#### 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 13/2021. 21st August 2021 (for ANGVA members only)

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#### 1.0 Selected News / Articles

#### 1.1 India

## Ernakulam: Soaring fuel price forces more people to favour CNG vehicles

15th August 2021. T C Sreemol / TNN /

Picture used for representational purpose only

KOCHI: The rising fossil fuel price is leading many Kochiites to opt for green <u>vehicles</u> by converting their existing petrol/diesel vehicles into CNG. As many as 288 vehicles under Ernakulam RTO limit were converted to <u>CNG</u> ones till August 14 this year, against 473 vehicles last year.

The number of vehicles being converted into CNG ones have increased after the pandemic induced restrictions were lifted last year. The conversion continued to keep its momentum from June last year, and every month more than 40 vehicles were converted till the second lockdown was imposed in May this year. The highest number of vehicles converted in a month under Ernakulam RTO limit before the pandemic was in February last year - 23 vehicles. Soon after the state government lifted the restrictions, conversion of vehicles has picked up momentum with 30 in July and another 30 in just 14 days of August. The highest number of vehicles converted in a month under Ernakulam RTO was in November last year with 87 vehicles, followed by 79 in January this year.

Compared to previous years, it is the rural areas which show more takers for converted CNG vehicles than in the city limits. Conversion of vehicles in <u>Perumbavoor</u>, <u>Muvattupuzha</u>, <u>Aluva</u>, Mattancherry and Tripunithura has already somewhat touched the number of vehicles converted last year.

### **GREEN SHIFT**

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As many as 219 vehicles were converted into CNG last year in Perumbavoor joint RTO limit, whereas, 217 vehicles have been converted till August this year. "Rising petrol prices force owners to convert their vehicles into CNG as per the provisions of the motor vehicles department," said Perumbavoor JRTO Prakash.

Meanwhile, an owner who wants to convert his vehicle has to shell out more than Rs 50,000 to retrofit it with a CNG kit, the price of which has increased after the pandemic. The rising

demand and short supply of the kits for conversion are some of the issues faced. The agencies which retrofit the kits are flooded with enquiry from vehicle owners and bus operators for the past two months as the price of the fossil fuel touched Rs 100.

"The price of the CNG tank is around Rs 20,000 now, without GST. It was only around Rs 12,500 before the pandemic. When the lockdown was announced, manufacturing of cylinders and importing of components required for manufacturing the kits were affected. This led to a shortage in the availability of kits while the demand skyrocketed. With the corporate vehicle manufacturing companies focusing on launching their own CNG vehicles, the availability of kits reduced further," says Ayyappan B, managing director of Surabhi Gas Track pvt ltd.

At present, it takes a day to retrofit a kit in a vehicle as the infrastructure in the retrofitting firms are not yet upgraded to meet the rising demand.

<u>Source:</u> <u>https://timesofindia.indiatimes.com/city/kochi/soaring-fuel-price-forces-more-people-to-favour-cng-vehicles/articleshow/85335759.cms</u>

#### 1.2 India

## CGD cos stick with expansion projects amid push for EVs

16<sup>th</sup> August 2021. Kalpana Pathak



IGL plans to spend  $\[ \] 1,200$  crore to expand its capacity. Torrent Gas has announced an investment of  $\[ \] 5,000$  crore in Tamil Nadu to lay infrastructure for its CGD business.

Electric vehicles (EVs) may be the flavour of the season, but city gas distribution (CGD) companies are racing ahead with their expansion plans. Mumbai-

based Mahanagar Gas Ltd (MGL) is planning to spend ₹800 crore this financial year, Gujarat-based Torrent Gas over ₹3,500 crore and Delhi-based Indraprastha Gas Ltd (IGL) will spend ₹1,200 crore on expanding their capacities.

