companies (OMCs) is likely to come under renewed pressure after peace talks between the US and Iran ended without a breakthrough, a development analysts say could keep energy prices elevated.

Energy prices are expected to surge when markets reopen on Monday, they said.

The conflict in West Asia is likely to drag on, with uncertainty looming over the reopening of the Strait of Hormuz, posing energy supply challenges for Indian companies amid high energy prices. The US and Iran failed to reach an agreement on Sunday, with key differences remaining over the status of the Strait of Hormuz and Tehran's nuclear programme, according to officials.

Indian consumers may soon face higher fuel prices if OMCs are unable to absorb the impact of rising global rates.

"Procurement costs have escalated sharply over the past 30 days, particularly since the conflict's onset on February 28. While the Indian gov-



WEST ASIA
CONFLICT



ernment has temporarily shielded citizens through excise duty cuts of ₹10 per litre, the pressure on OMCs is mounting," said Deepak Mahurkar, partner-oil and gas at PwC.

"We are reaching a critical juncture where the ability of these firms to absorb these costs without passing them on to domestic consumers will be fundamentally challenged," added Mahurkar.

As state-run OMCs have left fuel prices unchanged despite crude

Cascading effect

- Indian consumers are likely to face higher energy prices if OMCs fail to absorb surging global rates
- Procurement cost has gone up significantly in last 30 days and is expected to climb
- The govt has increased export duties on diesel and ATF to secure domestic energy supplies
- Experts believe OMCs ability to curb domestic energy prices from rising will be challenged in near term

prices rising to over \$100 per barrel, the firms are incurring steep under-recoveries of ₹24.40 per litre on petrol and ₹104.99 per litre on diesel at current retail selling prices, the government said.

"Crude prices will jump on Monday as talks have failed. There will again be risks for vessels to pass through Strait of Hormuz. India's oil and gas sector will be impacted by the jump in energy prices. OMCs will see significant impact on both availability of supplies and their margins," said Prashant Vasisht, VP & co-head

of corporate ratings at Icria.

In a bid to secure domestic energy supplies and curb exports, the government has sharply increased export duties on diesel and aviation turbine fuel. The duty on diesel exports has more than doubled to ₹55.5 per litre from ₹21.5 per litre, while the levy on jet fuel exports has been raised to ₹42 per litre from ₹29.5 per litre.

Meanwhile, an Indian-flagged liquefied petroleum gas (LPG) vessel, Jag Vikram, carrying 20,400 tonnes of cooking fuel safely crossed the Strait of Hormuz on Saturday.

Of the Indian vessels stranded in Hormuz, the government is prioritising safe passage of LPG tankers amid an acute shortage of cooking fuel in the country. So far, seven other Indian-flagged LPG carriers have crossed the region and reached Indian ports. Despite the safe passage of several LPG tankers, India continues to face a cooking gas shortage due to the conflict in West Asia.

Fifteen vessels remain in the Persian Gulf, including one liquefied natural gas (LNG) carrier, six crude oil tankers, and one empty LPG vessel, with the rest comprising container, chemical, and bulk carriers.

Iran war prompted India to change crude formula to fix 3-yr inaccuracy

Old formula did not represent the price paid by Indian refiners

S DINAKAR
Hyderabad, 12 April

In a break from tradition, India's Petroleum Planning & Analysis Cell (PPAC), the custodian of the country's petroleum data, changed India's crude pricing formula in March, increasing the weight of the European benchmark Brent over 50 per cent for the first time ever in the Indian crude oil basket.

This has been done to reflect India's underlying realities in crude imports, according to government data, industry officials and shipping data. The new formula also correctly signals the general direction of India's crude imports and the underlying pricing benchmarks after being out of sync with actual import trends for the last three years.

The new Indian crude oil basket formula in March comprised 61 per cent weight to European benchmark Dated Brent, a light, sweet crude oil grade of premium quality, and 39 per cent to the average of Oman and Dubai oil benchmarks, sour grades containing higher sulphur and typically cheaper than sweet crude oil.

