



ANGVA2U Info 09/2023. 23rd September 2023 (for ANGVA members only)

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1.0 Selected News / Articles

1.1 India

City gas distributors optimistic about long-term growth prospects

14th September 2023. By Devangshu Datta

The government is looking to push up the share of natural gas to around 15 per cent in the energy mix from the current 6 per cent



Representative Image

The city gas distribution (CGD) companies are optimistic about long-term growth prospects as their robust balance sheets are capable of handling investments through low or zero leverage, given the strong operating cash flow.

Several positive factors are driving the CGD business at the moment. One is that domestic gas prices (APM gas) have been frozen, or rather a ceiling set, reducing volatility. There is no real alternative to cooking gas for most households and gas is an attractive alternative to petrol and diesel for transport.

There's investment in geographical expansion, regulatory support due to the pollution control policy, and gas imports are not a problem. CGD companies are also investing to digitise customer services and improve their tech infra.

The bigger players are also looking at consolidation by merger and acquisition of small players and examining renewables (solar, hydrogen).

The current environment does not allow for much CGD pricing power however, and any significant price hikes in liquefied natural gas (LNG) would have to be absorbed rather than passed on.

Roughly speaking, every \$1 /mmbtu increase in blended gas cost for the domestic and CNG segment leads to a negative impact of Rs 3/scm on the margins for compressed natural gas (CNG), and needs a price hike of about Rs 4.4/kg or so for CNG and Rs 3.2/scm to cover the impact.

Since April, CGD companies have reduced prices to pass on the \$2/mmbtu dip in priority sector gas prices. This leaves gas at a serious price discount compared to petrol and diesel.

The CGD companies will probably not hike to compensate for short-term spikes. Any increase in blended gas costs for FY24E will constrain profitability. Demand for gas is likely to revive given improved availability at a reasonable cost.

There is a focus on incentives and promotions to drive light commercial vehicle (LCV) conversion and OEM sales of gas vehicles.

Higher gas-driven LCV would result in a jump in volumes since each LCV consumes 15-17 kg of CNG per fill vs 8-9 kg for passenger vehicles.

Investments into LNG fuelling stations would add to the convenience for trucks, apart from the cost-cum-environmental benefits of switching to LNG.

The sector's return on equity (ROE) is around 17-20 per cent and this seems attractive since return on capital employed is also at the higher end of the same range.

By using internal accruals to invest, CGD players could push up the ROE by reducing the equity component and pushing up revenues.

The government is looking to push up the share of natural gas to around 15 per cent in the energy mix from the current 6 per cent.

The regulator, PNGRB, has been active in issuing new CGD licenses, which have a footprint of 75-80 per cent of India's population. Import facilities (terminals, evacuation infrastructure) for LNG are also being developed.

Each of the companies is looking to add 60-100 CNG stations per year, accompanied by pipeline connectivity.

Pressurised natural gas (PNG) expansion is also on the cards. They are also eyeing green hydrogen blending into PNG.

Among the key players, Gujarat Gas is uniquely positioned with exposure to industrial gas usage in Morbi, whereas other companies primarily focus on transport and households.

This makes it subject to market re-rating based on fluctuating industrial demand, while other companies benefit from more stable consumer bases.

Source: https://www.business-standard.com/companies/news/city-gas-distributors-optimistic-about-long-term-growth-prospects-123091301205_1.html

1.2 Iran

Iran launching 400 new CNG stations to cut its gasoline bill

12th September 2023.



TEHRAN, Sep. 12 (MNA) – Iran is launching hundreds of new filling stations to supply compressed natural gas (CNG) to motorists amid efforts to control the rising consumption of gasoline in the country.

The Iranian Oil Ministry on Monday awarded contracts to two subsidiary companies of the Defense Ministry for launching some 400 CNG stations across Iran.

Deputy Oil Minister Jalil Salari said the new CNG pumps will enable Iran to cut up to 6 million liters per day from its gasoline bill.

Salari said more than 2,500 CNG stations are currently active in Iran, helping to save up to 23 million liters per day of gasoline in the country.

Iran is one of the largest producers of natural gas in the world. The country has a large network for distribution of gas which makes it possible to set up CNG pumps in almost every spot in the country.

The plan for expansion of CNG pumps network in Iran comes as the country is struggling to contain a rising demand for gasoline that has been exacerbated in recent years because of increasing smuggling activity across the borders.

Salari, who also leads Iranian Oil Ministry's fuel operations, said that average gasoline use in Iran had reached 116 million liters per day.