"EVs may be the talk of the town, but they are far away in most vehicle categories in India. Except for two-wheelers, I do not see EVs making a big dent in any other segment," said Jinal Mehta, director, Torrent Gas. Two-wheelers is not a segment that the CGD companies are focused on, and compressed natural gas (CNG) will have a stronger play in the next decade in India, he added. Torrent plans to invest ₹10,000 crore over the next five years to expand its business. Last month, it had announced an investment of ₹5,000 crore in Tamil Nadu for the next five years to lay the infrastructure for its CGD business.

The Petroleum and Natural Gas Regulatory Board has authorized Torrent to set up and operate CGD networks and provide CNG and piped natural gas (PNG) in 33 districts across seven states and a Union territory. Mahanagar Gas said a large majority of demand in Mumbai for CNG comes from taxis, private cars and the 350,000 autorickshaws that ply on city roads. The company said space to set up electric charging infrastructure is inadequate in Mumbai to support large-scale EV adoption at least for the next three years.

"Yes, EVs will have some market share, going forward, but not to such a large extent that it becomes a very big risk for Mahanagar Gas," said Sanjib Datta, managing director, MGL. While EVs will remain a part of long-term development, it will not eliminate CNG, or for that matter, eliminate petrol or diesel, Datta added.

As many as 13 states, including Andhra Pradesh, Delhi and Karnataka, have approved or notified dedicated policies to promote the adoption of EVs, according to a written reply to the Rajya Sabha on 9 August.

Maharashtra launched its EV policy in July and will offer subsidies to the first 100,000 buyers of electric two-wheelers for up to ₹5,000 per kWh of battery capacity. The state expects electric two-wheelers to account for 10% of all new vehicle registrations by 2025.

<u>Source:</u> <u>https://www.livemint.com/companies/news/cgd-cos-stick-with-expansion-projects-amid-push-for-evs-11629052367819.html</u>

### 1.3 Nigeria

## Gas flaring in Nigeria: Eco-green mass transit buses to the rescue

17th August 2021. By Theodore Opara. Vanguard News Nigeria

NIGERIA's dream of having a pollution-free environment may soon come to reality as an environmental concern, an automotive manufacturing company, is set to launch eco-green mass transit buses in the country.

The buses already being used in major cities of the world are powered by compressed natural gas, which is usually flared in Nigeria's Niger Delta region and causing environmental pollution and crisis in the area.

Chief Executive Officer of Austrian Technologies Nigeria Limited, Johann Rieger, said the eco-green buses had been built on European standards for critical climate and infrastructure as in Nigeria.

According to him, the buses are the safest and most economic public mass transit vehicles that can reduce carbon footprints by 95 per cent and maintenance cost by 30 per cent.

Specifically, he said the buses, coming with a lifespan of at least 15 years, had been equipped with engines of higher emission standards (Euro 5) with no toxic, smog or smoke, guaranteeing reduced noise and lower fuel costs.

Rieger also said the project would guarantee local capacity building of the buses through extensive transfer of the technology and know-how within a short time of the entire value chain.

He added that up to 70 per cent of all components of the eco-green buses should be manufactured or assembled locally within five years of operation including the first green engine.

According to Rieger the project would come with uniquely designed and efficient drivers' safety training that would allow safe increase of passengers' capacity by 30 per cent in accordance with international standards of public transport.

He said the vehicle had been built with the highest operational standards and expected to save the operator a minimum of \$25,000 in comparison to any other large capacity bus.

Rieger who noted that six eco-green buses would do the job of at least 10 biggest BRT buses currently being operated in Nigeria explained that by switching over to locally available natural gas, at least \$20,000 of foreign exchange would also be saved.

He remarked that driving with natural gas was the most environmentally friendly solution wherever this green fuel is available, stressing that about 90 per cent efficiency and transparency would be guaranteed through permanent real-time monitoring of each bus by ecotelematics and extended after-sale service with 24/7 spare parts availability and service parts for the first two years.

