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

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1.0 Selected News / Articles

1.1 India Megha Engineering, Adani Total Gas top winners of city gas distribution licences

14th January 2022. PTI.

According to the results of the bid opening for the 11th round of city gas distribution (CGD) bidding, IOC stands to get nine licences and BPCL 6.



Megha Engineering, Adani Total Gas top winners of city gas distribution licences

Megha Engineering and Infrastructures Ltd (MEIL) walked away with the most 15 licences to retail CNG to automobiles and piped cooking gas to households in the latest city gas bidding round, while

a joint venture of billionaire Gautam Adani's gas arm and Total of France got 14 licences.

According to the results of the bid opening for the 11th round of city gas distribution (CGD) bidding, Indian Oil Corporation (IOC) stands to get nine licences and Bharat Petroleum Corporation Ltd (BPCL) 6.

While Assam Gas Company is winning three licences, Dinesh Engineers Ltd is set to bag licences for four geographical areas (GAs).

Hindustan Petroleum Corporation Ltd (HPCL), GAIL Gas Ltd, Think Gas Distribution Pvt Ltd, IRM Energy Pvt Ltd, Indraprastha Gas Ltd and Sholagasco Pvt Ltd are to get one licence each.

An official of the Petroleum and Natural Gas Regulatory Board (PNGRB) said the bids have been opened and the preliminary winners decided but a formal announcement will be made in the next few days after the documents submitted by the bidders are verified.

Bids for 61 out of the 65 GAs offered in the 11th round were received at the close of bidding last month.

IOC had bid for 53 out of 61 GAs while Adani Total Gas Ltd had bid for 52 GAs. Adani group had originally ventured into the city gas business in a joint venture with IOC but it later tied up with Total. Adani and IOC did not put any combined bid in the latest bid round.

PNGRB had bid out 65 GAs, including Jammu, Nagpur, Pathankot and Madurai, in the latest licensing round. Four GAs in Chhattisgarh did not receive a single bid.

I Squared Capital-backed Think Gas Distribution Pvt Ltd was the third largest bidder as it put in offers for 44 GAs. Privatisation-bound BPCL had put in bids for 43 GAs, while GAIL Gas Ltd – the city gas arm of state gas utility GAIL India Ltd – had bid for 30 areas.

HPCL bid for 37 GAs and Torrent Gas for 28. Indraprastha Gas Ltd – the firm that retails CNG in the national capital and adjoining areas – bid for 15 GAs, Gujarat Gas for 14 and Assam Gas for 10 GAs.

Megha Engineering had a winning percentage of 24.6 per cent, while Adani Total Gas Ltd was successful in 23 per cent of the GAs where it had bid. IOC was successful in 14.8 per cent and BPCL's success rate was 9.8 per cent. While Torrent Gas drew blank, other major bidders had a success rate of just 1.6 per cent.

The bids were decided on the basis of those offering to give most city gas connections and those setting the largest number of CNG retail outlets.

PNGRB had last month stated that as much as Rs 80,000 crore investment is envisaged in setting up city gas infrastructure in the 61 GAs.

The 65 GAs offered in the 11th bid round are spread over 215 districts in 19 states and one Union territory covering 26 per cent of India's population and 33 per cent of its area.

Currently, there are 228 geographical areas authorised by PNGRB in 27 states and UTs covering about 53 per cent of the country's geographical area and 70 per cent of its population.

In the last city gas distribution bidding round (the 10th CGD bidding round), 50 GAs were authorised for the development of the CGD network.

In the current round, 215 districts clubbed into 65 GAs are being offered. Bids were received for 61 GAs, according to PNGRB. During 2018 and 2019, PNGRB gave out licences to retail CNG to automobiles and piped cooking gas to household kitchens in 136 GAs. This extended coverage of the city gas network to 406 districts and around 70 per cent of the country's population.

The push for city gas expansion is part of the government's plan for raising the share of natural gas in the country's energy basket to 15 per cent by 2030 from the current 6.3 per cent.

