ASIA PACIFIC NATURAL GAS VEHCLES ASSOCIATION (ANGVA)

Together we propagate and support the efficient utilization of low to net zero carbon fuels for cleaner air and better life in the Asia Pacific Region



ANGVA2U Info 12/2021. 3rd August 2021 (for ANGVA members only)

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1.0 Selected News / Articles

1.1 India

MGL to set up 10 mobile refuelling units in the next year

31st July 2021. Kalpana Patkhak

The company said in the first quarter earnings call that it plans to add eight to 10 MRUs within this fiscal. The move is expected to meet the increased demand for selling compressed natural gas



MUMBAI: Mumbai-based city gas distribution (CGD) company Mahanagar Gas Ltd (MGL) will set up 10 mobile refuelling units (MRUs) in the next year to meet the increasing demand for selling compressed natural gas (CNG).

MRUs, used for refuelling, can be conveniently parked at parking lots or open parks and land parcels approved by local authorities.

These units are an effective way of reaching out to customers and will also accelerate the expansion plans of CGD companies, considering that setting up a CNG outlet is capital-intensive and could cost between ₹75 lakh and ₹1 crore.

"We think that eight to 10 should be a good number to start within this fisc," the company told analysts during the first quarter ending earnings call, adding that once it places an order, it is only a matter of putting up a cascade and a cylinder and a compressor and a dispenser on a truck and then take it and drive it to a location and then start dispensing and get it, fly it between mother station and that location to get it filled up.

MRUs will allow these companies to serve a higher number of customers pushing CNG volumes. For CGD players, over 65% of their existing sales volumes come through co-located CNG outlets on oil marketing companies' land.

MGL on Thursday reported a 351% jump in its June quarter net profit as volumes recovered over a low base of last year.

Net profit of ₹204.08 crore, or ₹20.66 per share, in April-June, compared with ₹45.25 crore, in the same period a year back.

Piped natural gas supplies to households at 42.57 million standard cubic meters was 9.14% higher year-on-year and 3.5% over the previous quarter.

<u>Source:</u> <u>https://www.livemint.com/companies/news/mgl-to-set-up-10-mobile-refuelling-units-in-the-next-year-11627707866026.html</u>

1.2 Tanzania

Tanzania opts for natural gas to reduce import fuel costs

21st July 2021. By Beatrice Materu.



Tanzania's Energy Minister Medard Kalemani. Tanzania is pushing forward with the development of and use of natural gas in various sectors of the economies. PHOTO | THE CITIZEN | NMG

Summary

- Tanzania is pushing forward with the development of and use of natural gas in various sectors of the economies.
- Data from the Energy Ministry shows that the country spent nearly Tsh2.9 trillion (\$1.246 billion) last year importing fuel.
- Dr Kalemani also advised motorists to convert more of their vehicles from carbon fuels to natural gas, to save on fuel costs.

Tanzania is pushing forward with the development of and use of natural gas in various sectors of the economies and has set aside Tsh30 billion (\$12.89 million) for compressed natural gas (CNG) projects only. This will assist the government in reducing import fuel costs while going green to preserve the environment.

Data from the Energy Ministry shows that the country spent nearly Tsh2.9 trillion (\$1.246 billion) last year importing fuel.

Tanzanian already uses and supplies natural gas for electricity generation by major industries, manufacturers and households for domestic use. About 3,000 households are already connected to CNG supplies in Dar es Salaam, Mtwara and Lindi. The country has 701 vehicles using CNG in the commercial capital, Dar es Salaam.

Converting automobiles

"These projects are ongoing. But from when gas was first explored to current usage and ongoing projects we have only used half a trillion units of the natural gas," said Dr Medard Kalemani, Minister of Energy.

Dr Kalemani also advised motorists to convert more of their vehicles from carbon fuels to natural gas, to save on fuel costs.

"We have two stations that provide such service of converting vehicles from diesel and petrol fuel to national gas use at the University of Dar es Salaam and at the Dar es Salaam Institute of Technology. I am asking the two stations in collaboration with Tanzania Petroleum Development Corporation to revisit prices for converting vehicles to CNG use," added Dr Kalemani.

According to the minister, it costs between Tsh1 million (\$430) and Tsh1.5 million (\$645) to convert a vehicle from diesel or petrol fuel to compressed national gas use.

<u>Source:</u> <u>https://www.theeastafrican.co.ke/tea/business/tanzania-opts-for-natural-gas-to-reduce-import-fuel-costs-3480834</u>

1.3 India

IOC to tie up with Malaysia's Petronas for natural gas, fuel retailing 30th July 2021. By PTI

IOC owns 32,303 out of 77,709 petrol pumps in the country. It also has licences to retail CNG to automobiles and piped cooking gas to households in several geographical areas.