Some of the unique features of an eco-green bus are roof-mounted CNG cylinder with up to 500km and gas leakage detection system and tyre pressure monitoring system. Others are speed limiter, alcohol test and driver's fatigue detection with driver's biometric identification; air conditioning system with bipolar ionisation; reverse camera; handicapped ramp and wheelchair area.

Rieger listed some of the technical features of the bus as electronic dashboard with extended eco-telematics system, real time driver's feedback on safety and economic driving; on board video education in cooperation with UNICEF.

The bus is said to come as 8.7metres for 60 passengers; 10.5metres for 80 passengers, 13metres for 110 people and 18metres accommodating 160 passengers.

<u>Source:</u> https://www.vanguardngr.com/2021/08/gas-flaring-in-nigeria-eco-green-mass-transit-buses-to-the-rescue/

#### 1.4 Russia

## Alrosa to launch LNG conversion pilot for mining fleet

17<sup>th</sup> August 2021. By Craig Guthrie.

Russian diamond producer Alrosa plans a 16-month pilot project that would evaluate if its mining trucks can run partially on liquefied natural gas (LNG) and partially on diesel to increase operational efficiency and improve overall environmental performance.



Alrosa said that the pilot will involve the testing of several types of equipment in real mining conditions, with the results informing if a fullscale switch can be made to LNG and diesel operation for motor vehicles.

That conversion project would see the transfer of more than 200 pieces of heavy machinery to LNG

and diesel operation at the Aikhal and Udachny Divisions. It envisages the construction of an LNG plant in Udachny and refuelling infrastructure that will include both fixed and mobile cryogenic filling stations

"Converting the vehicles would neither affect their technical performance nor require replacing their fuel systems. But, according to our calculations, it would reduce our consumption of

diesel, which today costs approximately twice as much as natural gas, by more than 40%," said Ruslan Sizonov, deputy chief operating officer for vehicle management.

The producer launched a project in July to convert its vehicles from gasoline and diesel to natural gas, while in 2015, it had began switching some of its vehicles from diesel and petrol sources to compressed natural gas.

<u>Source:</u> <a href="https://www.miningmagazine.com/fleet/news/1416021/alrosa-to-launch-lng-conversion-pilot-for-mining-fleet">https://www.miningmagazine.com/fleet/news/1416021/alrosa-to-launch-lng-conversion-pilot-for-mining-fleet</a>

#### 1.5 India

## India's Petronet LNG eyes transport sector with 1,000 LNG filling stations 17th August 2021.

The company has the goal to supply around 4mn t/yr of LNG to heavy-duty vehicles, according to Petronet LNG Chief Executive Officer, Akshay Kumar Singh.



Indian state-controlled Petronet LNG, the country's biggest liquified natural gas (LNG) importer, is planning to build 1,000 LNG filling stations in the next 4-5 years as the company eyes the transport sector for growth, diversifying its customer base from fertilizers, power plants and city gas.

According to Petronet LNG Chief Executive Officer, Akshay Kumar Singh, the company has the goal to supply around 4mn t/yr of LNG to trucks, buses and other heavy vehicles refuelling at these proposed retail outlets.

Initially, Petronet had planned to install some 1,000 LNG filling station within the next couple of years, however, COVID-19 related disruptions and a reluctance among transporters to convert their fleet delayed the company's plans. In a classic case of chick and egg problem, none of the 400,000 heavy-duty vehicles added to Indian roads every year use gas as fuel, reports Argus Media.

India plans to roll out as many as 3,000 LNG retail outlets, with transport fuel retailers such as state-controlled IOC, Hindustan Petroleum and Bharat Petroleum also intending to serve LNG at some of their retail outlets.

Source: https://www.petrolplaza.com/news/27928

#### 1.6 Thailand

**Japanese firm enters industrial natural gas supply business in Thailand** 16<sup>th</sup> August 2021. By Vũ Thị Lộc

Japan's Shizuoka Gas Co. will engage in supplying industrial natural gas in Thailand next year by investing in a local firm and developing new customers in the Southeast Asian country.