While 86 GAs, made up of 174 districts, were offered for bidding in the 9th round that concluded in August 2018, 50 GAs, comprising 124 districts, were offered in the 10th round in 2019.

<u>Source:</u> https://www.businesstoday.in/industry/energy/story/megha-engineering-adani-total-gas-topwinners-of-city-gas-distribution-licences-319170-2022-01-14

1.2 Thailand LPG subsidy extended

11th January 2022. Writer: Online Reporters.



A pump attendant waits for customers. (Bangkok Post file photo)

The Energy Policy Administration Committee will extend the liquefied petroleum gas (LPG) price cap for another two months to relieve people's living costs, Kulit Sombatsiri, permanent secretary for energy, said on Tuesday.

Mr Kulit, as chairman of the committee, said the LPG price cap at 318 baht per 15-kilogramme cylinder, which was due to end this month, will be extended until March 31.

As of Jan 5, the global price of LPG stood at US\$682.90 a tonne, which is equal to its retail price of 412 baht per 15-kg cylinder.

He said that the committee also approved a cap of the price of compressed natural gas, also known as NGV (natural gas for vehicles), at 15.59 baht per kg for personal vehicles and 13.62 baht per kg for taxis in greater Bangkok until March 15, with support from PTT.

Source: https://www.bangkokpost.com/business/2245851/lpg-subsidy-extended

1.3 Iran

165,000 public transport vehicles turned dual-fuel* (*Note: dual fuel means bi-fuel) 18th January 2022.



TEHRAN - The director of the National Iranian Oil Refining and Distribution Company (NIORDC)'s compressed natural gas (CNG) programs said 165,000 public transport vehicles have been already turned into dual-fuel cars.

According to Mohammad-Hossein Baqeri, the fund saved

through turning the mentioned vehicles into the dual-fuel cars will be expended for the development of CNG industry in the country.

Since the implementation of a program for rationing subsidized gasoline and increasing fuel prices in November 2019, CNG consumption has been rising in the country.

Iranian Oil Ministry considers CNG as the national fuel, therefore, to increase the share of this fuel in the country's energy basket, it was planned to turn public vehicles into dual-fuel cars.

In early December 2021, NIORDC and state-owned Iran Khodro Company (IKCO) signed a \$20 million deal to co-manufacture 45,000 dual-fuel vehicles for the country's public transportation fleet.

The signing ceremony was attended by the NIORDC Head Jalil Salari, IKCO Managing Director Farshad Moghimi, and Deputy Industry, Mining and Trade Minister Mohsen Salehi-Nia.

Based on the deal, of the mentioned vehicles 40,000 will be taxis and 5,000 are going to be vans.

NIORDC and IKCO had signed a memorandum of understanding (MOU) in December 2019, to add new dual-fuel vehicles to the country's public transportation fleet.

According to that MOU, 1.46 million dual-fuel vehicles were supposed to be added to the public transportation fleet, reducing the country's daily gasoline consumption by 10 million liters. MA/MA

<u>Source:</u> https://www.tehrantimes.com/news/469189/165-000-public-transport-vehicles-turned-dualfuel

1.4 India

North MCD inks MoU with IGL to set up compressed biogas plants

5th January 2022. By HT Correspondent.

A number of compressed bio gas (CBG) plants and integrated CBG-CNG fuel stations will be set up in north Delhi for the in-situ processing of wet waste and making optimum use of biodegradable waste



Each CBG plant will have the capacity to convert 100 tonnes of segregated MSW (municipal solid waste) per day. (Representational image/HT Archive)

The North Delhi Municipal Corporation (North MCD), on Tuesday, signed a memorandum of understanding (MoU) with Indraprastha Gas Limited (IGL), under which a number of

compressed bio gas (CBG) plants and integrated CBG-CNG fuel stations will be set up in north Delhi for the in-situ processing of wet waste and making optimum use of bio-degradable waste.