The ratio changed from a weight of 79 per cent given to Oman/Dubai and only 21 per cent to Brent in 2024-25 and 2025-26 until February. Weight to Brent was the highest prior to 2006 at 43 per cent, PPAC data showed.

"India's diversification in crude oil purchases is being reflected in the new crude price formula," said Prashant Vasishth, senior vice-president at ratings agency Icra, a Moody's affiliate.

It added, "The Indian basket was not reflective of the diversification



Changing oil matrix

	Avg crude price (\$/bbl)	Dubai/Oman to Brent	
		Price formula weightage	Actual purchase ratio
2020-21	44.82	76:24	63:37
2021-22	79.18	76:24	61:39
2022-23	93.15	76:24	60:40
2023-24	82.58	76:24	46:54
2024-25	78.56	79:21	45:55
2025-26*	71.00	79:21	47:53
Mar-26	NA	39:61	28:72

*Data as of February 2026 Note: Actual price ratio is approximate; All numbers are rounded up
Source: Oil ministry, PPAC, Kpler

during the past three years."

Russian oil comprised 35 per cent for the last three years and it is typically priced off Brent, he added.

This is the first time the formula was changed mid-way, an official involved with petroleum statistics told *Business Standard*.

Typically, a committee meets to decide the ratio, which changes once a fiscal or once in many fiscals, another official said.

"Normally, they (changes) are not done between a month. But this time, as a special case, it had to be resorted to," he added, declining to give details.

The Indian crude cocktail is a free on board (FOB) price, excluding freight, insurance and other charges, published to represent an indicative price for Indian imports.

The reason for the sudden change, the official said, was that under the old formula, the Indian crude basket surged to as high as \$156 a barrel. This did not accurately represent the prices Indian refiners were paying for the oil and from where it was sourced.

In March, India bought a record low 910,000 barrels per day from West Asia, typically benchmarked off Dubai/Oman, after Iran virtually shuttered the Hormuz. This compares to 3 million bpd in February from the region, according to

Kpler data and a senior refining official, prompting a rework in pricing weights.

PPAC could not be reached for comment.

"The basket is relevant because it's a representation of the actual crude cost," said R Ramachandran, former refinery director at Bharat Petroleum and an industry consultant. "In India, we buy a mix of crudes; some may be cheaper or costlier. When I have an index that represents what it is to my country, in the context of using strategy pricing and crude pricing, a crude basket becomes essential."

Since 2013-14, the government gave a weight of over 70 per cent for the Oman/Dubai benchmark in the Indian crude oil price basket, reflecting the general trend of India's oil imports.

However, since Russia invaded Ukraine in February 2022, the basket was untethered to India's actual crude imports, shipping and Customs data showed, and industry officials said.

In the last three years, PPAC increased the ratio of Dubai/Oman to a record 79 per cent and reduced Brent to 21 per cent. During that period, over 50 per cent of India's oil imports were actually priced off Brent after a surge in Russian oil purchases, according to Kpler and

two traders from refiners.

Basket of relevance

"There's relevance for the crude basket if it is properly updated," Ramachandran added.

Dated Brent is the price for a cargo with a loading date in the next few weeks.

Dubai and Oman are spot price markers for crudes shipped to Asia.

While the new formula still doesn't capture the exact ratio of how India's crude oil is priced, nor does it account for the discounts or premiums charged, the basket signals the right direction now, the official said.

In March, imports from West Asia, pegged to the Dubai/Oman benchmark, accounted for only 16 per cent, nearly a third of flows in pre-war February.

The rest was sourced from Russia, Africa, and the Americas, on Brent basis, according to Kpler data.

Prior to 2023, the Indian crude basket broadly reflected the direction of Indian crude imports at 75 per cent Dubai/Oman and 25 per cent Brent, in line with India buying over 60 per cent of its oil from West Asia during that period.

But the sourcing dynamics changed after the Russian invasion of Ukraine in 2022, which PPAC's crude oil basket did not capture.