Indian Oil Corporation (IOC), the nation's biggest oil firm, on Friday said it will partner with Malaysia's Petronas for natural gas and transportation fuel retailing business.

IOC and Petronas have a 50:50 joint venture, IndianOil Petronas Pvt Ltd (IPPL) for import of LPG. It sells LPG to commercial customers who are not allowed to use subsidised cooking gas sold to households by state energy firms.

This joint venture will "diversify into natural gas and transportation fuel retailing business," IOC Chairman Shrikant Madhav Vaidya said.

IPPL will set up petrol pumps as well as get into the city gas distribution business, he said. He however said detailing of the business has not been done yet.

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Vaidya said IPPL will have its own branding and marketing.

Asked if IPPL's foray in retailing will not cannibalise on IOC's business, he said India's energy demand is growing and will have space for all players.

"Energy pie is increasing. There is place for everybody," he said. "Our (IOC's) market share is intact and IPPL will capture new opportunities."

Vaidya said the detail of IPPL's foray will be finalised in due course.

"Today the board of IOC has approved amending the memorandum of association of IPPL for forays into natural gas and transportation fuel business," he said.

IPPL will be the 7th fuel retailer in the country. Besides IOC, Bharat Petroleum Corporation Ltd (BPCL) and Hindustan Petroleum Corporation Ltd (HPCL) are the other two public sector fuel retailers.

Reliance Industries and BP have a joint venture, Reliance BP Mobility Ltd which operates 1,422 petrol pumps in the country. Rosneft-promoted Nayara Energy is the biggest private player with 6,152 petrol pumps while Shell has 270 outlets.

BPCL owns 18,766 petrol pumps while HPCL has 18,776. Mangalore Refinery and Petrochemicals Ltd (MRPL) has some 20 outlets.

IPPL has import terminals at Haldia in West Bengal and Ennore in Tamil Nadu. It is also one of the leading parallel marketers of propane/ butane / LPG in India.

Vaidya said monetisation of retail business in the future may be on lines of IPPL.

<u>Source:</u> <u>https://www.freepressjournal.in/business/ioc-to-tie-up-with-malaysias-petronas-for-natural-gas-fuel-retailing</u>

1.4 The Netherlands

Dutch project for producing bio-LNG gets funds from EU

30th July 2021. By Sanja Pekic

Bio-LNG bunkering project FirstBio2Shipping, developed by Attero and Bio-LNG Hub Wilp, will receive funding from the European Commission.



Illustration only; Courtesy of Port of Rotterdam

The European Union is investing €118 million (\$140.3 million) into 32 small renewable energy projects from different European countries.

The supported projects have the goal to bring low-carbon technologies to the market in energy-intensive industries,

hydrogen, energy storage, and renewable energy.

Amongst them is the FirstBio2Shipping, the project of Dutch environmental company Attero and Bio-LNG Hub Wilp.

The project wants to decarbonise the maritime sector by demonstrating the first industrial plant producing renewable, low-carbon bio-liquified natural gas (bio-LNG) in a standardised and scalable fashion. This would enable the cost-effective substitution of heavy fuel oil.

It would include a gas treatment facility, a bio-LNG unit, and a carbon capture unit.

The demonstration plant is to produce six million normal cubic metres a year of biogas, 2,400 tonnes a year biomethane and 5,000 tonner a year of bio-CO2.

The plant would use a Nordsol-patented technology called iLNG.

FirstBio2Shipping would reduce greenhouse gas emissions by 92 per cent compared to a reference scenario.

European Commission executive vice-president **Frans Timmermans** said: "With today's investment, the EU is giving concrete support to clean tech projects all over Europe to scale up technological solutions that can help reach climate neutrality by 2050. The increase of the Innovation Fund proposed in the Fit for 55 Package will enable the EU to support even more projects in the future, speed them up, and bring them to the market as quickly as possible."

Source: https://www.offshore-energy.biz/dutch-project-for-producing-bio-lng-gets-funds-from-eu/?utm_source=lngworldnews&utm_medium=email&utm_campaign=newsletter_2021-08-02

1.5 United Kingdom

CNG Fuels opens new UK biomethane refuelling station for HGVs 29th July 2021.



Philip Fjeld, CNG Fuels

CNG Fuels has opened a new low-carbon heavy-goods vehicle (HGV) refuelling station in Nottinghamshire, UK, allowing vehicles to run on 100% biomethane.