He said annual demand for gasoline in the country had increased by nearly 63% in five years to reach 42 billion liters.

The official said the Iranian Oil Ministry is currently supplying 23 million cubic meters (mcm) per day of natural gas to motorists via CNG pumps, adding that the figure can easily increase to 35 mcm per day if more cars are modified to be able to use the fuel.

MNA/PressTV. News Code 205954

Source: <https://en.mehrnews.com/news/205954/Iran-launching-400-new-CNG-stations-to-cut-its-gasoline-bill>

1.3 Thailand

Truck operators call for govt intervention as NGV prices hit ceiling

19th September 2023. Published by Press Release

Truck operators relying on natural gas for vehicles (NGV) face growing worries, even as the prices of oil and electricity fall.



The cost of NGV has risen to nearly 20 baht per kilogram, prompting a group of truck operators to take their concerns to the Energy Ministry.

Some 64 transport operators met on Monday to discuss and air their grievances. The meeting was led by Apichart Pairoongreung, chairman of the Land Transport Federation of Thailand, and Jitakorn Padetsuk, president of the Chachoengsao Chamber of Commerce.

The retail price of NGV rose from 18.59 baht to 19.59 baht per kilogram on the morning of September 16, and there have been hints of another potential increase to 20.59 baht per kilo by mid-December.

This sudden spike has placed significant financial strain on transport operators.

NGV was first introduced in 2002 at the retail price of 8.50 baht per kilo and promoted as an alternative fuel by the government because it could be domestically produced.

This led to the widespread adoption of NGV as a primary fuel source for trucks and public transport vehicles around 2005.

However, the continuous and unanticipated price hikes have been posing severe challenges for operators who have invested heavily in NGV-powered vehicles and infrastructure.

They are now calling on relevant authorities to intervene and ensure fairness in pricing. These concerns will soon be brought to the attention of Prime Minister Srettha Thavisin.

Source: <https://www.nationthailand.com/thailand/general/40031166>

1.4 Nigeria

Niger Awards Contract For 200 CNG Buses

19th September 2023. By Daniel Atori



...targets 1,000 buses in 4 years

Niger State Government has signed an agreement with four different contracting firms for the purchase of 200 Compressed Natural Gas (CNG) buses.

While supervising the signing of the agreement at the government house, Minna, Governor Mohammed Umaru Bago said the purchase of the 200 buses is in fulfilment of his promise to provide free transportation for pupils and students.

He also stated that transportation fares will be subsidized for all Civil servants both inter and intra-state services.

According to him “the first 100 buses will be deployed to serve commuters between Abuja and Suleja, 50 to be used within Minna the state capital while the remaining 50 Buses will be spread across other local government areas.

“An additional 300 buses will be purchased next year as part of the second phase of the scheme”.

Governor Bago while describing the initiative as a way of reducing hardship faced by citizens due to the fuel subsidy removal, said the gesture is also to bring a revolution in the transportation system and reduce the rate of accidents on roads.

Accordingly, he said, “in the next four years, the State intends to purchase 1,000 CNG buses and electric motorcycles to reduce the pollution caused by the fuel engine motorcycles”.

While calling on the contractors to deliver the buses according to the specifications, Governor Bago also called on investors to take advantage of the policy to establish CNG plants in the state.

Earlier, the Commissioner for Transportation, Hajiya Hadiza Idris Kuta said the State Government is to purchase the Buses at about N7 billion.

Representative of Nationwide Unity Transport Limited, Mohammed Bawa who spoke on behalf of other contractors, disclosed that the 200 high-capacity buses will be of great quality and will come with a warranty of two years while availability of spare parts will be for the next 10 years.

Four contracting firms are to provide fifty buses each and the delivery is expected to be completed in 12 weeks.

Source: <https://newtelegraphng.com/niger-awards-contract-for-200-cng-buses/>

1.5 Indonesia

Partners to jointly develop CBG plants in Indonesia

14th September 2023.

reNIKOLA Holdings Sdn Bhd, a renewable energy (RE) producer, has partnered with PT Perkebunan Nusantara (PTPN) to jointly develop compressed biomethane gas (CBG) plants in North Sumatra, Indonesia.

A memorandum of understanding (MoU) was signed by both companies and based on it, four CBG plants will be built at PTPN's palm oil mills. Each CBG plant will utilise PTPN's palm oil mill effluent (POME) as a raw material to produce biomethane. This will help the government reduce GHG emissions by 29 per cent with its own capabilities or 41 per cent with international assistance by 2030.