EASING STANDOFF OVER DOMESTIC SUPPLY DEALS

Diesel Export Tax Hike may Align Prices of State OMCs, Private Cos

Sanjeev Choudhary

New Delhi: A sharp increase in export tax on diesel is set to drive price convergence between state-run oil marketers and private fuel exporters, potentially easing a weeks-long standoff over domestic supply deals.

State-run oil marketing companies (OMCs) such as Indian Oil, BPCL, and HPCL, which control about 90% of India's fuel retail market, procure part of their diesel requirement from private refiners like Reliance Industries and Nayara Energy, as well as from state-run refiners with limited retail presence such as MRPL, CPCL, and Numaligarh Refinery. Typically, these purchases are linked to international diesel prices.

However, with global prices elevated currently and retail pump prices frozen, OMCs are seeking to cap procurement costs by pushing for prices below international benchmarks.



PRAMOD SHARMA

OMCs have been advocating a pricing formula of Indian crude basket plus \$15 per barrel, while private refiners have argued for a benchmark diesel price net of export tax. On Saturday, the government raised the export duty on diesel to ₹55.5 per litre (\$95 per barrel) from ₹21.5 per litre (\$37 per barrel).

At the average April Indian basket crude price of \$124.64 per barrel, the OMC formula yields a diesel price of about \$140 per barrel. By contrast, the refiners' pre-

ferred formula—benchmark diesel minus export tax—works out to roughly \$143 per barrel, after deducting the \$95 duty from the April Arab Gulf diesel benchmark of \$238.4 per barrel. This narrows the gap between the two sides to about \$3 per barrel.

The divergence was far wider in March. The OMC formula would have implied a price of \$128.5 per barrel, based on an average Indian basket crude price of \$113.5 plus \$15. In comparison, the refiners' formula would have yielded about \$150 per barrel, after subtracting the then export duty of \$37 from the March average diesel benchmark of \$186.6. This left a gap of over \$20 per barrel between the two positions.

Private refiners, along with standalone state refiners, have resisted the OMC pricing proposal, arguing that their crude acquisition costs are significantly higher than benchmark-linked levels.



Shell steps up LNG supplies to India, wins major fertiliser tenders

New Delhi: Global energy major Shell plc has ramped up natural gas supplies to India in the wake of disruptions due to the West Asia conflict, leveraging its global LNG portfolio to capture a larger share of spot and term demand, including key fertiliser sector tenders.

Industry sources said Shell emerged as a leading supplier in last month's bulk LNG procurement by Indian fertiliser companies, securing a supply of 4 trillion British thermal units out of 6 TBtus volumes tendered, as the Centre moved to ensure feedstock availability for urea production amid constrained supplies from the Gulf.

In March, Shell became India's largest supplier of imported gas. PTI

AMID WEST ASIA CRISIS

Santa Marta Meet Aims to Drive Fossil Fuel Shift

Urmi Goswami

New Delhi: The war in West Asia is clearly demonstrating the risks of dependence on fossil fuels, particularly oil and gas, giving added impetus to the first global conference on transitioning away from fossil fuels to be held in Santa Marta later this month.

However, the invitation list is limited to countries that are part of existing plurilateral arrangements and coalitions that have a stated goal of shifting away from fossil fuels. Conference co-hosts Colombia and the Netherlands stress that the doors are not closed to other countries. Nearly 50 countries will be attending the Santa Marta conference, including fossil fuel producers such as Norway and Brazil.

The Santa Marta conference has been described as a meeting of the “coalition of doers”, comprising countries and stakeholders commit-

ted to shifting away from fossil fuels. It will bring together members of existing alliances such as the Fossil Fuel Non-Proliferation Treaty, the Beyond Oil and Gas Alliance, and the Powering Past Coal Alliance. The Santa Marta conference is about these countries and other stakeholders taking the next step to “accelerate the shift, taking practical steps to deliver a more stable, resilient energy and climate system—doing so is the safest path forward and the smartest one for their economies,” said Jennifer Morgan, former German state secretary and special envoy for international climate action. The Santa Marta meeting, experts and observers stress, is not intended to serve as a negotiating body, nor does it constitute part of any formal negotiation process or initiative. Conceived as a platform that is complementary to the UN climate negotiations, those involved with organising the



meeting expect that the Santa Marta conference will contribute to and shape the roadmap to transition away from fossil fuels that the COP30 presidency has committed to preparing. “It is imperative for governments to use the Santa Marta conference to agree on a path towards rights-based commitments to phase out fossil fuels once and for all and phase in renewable energy quickly, reliably and ethically, and for these commitments to honour equity and justice,” said Tasneem Essop, executive director, Climate Action Network International.