North MCD commissioner Sanjay Goel said that while the concessional period will be 20 years, the MoU period is two years. "Each CBG plant will have the capacity to convert 100 tonnes of segregated MSW (municipal solid waste) per day. North MCD will provide segregated bio-degradable waste (wet waste) to the plants as per Solid Waste Management Rules 2016. The civic body will also provide land for the plants without any charge, at a notional lease rental of $\gtrless1$ per annum. To start with, approximately three acres of land at Ghogha dairy is being considered for this project. The site has been inspected by IGL officials and found suitable for this project," he said.

He also said that bio manure, city compost and fertiliser produced after processing the waste shall be utilised by North MCD at its nurseries, gardens and green belts at a pre-decided cost. "Also, the IGL may sell it in the open market after enrichment," Goel said.

When contacted, IGL's director-in-chief Pradeep Bansal said the gas-distributing company will engage a technical consultant to prepare a Detailed Feasibility Report and set up the plant and fuel station at its own cost.

"We will run the plant for the entire duration of the concessional agreement of 20 years, which may be also extended according to the mutual understanding. The expected production of various components generated after bio-methanation of 100 tonnes per day of MSW will comprise 4,000 kilograms per day of CBG, 15 tonnes per day of city compost and 50,000 litres of wet slurry per day," he said.

<u>Source:</u> <u>https://www.hindustantimes.com/cities/delhi-news/north-mcd-inks-mou-with-igl-to-set-up-compressed-biogas-plants-101641332765625.html</u>

1.5 United Kingdom Gasrec opens new monitoring centre for biomethane stations

13th January 2022. George Barrow.



Gasrec has opened a Remote Monitoring Centre to watch and react to real-time data from its biomethane refuelling stations across the UK. Manned by a team of six operatives, the new site will also monitor its tanker fleet, 24 hours a day, seven days a week, 365 days a year, while keeping on eye on the gas levels to ensure an uninterrupted supply as well as detect any equipment faults or safety issues immediately.

Tony Robinson, chief technical officer at Gasrec, said: "The safety and resilience of our operations is at the heart of everything we do. Historically this work has been incorporated into our operations and engineering team but the substantial growth of the business over the past two years has enabled us to take things to the next level.

"Our Remote Monitoring Centre team have undergone intensive on-site training, ensuring they are all familiar with our stations and equipment. Through the latest technology, they will be able to monitor every aspect of our operation, ensuring we can react to potential issues before our customers even know there is a problem."

Operators will be able to access and control CCTV footage of every Gasrec facility, allowing them to identify problems quickly while also offering advice or assistance to drivers fuelling their vehicles whatever time of day or night.

<u>Source:</u> <u>https://www.commercialmotor.com/news/product/gasrec-opens-new-monitoring-centre-biomethane-stations</u></u>

1.6 China

Cummins and Sinopec to install 1GW hydrogen electrolyzer facility in China 12th January 2022. By Angie Bergenson

The American company is working with the Chinese state-owned oil giant on the H2 production plant.

Cummins (NYSE stock symbol CMI) has announced that it is joining Chinese state-owned oil company Sinopec to build a 1GW hydrogen electrolyzer in China.

The plant is expected to have a 500MW capacity when it begins its initial operation in 2023.

The new plant will be the first one in China to use Western technology for H2 production. The equipment will be made by Cummins, which has <u>entered into a joint venture</u> with Sinopec. The venture is called Cummins Enze and will result in the construction of a 1GW PEM electrolyzer factory in the country's southern Foshan, Guangdong province. While it will be starting off at 500MW, its capacity will gradually increase until it reaches 1GW in 2028.

The facility is expected to cost \$47 million. The fact that it uses proton exchange membrane or polymer exchange membrane (PEM) technology instead of the standard alkaline design stands out as it has been an exclusively Western tech until now. Moreover, China already has a number of alkaline model manufacturers that would have been able to offer a lower price than Western rivals. However, the local industry has been falling behind on the newer PEM tech. Green H2 developers tend to prefer PEM tech due to its superior performance when powered by wind and solar energy, which have variable output levels.