PTPN will reduce methane emissions from POME by utilising it to produce new, RE equivalent to 377,523 tCO₂ by 2030.

Source: <https://southeastasiainfra.com/partners-to-jointly-develop-cbg-plants-in-indonesia/>

1.6 India

Turning Waste into Wealth: State's bio gas & bio CNG initiative

13th September 2023. By Rishika Choudhury



In Madhya Pradesh, the efforts are being made towards realizing Prime Minister Narendra Modi's dream of Waste-to-Wealth, to emerge as a role model for other major states of the country. Under the leadership of Chief Minister Shivraj Singh Chouhan, the state has taken remarkable steps towards self-sufficiency in waste management. One key initiative is the production of bio gas and bio CNG from urban wet waste, contributing to both environmental sustainability and economic growth.

Process of making bio gas and bio CNG

To create bio gas and bio CNG from wet waste, the first step is separate waste collection. Madhya Pradesh has taken a significant stride in this direction, with 100 out of 5423 garbage collection vehicles focusing on gathering waste from residential and public areas.

In 2018-19, the state established bio gas production units capable of processing 20 tonnes per day from the Chauithram vegetable market in Indore and 15 tonnes per day in Kabitkhedi. These units required an investment of Rs 14 crore 5 lakh through public-private partnerships. Additionally, bio gas units with a combined processing capacity of 127 metric tons per day were set up in Indore, Dewas, Ujjain, and Bhopal. Bhopal also introduced 5 mini units to process 17.5 metric tonnes of wet waste. Ujjain took the lead in generating electricity from bio gas, while Dewas embraced private sector participation with a small-scale unit.

In the second phase, the Indore Municipal Corporation established the Gobar Dhan Bio CNG plant at Dev Guradia, increasing a processing capacity of 550 metric tons. This project operates on a public-private partnership model with Environmental Infrastructure and Services Limited and German company Proveys. From this unit, approximately 17,500 kg of bio-CNG and 100 tons of high-quality compost are produced. Moreover, Bhopal is currently constructing a bio-

CNG unit with a capacity of 400 metric tons per day in Adampur, with an investment of Rs 80 crore. A PPP contract was signed with Bhopal Enviro Private Limited in April 2022 to ensure the unit becomes operational within 15 months.

Madhya Pradesh plans to replicate Indore's successful model in other urban areas, both large and small. In Gwalior Municipal Corporation, efforts are being made to produce bio gas from the dung obtained from 7,000 cowsheds in garbage processing plants. Apart from this, efforts are on to create small projects for bio gas production from wet waste in Hoshangabad, Sehore, Vidisha, and other major cities.

Madhya Pradesh's Waste-to-Wealth initiative is a testament to its commitment to sustainable waste management and environmental conservation. By transforming wet waste into bio gas and bio CNG, the state not only reduces its environmental footprint but also generates valuable resources, paving the way for a cleaner and more prosperous future.

Source: <https://seepositive.in/article/5993/waste-into-wealth/>

1.7 India

Adani Total Gas Gains on Rs 150 Crore Order from Ahmedabad Municipal Corporation

18th August 2023.



The plant is said to be located at Gyaspur in Ahmedabad and is said to operate on a PPP model.

Adani Total Gas shares were trading in the green on 18 September after the company gave further details about the order received on 6 September.

The company received an order from Ahmedabad Municipal Corporation for designing, constructing, managing, and financing a bio-CNG plant with a capacity of 500 tonnes per day.

The plant is said to be located at Gyaspur in Ahmedabad and is said to operate on a PPP model.

The company said in its exchange filing that the order's approximate cost will range from Rs 130 crore to Rs 150 crore.

The order is said to be executed in 20 years and will be constructed on a land parcel provided by the municipal corporation for setting up the bio-CNG plant and 500 tonnes per day of waste at the plant's doorstep.

In its annual report, the company announced an investment of Rs 18,000 crore to Rs 20,000 crore in the next 8 – 10 years to expand infrastructure for retailing CNG to automobiles and piped gas to households and industries.

In its quarterly report for the April-June quarter, the company reported a 9% YoY growth in its net profit at Rs 150 crore from Rs 138 crore in the year-ago quarter.

At 11:36 am, the shares of Adani Total Gas were trading at Rs 642.30 or 0.94% above its previous close on NSE.