In this context, there are concerns that the absence of countries like India and China that have record deployment of renewable could limit the effectiveness of the platform, rather than serving as a complementary space to work through concerns that many developing countries have about financing the shift, energy access for all, and energy security.

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Wins fertiliser tenders after Gulf disruptions



PTI

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India boosts 5-kg LPG supply and accelerates PNG rollout

PTI

NEW DELHI

India has ramped up supply of smaller five-kg LPG cylinders and accelerated the rollout of piped natural gas (PNG) connections as it manages fuel availability amid disruptions triggered by the West Asia conflict.

More than 13 lakh five-kg free trade LPG cylinders have been sold since March 23, with daily sales rising above 100,000 units, as authorities expand access for migrant workers and low-income consumers, according to an official statement.

At the same time, over 4.24 lakh new PNG connections have been activated since March, with more than 30,000 consumers surrendering LPG connections as part of the transition.

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Can modern cookstoves turn the return of firewood into a sustainable alternative during the LPG crisis?

Ankit Mathur

The story so far:

Owing to the LPG crisis, many areas—especially rural regions—have reported going back to firewood that are generally seen as increasing drudgery for women, while also causing pollution and health hazards.

Are today's firewood-based stoves less polluting and benign to human use?

Modern biomass stoves, often called improved cookstoves (ICS), represent a major step up from traditional cooking methods. Unlike old-fashioned mud stoves, they can cut fuel use by up to two-thirds while dramatically reducing smoke.

Traditional “chulhas” waste most of their heat through poor airflow and have an efficiency of barely 10%. By contrast, modern stoves reach thermal efficiency levels of 38% to 45%. Technologies such

as secondary aeration help to catch soot and harmful gases before they turn into smoke.

How can mass firewood-based cooking be made sustainable?

Cooking with firewood can be sustainable, provided the wood is harvested and used responsibly. Firewood is a renewable resource as long as the rate of extraction does not exceed the rate of regrowth. Since improved cookstoves burn fuel more efficiently, they can reduce the amount of wood needed for a meal.

Modern cookstoves can also run on alternative biomass fuels, including pellets and briquettes made from sawdust or agricultural waste. This widens the fuel base and takes some pressure off raw firewood.

Financing is key to achieving deployment at scale. Emissions savings enabled by improved cookstoves can be tracked and turned into carbon credits,

creating a funding stream that makes stoves more affordable for lower-income families.

What about the cost of equipment and fuel expenses?

Upfront costs vary significantly. Household models start below ₹2,000, while commercial systems can exceed ₹20,000, depending on the manufacturer and purchase channel (whether direct, through e-commerce, or via distributors). For low- and middle-income households, managing upfront costs can be made easier through financing partnerships involving microfinance, CSR programs, and carbon finance.

The principal operating cost is fuel, and modern cookstoves' high thermal efficiency can significantly reduce fuel requirements. Today's stoves have cut firewood consumption by more than 50%.

Firewood is highly cost-effective compared with LPG, especially during the

ongoing supply crunch when commercial LPG rates in major cities have exceeded ₹100/kg. From the wide range of prices available for different firewood types, it is possible to assume a rough average cost of around ₹10/kg (if firewood is being bought instead of being simply scavenged). Considering that 4 kilos of firewood deliver the same cooking energy output as 1 kg of commercial LPG (in an improved cookstove), firewood could potentially offer cost savings of well over 60%.

What supply chain would be needed for mass adoption? Will this be a massive investment?