Beijing is seeking to use the new hydrogen electrolyzer joint venture to correct that tech imbalance.

The goal is to use a national-level project for the development of a competitive <u>PEM tech-based facility</u> that will stand up to the machines made by leading manufacturers in Europe.

The joint venture making Chinese and Cummins news will use PEM technology originally developed by Hydrogenics in France. That company, an electrolyser manufacturer, was acquired by the American giant in 2019.

<u>Sinopec</u>, the largest oil refiner in China, has a massive greenhouse gas pollution level. It currently produces an annual 3.5 million tons of highly polluting <u>grey H2</u>, powered mainly by unabated coal, for use in its petrochemical plants and refineries. As of last summer, Sinopec news headline s took off as the company announced that it wanted to be the largest "hydrogen energy" company in the country. Its initial target is to use hydrogen electrolyzer technology to produce one million tons of renewably produced green H2 between 2021 and 2025.

Source: https://www.hydrogenfuelnews.com/hydrogen-electrolyzer-cummins/8550820/

1.7 United Kingdom

Gas grid ready for 20% hydrogen blend from next year

13th January 2022. By Press Association 2021.



The gas grid will be able to deliver more hydrogen to households across Britain from next year, the trade body of network companies has said.

The operators of the grid say they will have the capacity to blend 20% of the fuel into the regular gas grid, a move that could see a drop in

households' carbon emissions.

"Whether it be heating our homes, powering our businesses or generating cleaner electricity, hydrogen will help drive up our energy security, while driving down our carbon emissions – and Britain's gas grid companies are ready to get on with the job of delivering that," said Energy Networks Association chief executive David Smith.

"This plan sets out the changes needed to deliver cleaner, more secure energy supplies for all.

"What's key is that the Government does its bit too by lifting its target for homegrown hydrogen production this decade. Doing that today will help gas grid companies deliver for tomorrow."

Hydrogen can be produced in several ways, some of which are entirely green. Some manufacturers use renewable electricity to split water atoms into hydrogen and oxygen.

This method does not release any carbon into the atmosphere.

However most hydrogen is still produced by manufacturers who make hydrogen from natural gas – a process which produces carbon. Some manufacturers try to capture this carbon during the process.

There are also questions whether there will be enough hydrogen to fill the whole 20% capacity as soon as next year. The networks hope that by providing the capacity it will encourage producers to ramp up production.

They called on the Government to double the target for how much hydrogen should be produced in the UK by the end of the decade.

But if the 20% capacity could be met it would be a major step towards reducing the UK's carbon emissions, the equivalent of taking 2.5 million cars off roads.

Around a third of emissions from British homes come from heating, largely because there are so many gas boilers in the country.

Blending hydrogen into the system will not only reduce these emissions, if green hydrogen is used it will also cut emissions from gas stoves and from gas power plants that supply electricity to homes and businesses.

Regular gas boilers are able to cope with 20% hydrogen blended into the system. However boilers up and down the country will need to be swapped for "hydrogen ready" alternatives if more than 20% is blended in.

UK households need to reduce their carbon emissions by 95% by 2050 if the country is to meet its target of being net zero by then.

Source: https://www.winsfordguardian.co.uk/news/19843463.gas-grid-ready-20-hydrogen-blendnext-year/

1.8 China SAIC HONGYAN starts production at fuel cell heavy-duty truck plant in Ordos

17th January 2022. By Monika From Gasgoo



Shanghai (**Gasgoo**)- SAIC HONGYAN, a heavy-duty truck subsidiary of SAIC Motor, on Jan. 14 celebrated the start of production at its vehicle manufacturing plant in Ordos City, Inner Mongolia Autonomous Region, with the first-batch vehicles rolling off the production line at the same time, according to a post on SAIC Motor's WeChat account.