Source: <https://www.equitypandit.com/adani-total-gas-gain-on-rs-150-crore-order-from-ahmedabad/>

1.8 Spain

Enagás and Port of Huelva to jointly promote hydrogen and bioLNG projects

18th September 2023. By Ajsa Habibic

Spanish energy company Enagás and Port of Huelva have signed an agreement to facilitate the integration of renewable gases such as hydrogen and BioLNG into the integrated logistics chain and promote future decarbonisation projects at the Enagás plant in Huelva.



Courtesy of Enagás

The agreement aims to establish the groundwork for conducting technical and economic analyses of services with renewable gases, identifying new infrastructures and connections, developing trade missions and contacts with actors in the sector, and exploring access to possible funding.

It sets specific objectives to advance the integration of renewable gases in the development of the integrated logistics chain. As explained, this progress will be driven by the European CoreLNGas Hive project.

The agreement also aims to promote the development of BioLNG and green hydrogen, particularly in connection with the future Spanish Hydrogen Backbone Network.

In the short term, this deal is expected to allow for the exploration of BioLNG bunkering logistics projects that will reduce the carbon footprint of the entire supply chain. The partners said that following the signing of this protocol, a work programme and timetable for the implementation of joint studies will be established.

Furthermore, Enagás underlined its engagement in various initiatives aimed at enhancing efficiency and decarbonisation at its Huelva plant, including a self-consumption electricity and green hydrogen project, as well as the use of ecological cooling generated from the terminal's LNG. The latter initiative is being pursued in collaboration with the Port of Huelva.

During the signing of the agreement, the President of the Port of Huelva Authority, Alberto Santana, thanked Enagás for “its willingness to collaborate in the development of new fuels” and assured that “the Port of Huelva has become an energy and industrial cluster that promotes clean fuels as one of the three drivers of the Port of Huelva 2023-2030 Strategic Plan with a vision to 2050”.

Enagás CEO Arturo Gonzalo emphasised the Huelva regasification plant's “significant role as an energy hub that strengthens Europe's supply security, in which efforts are ongoing to enhance capacity, flexibility, and operational availability at the plant, while also making strides in the decarbonisation process, focusing on the operation and value chain with renewable gases”.

Source: https://www.offshore-energy.biz/enagas-and-port-of-huelva-to-jointly-promote-hydrogen-and-biolng-projects/?utm_source=lngworldnews&utm_medium=email&utm_campaign=newsletter_2023-09-19

1.9 Denmark

Danish taxi company seeks help to fuel its 100 stranded hydrogen vehicles after nation's H2 stations closed

20th September 2023. By Polly Martin

Drivr had entered a five-year supply contract with Everfuel, which has shuttered the only five commercial refuelling sites in Denmark



Drivr's Toyota Mirai vehicles, bought in November 2021. Photo: Mikal Schlosser/Toyota

Danish taxi start-up Drivr has confirmed to Hydrogen Insight that it has halted operations for all 100 Toyota Mirai vehicles in its fleet, after its refuelling partner Everfuel shuttered the only five stations in Denmark “until further notice”.

The Copenhagen-based taxi firm is currently running its operations solely off its 60 hybrid electric vehicles — but that is a 62.5% reduction in the number of vehicles it can use to transport paying passengers.

It had originally acquired the 100 Toyota Mirais in November 2021, with an undisclosed level of support from the ZEFER (Zero Emission taxi Fleets for European Rollout) and H2ME2 (Hydrogen Mobility Europe) projects, both funded by the EU’s Clean Hydrogen Partnership.

And Everfuel had confirmed in January 2022 that it had entered a five-year sole hydrogen supply contract with Drivr.

But the Danish hydrogen supplier has since announced in its second-quarter earning report that it would “close or pause, and if possible, divest or repurpose” its light-duty H2 refuelling stations serving passenger cars, due to a lack of profitability.

While two of the stations, including Drivr’s main refuelling site at Prags Boulevard in Copenhagen, could be eventually reopened, no timelines have been disclosed to date.

“We are here to help with the offtake, and invites [sic] everybody that has interest to reach out,” Svane added. “Drivr is in Denmark, but we don’t mind expanding to other countries.”

Prior to taking on the role of CEO at Drivr in December, Svane had been involved in the Everfuel-Drivr agreement as the general manager for mobility and new business for Toyota Denmark.

Drivr had previously suggested it would ramp up its Mirai fleet to 500 vehicles by 2025, given the Danish government’s target for all new taxis to not emit CO2 or air pollution by that year, and all taxis on the road to be zero-emission by 2030.