Adopting biomass cookstoves on a large scale absolutely does not require a massive investment in fuel supply chains. Since the primary fuels - like firewood, crop waste, and dung cakes - are already widely available in rural and semi-urban areas, there is less need for expensive, centralised infrastructure.

Scaling up is therefore more about strengthening distribution networks. Success depends on improving logistics, last-mile delivery, and local partnerships. Just as importantly, building user awareness and providing reliable after-sales support are essential to making sure these stoves remain a permanent part of daily life.

(The author is co-founder and CEO, Greenway Grameen)

THE GIST

▼ Improved Cookstoves (ICS) offer a sustainable solution by increasing thermal efficiency, reducing smoke, and cutting firewood usage by over 50%.

▼ Mass adoption of efficient biomass stoves does not require massive infrastructure investment, as local, renewable fuels (wood, agricultural waste) are readily available.



शेल ने भारत को बढ़ाई एलएनजी आपूर्ति

वैश्विक ऊर्जा दिग्गज शेल पीएलसी ने पश्चिम एशिया संघर्ष के कारण उत्पन्न आपूर्ति बाधाओं के बीच भारत को प्राकृतिक गैस की आपूर्ति तेज कर दी है। कंपनी ने अपने वैश्विक पोर्टफोलियो का लाभ उठाते हुए उर्वरक क्षेत्र के प्रमुख ठेकों सहित हाज़िर और वायदा मांग में बड़ी हिस्सेदारी हासिल की है। उद्योग सूत्रों के अनुसार, पिछले महीने भारतीय उर्वरक कंपनियों द्वारा की गई थोक एलएनजी खरीद में शेल एक अग्रणी आपूर्तिकर्ता के रूप में उभरी है। खाड़ी देशों से बाधित आपूर्ति के बीच सरकार ने यूरिया उत्पादन के लिए कच्चे माल की उपलब्धता सुनिश्चित करने के लिए ये निविदा जारी की थीं। इसके तहत शेल ने कुल छह टीबीटीयू (ट्रिलियन ब्रिटिश थर्मल यूनिट) में से चार टीबीटीयू की आपूर्ति हासिल की।

भाषा

युद्ध के दौर में ऊर्जा सुरक्षा का सवाल

अमेरिका और इजरायल ने ईरान के विरुद्ध जो विनाशकारी युद्ध छेड़ा उसने दुनिया की ऊर्जा आपूर्ति में उथलपुथल पैदा कर दी है। अमीर और गरीब दोनों तरह के मुल्क अपने नागरिकों को चेतावनी दे रहे हैं कि मुश्किल समय आने वाला है। ऐसा संकट जो शायद इस पीढ़ी ने तो नहीं झेला यानी ऊर्जा (ईंधन) की भारी कमी और राशनिंग। यहाँ तक कि कारों और विमानों के भी ईंधन से रहित हो जाने का खतरा सामने है। सवाल यह है कि भविष्य में ऊर्जा क्षेत्र का मानचित्र कैसा होगा ?

जिस समय मैं यह सवाल कर रही हूँ हज़ारों जान जा चुकी हैं और हम अपनी स्क्रीन्स पर निरर्थक विनाश का साफ़ देख सकते हैं। हमें इसे हल्के में नहीं लेना चाहिए। हमें इस ऊर्जा व्यवधान के कारण दुनिया में हो रही दिक्कतों को भी हल्के में नहीं लेना चाहिए। कई देशों में खाना पकाने के ईंधन खासतौर पर तरलीकृत पेट्रोलियम गैस (एलपीजी) की कमी हो रही है। आम परिवार किसी कीमत पर गैस पाने के लिए अपनी आय का बड़ा हिस्सा खर्च कर रहे हैं। गैस एंजिनियर्स-पेट्रोल पंप पर लंबी कतारें फिर से आम हो रही हैं। इससे लागत बढ़ रही है जिसे लोग मुश्किल से वहन कर पा रहे हैं। अधिकांश देशों में, खासकर हमारे क्षेत्र में ईंधन आयात व्यापार घाटे पर सबसे बड़ा बोझ है और इस परिदृश्य में बढ़ती तेल कीमतें अर्थव्यवस्था को पंगु बना देने की हद तक असर डाल सकती हैं। इसके अलावा, वैश्विक उर्वरक आपूर्ति में आसन्न कमी से किसानों को कड़ी चोट पहुँचने की उम्मीद है। ये वे किसान हैं जो पहले से ही जलवायु