**Bangkok** (VNA) – Japan's Shizuoka Gas Co. will engage in supplying industrial natural gas in <u>Thailand</u> next year by investing in a local firm and developing new customers in the Southeast Asian country.

In a recent announcement, the firm revealed that Shizuoka Gas on August 5 reached agreement to acquire 49 percent of shares in the Thai-Japan Gas Network Company Limited (TJN), a company established by the Thailand-based Scan Inter Public Company Limited (SCN) to strengthen supply businesses in industrial compressed natural gas (CNG) and <u>liquefied natural gas</u> (LNG).

This business development in Thailand marks <u>Shizuoka Gas</u>'s third project in the country, following a 2015 gas power generation project and a 2021 solar power generation project.

TJN is a spin-off company of SCN's industrial natural gas supply business. TJN inherits its customer base from SCN, which is the largest supplier of CNG in Thailand.

TJN's registered capital is 412 million THB (12 million USD). After the deal, SCN will own 51 percent of TJN's shares.

<u>Source:</u> <u>https://en.vietnamplus.vn/japanese-firm-enters-industrial-natural-gas-supply-business-in-thailand/206429.vnp</u>

#### 1.7 International

# World Biogas Association: anaerobic digestion 'dangerously overlooked' as climate change solution

12th August 2021. By World Biogas Association



As the Inter-Governmental Panel on Climate Change (IPCC) publishes an alarming sixth assessment report on climate

change, the World Biogas Association (WBA) has renewed its call for the potential of the biogas industry to be urgently unlocked so that it can help deliver the "rapid reductions in GHG emissions and in particular methane" that the IPCC says is needed to address the climate emergency.

The warning amplifies <u>recommendations</u> by the UN Environment Programme (UNEP) and Climate & Clean Air Coalition (CCAC) that said that tackling methane emissions was the most immediate and cost-effective way to avert climate catastrophe. They identified anaerobic digestion (AD) as a readily available low-cost technology that can help reduce these emissions. The International Energy Agency (IEA) has also <u>recognized the value of biomethane</u> in decarbonizing the energy sector, whilst the EU has embraced it in its <u>Methane Strategy</u>.

"Research from the WBA and other biogas trade bodies and from UNEP, CCAC and the IEA, has demonstrated our industry's potential to deliver a huge reduction in global GHG emissions, especially methane, within the next few years", says Charlotte Morton, WBA chief executive. "Crucially, anaerobic digestion, the technology that produces biogas – also known as renewable natural gas or biomethane – as well as a biofertilizer, bioCO2 and other valuable bio-products, is ready to deliver on that potential now. What is badly missing is the political will to remove policy barriers to the growth of the sector – both at global and national levels.

"As the UK prepares to host a particularly critical COP26, and given the widely recognized opportunity to address methane emissions through AD, the British government MUST show the leadership required in speedily committing to an integrated strategy that will deliver the full potential of AD in the UK by the end of the decade and in ensuring that all other countries follow suit. Without AD fully deployed, it will simply be impossible to keep below 1.5 degrees by 2030, nor to achieve Net Zero by 2050, "she continues. "Such commitments need to be in each country's Nationally Determined Contributions (NDCs) to the Paris Agreement – almost all of which are still failing to deliver on the targets set in 2015.

"With its latest report, the IPCC has just issued its starkest warning yet of the danger of climate change and of the need to act urgently. We are today issuing our own warning to world governments that it is dangerous to overlook the recognized power of AD as an immediate solution. With the right policy framework in place, AD can cut emissions by 10% by 2030. The global biogas industry has already made a public commitment to play its role to deliver on this potential. Now it is down to the world's politicians. We're here, we're ready – we're waiting for YOUR commitment, and the world needs it NOW."