SAIC HONGYAN's Ordos plant starting production; photo credit: SAIC Motor

The latest move means that a phased achievement has been made for the world's first project aiming at the industrial application of 10,000 fuel cell heavy trucks, said SAIC Motor.

Covering a floorage of 10,000 square meters, the new plant will be built into a base integrating functions of assembly, testing, and delivery of new energy heavy-duty trucks. It is designed to feature a production capacity of 3,000 vehicles per year.

According to the timeline given by SAIC Motor, the Shanghai-based auto giant struck a deal with Ordos municipal government on Jul. 20, 2021 for the investment in projects about new energy vehicle (NEV)-related industrial chain. Then in mid-Oct. last year, SAIC HONGYAN broke ground on the hydrogen-powered heavy-duty truck manufacturing factory in Ordos.

SAIC HONGYAN will better meet the market demands for new energy heavy-duty trucks by virtue of the joint efforts of its plants in Ordos and Chongqing.

A Shanghai-led city cluster was appointed one of the first batches of FCV demonstration cities in China. Notably, Ordos is included in the cluster.

Source:

https://autonews.gasgoo.com/new_energy/70019559.html?utm_source=edma&utm_medium=email& utm_content=endingyue&utm_campaign=service&systemPlat=EDM_EN&userId=leegs@angva.org &From=2022-01-17

1.9 Thailand

PTT sets up JV to develop electric vehicles and battery production in Thailand

17th January 2022.

PTT Public Company Limited (PTT), the state oil and gas company, and Global Power Synergy (GPSC), its power generation subsidiary, have formed a joint venture (JV) to support the development of electric vehicles (EV) and battery production in Thailand. The JV company named Nuovo Plus will undertake the feasibility of potential investment in battery production and sales.

The JV will also support the construction of an EV battery plant in Rayong and the deployment of charging infrastructure and digital platform in Thailand. The USD1-2 billion plant is expected to commence production of EVs by 2024 or 2025 with an annual capacity of 50,000. Currently, the plant produces G-Cell lithium-ion batteries for electric tuk-tuks, buses and motorcycles, with current annual capacity of 141 MWh.

In November 2021, PTT and China-based Hozon Auto, an EV manufacturing firm, signed an agreement to investigate the possibility of using the facility to manufacture and distribute its vehicles.

<u>Source</u>: <u>https://southeastasiainfra.com/ptt-sets-up-jv-to-develop-electric-vehicles-and-battery-production-in-thailand/</u></u>

1.10 China

China's car parc amounts to 302 million units by end of 2021

12th January 2022. By Monika from Gasgoo.



Shanghai (Gasgoo)- China's motor vehicle parc amounted to roughly 395 million units by the end of Dec. 2021, of which 302 million units were automobiles, according to China's Ministry of Public Security (MPS).

There were 36.74 million motor vehicles newly registered last year, representing 10.38% and 14.31% increase compared to 2020 and 2019 respectively.

China's registrations of new automobiles in 2021 rose 8.16% year on year to 26.22 million units, including 4.04 million freight vehicles (-2.88% YoY).

By the end of 2021, there were 79 cities in China whose auto parc all surpassed 1 million units, 9 more than that of the year-ago period. A total of 20 cities had over 3 million automobiles running on roads. Notably, Beijing, Chengdu and Chongqing saw their car parc surpass 5 million units. The respective car population of Suzhou, Shanghai, Zhengzhou, and Xi'an all exceeded 4 million units.

China's new energy vehicle (NEV) parc amounted to 7.84 million units by the end of 2021, 81.63% of which were full-electric vehicles. As of Dec. 2021, NEVs accounted for 2.6% of the country's total car parc. The full-year NEV registrations in 2021 stood at 2.95 million units, rising 151.61% from the previous year and rocketing from 650,000 units registered in 2017. *Source:*

https://autonews.gasgoo.com/china_news/70019540.html?utm_source=edma&utm_medium=email& utm_content=endingyue&utm_campaign=service&systemPlat=EDM_EN&userId=leegs@angva.org &From=2022-01-12