परिवर्तन के कारण चरम मौसम और विकृत वैश्विक खाद्य कीमतों से जूझ रहे हैं।

यहाँ यह सवाल आता है कि ऊर्जा क्षेत्र को लगे इस झटके का क्या असर होगा ? युद्ध की शुरुआत के पहले भी दुनिया ऊर्जा में बदलाव के दौर से गुजर रही थी। चरणबद्ध तरीके से कोयले का स्थान नवीकरणीय ऊर्जा ले रही थी। वाहनों में बिजली, पेट्रोल और डीजल की जगह ले रही थी। अंतरराष्ट्रीय नवीकरणीय ऊर्जा एजेंसी की मार्च 2026 की रिपोर्ट के मुताबिक 2025 के आखिर तक नवीकरणीय ऊर्जा दुनिया की कुल स्थापित बिजली उत्पादन क्षमता के 50 फीसदी के करीब है। साल के दौरान जो नया बिजली उत्पादन शामिल हुआ, उसका 85 फीसदी नवीकरणीय ऊर्जा से आया। मुख्य रूप से सौर और पवन ऊर्जा से।

दिलचस्प बात यह है कि यह ऊर्जा परिवर्तन केवल चीन या यूरोप में नहीं हो रहा था जहाँ इसके होने की उम्मीद थी। हाल ही में थिंक टैंक एम्बर द्वारा 74 सबसे जलवायु-संवेदनशील देशों के गठबंधन के साथ मिलकर जारी की गई एक रिपोर्ट में पाया गया कि ये देश इलेक्ट्रो-टेक को तेजी से अपना रहे हैं, जलवायु परिवर्तन के कारण नहीं बल्कि इसलिए कि यह तेज, सस्ता और अधिक विश्वसनीय है। ये निम्न और मध्यम आय वाले देश ईंधन आयातक हैं और उनके

लिए ऊर्जा संकट वास्तविक है यानी 70 करोड़ से अधिक लोगों के पास अभी भी बुनियादी आवश्यकताओं के लिए विश्वसनीय ऊर्जा नहीं है। इसका मतलब यह भी है कि वे अभी तक ग्रिड से जुड़े नहीं हैं और इसलिए वे वैकल्पिक ऊर्जा प्रणाली को तेजी से और बड़े पैमाने पर अपना सकते हैं। सौर पैनलों, बैटरियों और इलेक्ट्रिक वाहनों की लागत अब किफायती हो गई है और चीन से आयात उनके लिए उपयोगी है। ये देश जीवाश्म ईंधन को दरकिनार कर सकते हैं और नवीकरणीय ऊर्जा को तीव्र गति से अपना सकते हैं। रिपोर्ट में पाया गया है कि 'नामीबिया और टोंगो सौर उत्पादन में अग्रणी हैं, जॉर्डन और किर्गिजस्तान बैटरी बिक्री में और नेपाल और श्रीलंका ईवी अपनाने में।' नेपाल और श्रीलंका में

लगभग 70 फीसदी नए वाहन इलेक्ट्रिक थे। वर्तमान व्यवधान ने ऊर्जा आयात की लागत बढ़ा दी है और देशों को ऊर्जा सुरक्षा की आवश्यकता का एहसास कराया है। पहले से ही तेल और गैस के बाजारों पर कब्जा करने की नई होड़ शुरू हो गई है। नाइजीरिया, गुयाना, रूस और निश्चित रूप से अमेरिका से ऊर्जा प्राप्त की जाएगी। यह देशों को अपने संसाधनों यानी कोयला से लेकर लकड़ी के कोयले तक का अधिक उपयोग करने के लिए प्रेरित कर सकता है, जबकि दोनों ही प्रदूषक हैं। लेकिन यह