The announcement comes as the UK Government sets out plans to ban the sale of new petrol and diesel HGVs from 2040 under its transport decarbonisation plan.

CNG fuels already operates six stations across the UK and plans to open an additional 12-14 stations by the end of 2022.

The new station in Newark is the first to serve the North East region and is capable of refuelling up to 500 vehicles per day, making it one of the biggest stations in the UK, and cutting between 100,000 and 120,000 tonnes of greenhouse gas (GHG) emissions annually, when the station is fully utilised.

Most of the UK is already within a 300-mile round-trip of a CNG Fuels renewable biomethane refuelling station and the new site will put the cities of Lincoln and Sheffield within its range, serving local and passing fleets on the A1 north and south.

"Fleets around the country can already make the switch to cleaner and cheaper fuel by adopting biomethane, and our growing network of refuelling stations is making biomethane more accessible than ever before," said Philip Fjeld, CEO of CNG Fuels.

"Our new station in Newark will allow fleets in the region to support the local decarbonisation agenda and significantly cut both emissions and costs ahead of the UK's net-zero target."

Yorkshire-based logistics company, Campeys of Selby, is one of the many organisations in the region set to benefit from the new station. The company is taking delivery of 11 CNG trucks as part of its move towards low-carbon transport.

Harry Campey, transport manager of Campeys of Selby, commented: "Switching from diesel to biomethane was a no-brainer for us – we're dramatically reducing the environmental impact of our fleet and saving thousands of pounds in fuel costs in the process.

"CNG Fuels' station in Newark opens the door for even greater adoption in the region, as we continue to work towards hitting our local and national net-zero targets."

HGVs account for 4.2 of the UK's carbon emissions, making the sector a key area of focus for decarbonisation targets. As a result, renewable biomethane demand is growing at a rate of 100% per annum, with CNG Fuels forecasting that this growth will continue to accelerate. The firm expects almost 20% of the UK's high-mileage HGV fleet will be running on bio-CNG by 2025.

Manure-derived biomethane

CNG Fuels is currently securing supplies of manure-derived biomethane to create a fuel that will be net-zero emissions on a well-to-wheel basis. It expects to begin offering carbon-neutral biomethane across all sites from 2022 at the same price as the renewable biomethane it currently supplies.

Manure emits methane, a greenhouse gas that is 28 times more potent than CO2. Using methane as a fuel in HGVs prevents it from entering the atmosphere and reduces overall emissions. The EU's revised Renewable Energy Directive (RED II) recognises biomethane from manure as a carbon-negative fuel, and the UK is expected to adopt the same rules next year.

CNG Fuels' refuelling stations network is also 'ideally placed' to support battery electric and low-carbon hydrogen-powered HGVs in the future, the company said. It is consulting on how its stations can best accommodate these technologies when they become commercially viable.

The Committee on Climate Change expects battery-electric or hydrogen-powered HGVs to play a major role in decarbonising freight transport from 2030 onwards.

<u>Source:</u> <u>https://www.bioenergy-news.com/news/cng-fuels-opens-new-uk-biomethane-refuelling-station-for-hgvs/</u></u>

1.6 Scotland

Glenfiddich Fueling Trucks With Leftover Whiskey

29th July 2021. Nolan Beilstein Unit 202 Production Alex Shanahan

It is fueling three trucks and could fuel more in the future.

Glenfiddich is finding other uses for its unused Scotch whiskey rather than selling off leftover spent grains from the malting process for the purpose of cattle feed.

Reuters reported Glenfiddich is transforming its delivery trucks to operate on low-emission biogas and it's coming from waste products found in the whiskey distilling process.

The Scotland-based distillery's parent company, William Grant & Sons, first developed the technology and Glenfiddich is implementing it at a distillery in Dufftown.

The process involves converting production waste into an Ultra-Low Carbon Fuel gas. Bacteria break down organic matter to produce biogas in an oxygen-free vessel in what is called anaerobic digestion. Such a gas does well to limit harmful emissions.

Glenfiddich says biogas is used in three trucks which are from Iveco and traditionally run on liquefied natural gas. The trucks transport Glenfiddich spirit from the Dufftown distillery to bottling and packaging. This covers four William Grant & Sons sites.

According to Glenfiddich, biogas decreases carbon dioxide emissions by over 95% in comparison to diesel.

It also said biogas cuts harmful particulates and greenhouse gases up to 99% and one truck will take place of approximately 250 tons of carbon dioxide per year.