But without any ability to fuel these cars with hydrogen within Denmark in the short term, it is unlikely this future purchase will come to fruition.

Toyota Mirai vehicles have also been criticised by taxi operators in Japan as costly to run due to fuel inefficiency.

In 2021, Drivr had been selected by the city of Copenhagen to provide an ad-hoc taxi service, transporting children and adults with disabilities, citizens on their way to hospital, municipal employees on duty and politicians as part of this contract.

Hydrogen Insight has reached out to the city of Copenhagen to confirm whether this agreement is still in place. (Copyright)

Source: <https://www.hydrogeninsight.com/transport/danish-taxi-company-seeks-help-to-fuel-its-100-stranded-hydrogen-vehicles-after-nation-s-h2-stations-closed/2-1-1521473>

1.10 United States of America

US Vehicle Electrification Will Be a Decades-Long Process

12th September 2023.

Major Transition Risks for Private and Public Investment Ahead

In 2022, the share of electric vehicles (EVs) sold in the US hit a record high of nearly 6%. A new study from The Conference Board projects that even if new EV sales rise gradually to 100% by 2040, 40% of all cars and trucks on the road in 2040 might still be powered by fossil fuels.

According to The Future of US Vehicle Electrification and GHG Emissions, businesses must be prepared to manage their operations in a bifurcated and rapidly changing market environment.

“EV adoption is set to surge in the coming decade, but new vehicle sales tell only part of the story,” said Alex Heil, Senior Economist at The Conference Board. “Americans are holding on to their cars longer than they once did, with the average age of light vehicles exceeding 12 years in 2022. As a result, the US may need to support both a rapid ramp-up in EV charging and continued operation of fossil fuel infrastructure for decades to come—unless private investment, policy incentives, and consumer demand can spur even faster EV adoption and vehicle replacement.”

Among the report’s key insights:

EVs are likely to reach 50:50 parity with fossil-fuel vehicles in 2038.

- In this scenario, EVs account for 66% of new cars and light trucks and 25% of new medium and heavy trucks by 2032, before reaching 100% of all new vehicles by 2040.
- The transition to EVs will create a bifurcated transportation fuel system that persists for at least the next three decades.

Reaching net zero by 2050 will be doubtful without accelerating electrification of the transportation sector:

- If EV sales reach 100% by 2040, annual greenhouse gas (GHG) emissions from fossil fuel vehicles would fall by 51% based on current performance standards—a dramatic drop, but still far off the US goal of net zero in 2050.
- Indeed, a sizable portion of GHG emissions would remain in the absence of greater efficiencies for fossil fuel vehicles and potential adoption of alternative fuels like hydrogen for difficult-to-electrify subsectors.

Businesses face a transition risk in the decades ahead until near-complete electrification has occurred.

- In the interim, investments in fossil fuel infrastructure—including refineries, storage tanks, and fueling stations—would still be necessary, despite the decline of the gasoline and diesel markets in general.
- The rate of decline will determine the profitability of any such investments, integration of charging and refueling stations, and the willingness of businesses to commit financial resources.

EV Transition Will Require a New Policy Framework for US Infrastructure Funding

Among the serious complexities of electrification is its impact on the federal Highway Trust Fund (HTF), which has historically funded the maintenance and replacement of US road and transit through gasoline and diesel taxes.

In a supporting brief, *EV Adoption Could Exacerbate Transportation Infrastructure Funding Shortfall*, The Conference Board finds that fuel tax revenue could fall by 60% assuming EVs reach 100% market share of new vehicles by 2040. This will exacerbate challenges to the HTF—which is already chronically underfunded because gas taxes have not been raised since 1993.

Ultimately, an alternative funding mechanism may be needed to ensure the viability of US transport and supply chains:

Businesses might have to prepare to pay for new costs such as fees based on vehicle miles traveled (VMT) or on electricity used for charging.

- While HTF revenue is paid today when motorists purchase fuel, a future system may be based on peak demand or specific impacts on infrastructure during use.
- This shift to a new system, while not entirely costless in itself, could open up new efficiencies via better route choices or time-of-day planning.

Data security will become a critical issue for businesses and households.

A new system of telematics—data collected from vehicles via sensors or smart devices for pricing and revenue collection—would be needed to implement a more dynamic charging and cost recovery system.

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Source: <https://www.conference-board.org/press/us-electric-vehicle-transition-risks>

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