जमीनी हकीकत

सुनीता नारायण

जीवाश्म ईंधन से दूर जाने की गति को भी तेज कर सकता है, क्योंकि अब आयातित सौर पैनल और बैटरियाँ उपलब्ध हैं।

यह सब ऊर्जा के भविष्य को नया रूप देगा। वर्तमान तेल और गैस संकट केवल अल्पकालिक नहीं है। होर्मुज स्ट्रेट के बंद होने से वैश्विक प्रवाह का लगभग 20 फीसदी बाधित हुआ है, और भले ही यह फिर से खुले, क्षेत्र में उत्पादन सुविधाओं को हुए नुकसान की मरम्मत में समय लगेगा। इसका अर्थ यह हो सकता है कि सस्ते और प्रचुर जीवाश्म ईंधन का समय अब समाप्त हो गया है। ऊर्जा की लागत ही आर्थिक वृद्धि की लागत है और इस बदले हुए परिदृश्य का अर्थ होगा ऊर्जा सुरक्षा के लिए नई योजनाओं पर काम करना। इसकी लागत कारक होंगे। हरित तकनीक की राष्ट्रीय विनिर्माण क्षमता भी इसकी वाहक होगी जिसमें सौर और बिजली से चलने वाले वाहन शामिल होंगे। इसके अलावा यही भी अहम होगा कि ऊर्जा सुरक्षा से संबंधित आपूर्ति श्रृंखला के लिए क्या बेहतर होगा। इन तमाम बातों के बीच स्वच्छ ऊर्जा स्रोत और मौजूदा आपूर्ति का अधिक कुशल उपयोग केंद्रीय भूमिका निभा सकते हैं और निभानी भी चाहिए। लेकिन इस बार स्वच्छ ऊर्जा में बदलाव का तर्क राष्ट्रीय ऊर्जा सुरक्षा पर आधारित होगा, जिसमें जलवायु शमन का जुड़ा हुआ लाभ प्राप्त करने की संभावना होगी। मुझे अत्यंत दुख के साथ स्वीकार करना होगा कि भविष्य आसान नहीं होने वाला है। वर्तमान समय बताता है कि हम, एक वैश्विक समाज के रूप में, पीछे चले गए हैं। मानव विनाश और पतन के इन खंडहरों से टुकड़े जोड़ना कठिन होगा। एक टूटी और विभाजित दुनिया में जलवायु परिवर्तन जैसी वैश्विक समस्याओं का समाधान करना हमारे लिए कठिन होगा।



शेल बनी भारत की सबसे बड़ी प्राकृतिक गैस आपूर्तिकर्ता

नई दिल्ली। पश्चिम एशिया संघर्ष के चलते गैस आपूर्ति में आई रुकावटों के बीच वैश्विक ऊर्जा कंपनी शेल ने भारत को प्राकृतिक गैस (एलएनजी) की आपूर्ति बढ़ा दी है। कंपनी ने हाजिर और दीर्घकालिक दोनों तरह की मांग में अपनी हिस्सेदारी मजबूत की है। खाड़ी क्षेत्र से आपूर्ति प्रभावित होने के बाद सरकार ने यूरिया उत्पादन के लिए जरूरी गैस की उपलब्धता सुनिश्चित करने हेतु निविदाएं जारी की थीं। इन निविदाओं के तहत कुल छह टीबीटीयू में से लगभग चार टीबीटीयू की आपूर्ति शेल को मिली। कतर से गैस की आपूर्ति बाधित होने के बाद शेल की भारतीय इकाई ने स्थिति संभाली और मार्च के दौरान अब तक का सबसे बड़ा मासिक एलएनजी आयात दर्ज किया। उर्वरक क्षेत्र के अलावा कंपनी ने अन्य औद्योगिक उपभोक्ताओं और खुदरा बाजार को भी गैस उपलब्ध कराई, जिससे वह देश की सबसे बड़ी आयातित गैस सप्लायर बन गई। एजेसी