Distillery director at William Grant & Sons Stuart Watts said they could eventually use the technology utilized in Glenfiddich's trucks. It could also fuel trucks of other companies in the future.

By 2040, the Scottish whiskey industry plans to reach carbon net zero targets.

<u>Source:</u> https://www.manufacturing.net/video/video/21578807/glenfiddich-fueling-trucks-with-leftover-whiskey

1.7 International

The Hydrogen Hype Is Real, But Is It Justified?

2nd August 2021. Editor OilPrice.com. By Tsvetana Paraskova for Oilprice.com

Amid all the hype hydrogen is getting lately as an energy source, the reality is that this fuel faces significant challenges in scaling up in the global energy system.

That's the lead conclusion of the Innovation Insights Briefing prepared by the London-based World Energy Council (WEC) in collaboration with the Electric Power Research Institute (EPRI) and PwC.

Hydrogen, especially green hydrogen made of water electrolysis using electricity from solar or wind, has been gaining momentum in recent years.

Hydrogen now features in nearly every strategy of Big Oil and can be seen in many government plans for industry decarbonization. Hydrogen is expected to play a prominent role in lowering the carbon emissions from energy-intensive industries.

Currently, countries view hydrogen's role in the energy transition in very different ways. According to the WEC's report, existing hydrogen demand scenarios show estimates for future use of the fuel vary between 6 and 25 percent of final worldwide energy consumption by 2050, or between 150 and 600 megatons by 2050, depending on how hydrogen will compete with other clean solutions such as battery storage.

Despite the fact that many countries are looking at how to develop a 'hydrogen economy' by becoming suppliers or charting pathways for hydrogen use in domestic industries—scaling up hydrogen "faces significant challenges," the report found.

First and foremost, it's the cost.

"Low-carbon hydrogen is currently not cost-competitive with other energy supplies in most applications and locations and is likely to remain so without significant support to bridge the price gap - which raises the question of who should fund this support," the WEC notes.

But countries are sending encouraging signals that they are currently willing to help low-carbon hydrogen scale up with direct investments in projects, the report says.

The question is how much and how long of taxpayer support it could take to make low-carbon hydrogen competitive enough to be a viable cost-efficient solution to industry decarbonization.

Then, the WEC report says, the hydrogen economy is at such an early stage that it faces the "chicken and egg problem" between supply and demand, both lacking secure volumes from the other to help establish the value chain.

Next, the "color debate" about hydrogen, with colors used to denote how hydrogen is being produced, is stifling innovation, according to the report. This "color differentiation" could unnecessarily exclude a viable cost-efficient technology just because one type of hydrogen is currently color-coded as 'blue', for example. Blue hydrogen refers to hydrogen made from fossil fuels with carbon capture.

"The color debate needs clarity as it could risk prematurely excluding some technological routes that could be more cost and carbon-effective. There is an emerging sense that the discussion should perhaps think about moving beyond color and instead focus on carbon equivalence," the authors of the report wrote.

"This decade is crucial to develop hydrogen projects along with the infrastructure to produce, transport, import, distribute and use hydrogen at large scale. If we do this successfully over the next few years, it can pave the way for hydrogen demand to grow exponentially beyond 2030," Jeroen van Hoof, Global Energy, Utilities and Resources Leader, PwC Netherlands, said, commenting on the report.

The hydrogen economy may be in its very early stages, but companies-including major oil firms and governments are already working to develop projects and bring costs down.

The biggest oil companies in Europe, including BP, Shell, TotalEnergies, Equinor, Eni, and Repsol, all have ongoing hydrogen projects and plan more for the future.

Germany said in May that it would fund 62 large-scale hydrogen projects with as much as US\$10 billion in federal and state funds as it aims to become the world's leader in hydrogen technologies.

Even countries in the top oil-producing region in the world, the Middle East, are looking at ways to become hydrogen production and export hubs. Oman, the United Arab Emirates (UAE), and Saudi Arabia are betting on hydrogen for leadership in another energy market apart from oil exports.

In the United States, Secretary of Energy Jennifer Granholm launched in June the U.S. Department of Energy's first Energy Earthshots Initiative, Hydrogen Shot, which seeks to reduce the cost of clean hydrogen by 80 percent to \$1 per kilogram in one decade.

"Clean hydrogen is a game-changer. It will help decarbonize high-polluting heavy-duty and industrial sectors while delivering good-paying clean energy jobs and realizing a net-zero economy by 2050," Secretary Granholm said.

Source: https://finance.yahoo.com/news/hydrogen-hype-real-justified

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