<u>Source:</u> <u>https://www.canadianbiomassmagazine.ca/world-biogas-association-anaerobic-digestion-dangerously-overlooked-as-climate-change-solution/</u>

**1.8 Spain NATURAL GAS IS A DECISIVE ELEMENT OF THE ENERGY TRANSITION**17th August 2021. By Sam Brad



The transition towards a sustainable energy model to face the challenges of climate change is already one of the great issues of our present. Energy companies have a responsibility to lead a transformation that must be fair and orderly, since it will affect the economy as a whole.

And the gas sector plays a very important role in facilitating that transition. At Redexis, we trust in the great potential of our energy infrastructures to contribute to this transition called to generate a cleaner environment and a low-emission economy that results in an improvement in the quality of life for all.

Various international organizations coincide in stating that natural gas will register a significant increase in demand by 2040. Its application in long-distance mobility, among others, is being a great advance thanks to its economic advantages and its significant reductions in CO2 emissions with respect to traditional fuels. In the last three years, Redexis has opened 15 gas stations to offer this energy to companies and individuals.

At Redexis we have been growing for more than ten years and specifically in the industrial sector at triple annual digits. This shows that natural gas is a decisive element of the energy transformation in very important sectors of our society today, in 2021.

Therefore, it is the necessary key and one that will take an even greater role if possible to help in this transition process, which is a true reflection of the enormous attraction that natural gas continues to have for many clients and sectors that are essential for the Spanish economy.

In addition, from Redexis we are making a strong investment in projects related to renewable gas and hydrogen, already counting on examples such as our participation in the Power to Green Hydrogen project in which we will soon begin the construction of the first hydroduct in Spain.

Hydrogen and biomethane are energy vectors with a great future projection. Its use in Spain is still incipient, but its potential is considerable: energy that can be injected into current natural gas networks with practically zero environmental impact.

As biomethane is a perfect exponent for the development of a circular economy, we consider it very important to have a roadmap that translates into legislative and regulatory instruments that allow us to establish biomethane injection targets so that we can develop a national market and European.

<u>Source:</u> <u>https://www.jetsweekly.com/news/279/natural-gas-is-a-decisive-element-of-the-energy-transition/</u>

#### 1.9 China

### Beijing eyes 10,000 FCVs by 2025

17th August 2021. By Nika From Gasgoo

**Shanghai** (Gasgoo)- The city of Beijing aims to have over 10,000 fuel cell vehicles (FCVs) on roads and 37 newly built hydrogen filling stations by 2025, according to a plan issued by the Beijing Municipal Commission of Economy and Information Technology on August 16.



Foton Motor's FCV; photo credit: Foton Motor

The plan shows the specific goals the Chinese capital sets for the development of its local hydrogen energy industry. By 2025, the megacity will strive to foster 10 to 15 leading companies with global influence for hydrogen energy industrial chain, build 3 to 4 world-class industrial R&D innovation platforms, and construct an

industrial cluster for the manufacturing of hydrogen-related core parts and equipment.

Under the plan, a hydrogen energy industrial chain worth more than 100 billion yuan (\$15.438 billion) will be built and 2 million tons of carbon emissions will be reduced in the Beijing-Tianjin-Hebei region by 2025.

As to the goals for shorter term, Beijing is ambitious to have 37 hydrogen filling stations and 3,000 FCVs on roads by 2023. In the Beijing-Tianjin-Hebei region, the worth of hydrogen energy industrial chain should exceed 50 billion yuan (\$7.645 billion) and carbon emissions should be decreased by 1 million tons.

The upcoming Beijing 2022 Winter Olympic and Paralymic Games are seen as a major opportunity to demonstrate the development. On August 15, Beijing's first hydrogen refueling built for the 2022 Winter Olympics was officially put into operation.

#### Source:

https://autonews.gasgoo.com/new\_energy/70018543.html?utm\_source=edma&utm\_medium=email&utm\_content=endingyue&utm\_campaign=service&systemPlat=EDM\_EN&userId=leegs@angva.org&From=2021-08-17