एलपीजी पर दबाव कम करना कंपनी का उद्देश्य

सुविधा

थानों से लेकर रेस्तरां तक पहुंचा आइजीएल नेटवर्क

दिल्ली-एनसीआर में पीएनजी का तेजी से विस्तार

नई दिल्ली, 12 अप्रैल (भाषा)।

इंद्रप्रस्थ गैस लि. (आइजीएल) ने दिल्ली-एनसीआर में पाइप के जरिये खाना पकाने की गैस (पीएनजी) का कनेक्शन देने का काम तेज कर दिया है। कंपनी के मुख्य कार्यकारी कमल किशोर चट्टवाल का कहना है कि आइजीएल का उद्देश्य रसोई गैस (एलपीजी) पर दबाव कम करना और अधिक से अधिक उपभोक्ताओं को सुविधाजनक विकल्प उपलब्ध कराना है।

पश्चिम एशिया संघर्ष के बीच ऊर्जा की आपूर्ति बाधित होने के बाद सरकार पीएनजी को काफी बढ़ावा दे रही है और इसे एलपीजी के एक सुविधाजनक विकल्प के रूप में पेश कर रही है। चट्टवाल ने बताया कि पहले आइजीएल रोजाना 600-700 पीएनजी कनेक्शन देती थी, जिसे अब बढ़कर 2,100-2,200 प्रतिदिन कर दिया गया है।



कंपनी का लक्ष्य इस संख्या को बढ़ाकर 5,000 प्रतिदिन तक पहुंचाना है। उन्होंने कहा कि कंपनी अब केवल घरेलू रसोई तक सीमित नहीं है, बल्कि फास्ट-फूड श्रृंखला और पुलिस स्टेशनों को भी पीएनजी कनेक्शन देने पर ध्यान दे रही है। हाल ही

आइजीएल के पास 28,000 किलोमीटर से अधिक लंबा पाइपलाइन नेटवर्क है। इसका शहर गैस वितरण नेटवर्क ढांचा दिल्ली के अलावा नोएडा, ग्रेटर नोएडा, गाजियाबाद, रेवाड़ी, गुरुग्राम, करनाल, कैथल, फतेहपुर, अजमेर, पाली, शामली, बांदा, मुजफ्फरनगर, कानपुर और मेरठ तक फैसला हुआ है। साथ ही यह 950 से अधिक पीएनजी स्टेशन के जरिये 21 लाख से अधिक वाहनों को ईंधन उपलब्ध करा रही है।

में एलपीजी आपूर्ति में बाधा के कारण कई तत्काल खाने का सामान उपलब्ध कराने वाले फास्ट-फूड आउटलेट प्रभावित हुए हैं। देश की सबसे बड़ी शहर गैस वितरण कंपनी आइजीएल अब तक दो प्रमुख फास्ट-फूड श्रृंखला की 100 से अधिक

दुकानों को पीएनजी से जोड़ चुकी है और इतने ही कनेक्शन प्रक्रिया में है। कुल मिलाकर आइजीएल की योजना लगभग 400 आउटलेट को पीएनजी से जोड़ने की है। इसके साथ ही, दिल्ली के सभी पुलिस थानों को पीएनजी कनेक्शन देने की प्रक्रिया भी जारी है, जिससे कैटीन में एलपीजी सिलेंडर के रिफिल की समस्या से राहत मिलेगी।

नई दिल्ली के कबरोवारी केंद्र कनाट प्लेस में भी अब पीएनजी नेटवर्क पर काम शुरू हो गया है। पहले अनुमति न मिलने के कारण इस क्षेत्र में पीएनजी की पहुंच नहीं थी। हालांकि, अब सरकार द्वारा नियमों में ढील दिए जाने के बाद इसपर काम शुरू हो गया है। अधिकारी ने बताया कि अब पाइपलाइन कनाट प्लेस के आउटर सर्किल में पहुंच चुकी है। चट्टवाल ने बताया कि कंपनी अगले 90 दिन में अपने परिचालन वाले क्षेत्र में 4.85 लाख नए कनेक्शन देने का लक्ष्य लेकर चल रही है।