



ANGVA2U Info 17/2021. 3rd November 2021 (for ANGVA members only)

ANGVA2U Info aims to share information, data, and news related to low and net zero carbon fuels with ANGVA members. However, these information, data, and news are collected and shared in good faith, without any guarantee of accuracies. Members are advised to use these information and data prudently and at their own risks.

+++++

1.0 Selected News / Articles

1.1 India

CIL has begun process of retrofitting Liquefied Natural Gas kits in dumpers: Government

2nd November 2021. By PTI



The statement assumes significance in the wake of Prime Minister Narendra Modi on Monday stating that India will reach its net zero carbon emission target by 2070, as he laid out the country's climate action plan.

CIL has over 2,500 dumpers operating in opencast coal mines and the fleet consumes about 65 to 75 per cent of the total diesel used by CIL.

The coal ministry on Tuesday said that state-owned CIL has recently begun the process of retrofitting liquefied natural gas kits in its dumpers – big trucks engaged in transportation of coal in mines, a move that will further reduce the company's carbon footprint. The statement assumes significance in the wake of Prime Minister Narendra Modi on Monday stating that India will reach its net zero carbon emission target by 2070, as he laid out the country's climate action plan.

“In order to further reduce carbon footprint, Coal India Ltd (CIL), Ministry of Coal has recently initiated the process of retrofitting Liquefied Natural Gas (LNG) kits in its dumpers,” according to an official statement. CIL, the world's largest coal miner, uses over 4 lakh kilolitres of diesel per annum with an expense of over Rs 3,500 crore.

The company in association with GAIL (India) Ltd and BEML Ltd has taken up a pilot project for retrofitting LNG kits in its two 100 tonne dumpers operating at the subsidiary Mahanadi Coalfields Ltd (MCL) under an MoU with GAIL and BEML.

Once the LNG kit is successfully retrofitted and tested, these dumpers will be able to run on dual fuel systems and their operations will be significantly cheaper and cleaner with the use of LNG. CIL has over 2,500 dumpers operating in opencast coal mines and the fleet consumes about 65 to 75 per cent of the total diesel used by CIL.

LNG is likely to replace diesel use by 30 to 40 per cent and reduce fuel cost by about 15 per cent paving the way for Rs 500 crore savings annually if all heavy earth moving machines including dumpers are retrofitted with LNG kits. The cost economics of the project will be evaluated after completion of the pilot project and technical study on performance of the dumpers. The pilot project is likely to be completed by the year's end.

Based on the outcome, CIL will decide about bulk use of LNG in its Heavy Earth Moving Machines (HEMMs), especially dumpers. CIL is planning to buy HEMMs with only LNG engines if the project becomes a success and this will help reduce its carbon footprint drastically and achieve sustainable goals. Globally, LNG hybrid operation in high capacity mining dump trucks has been implemented by the US, Canada, Mexico, Russia and Ghana.

Source: <https://www.financialexpress.com/industry/cil-has-begun-process-of-retrofitting-liquefied-natural-gas-kits-in-dumpers-government/2361843/>

1.2 Russia (for Vietnam market)

Kamaz and PVGazprom NGV signed agreement of cooperation for LNG vehicles

18th October 2021.

Kamaz PTC and PVGazprom NGV signed a cooperation agreement at the St. Petersburg International Gas Forum 2021.

October 12, 2021. Kamaz PTC and PVGazprom NGV signed a cooperation agreement at the St. Petersburg International Gas Forum 2021. In the presence of Sergey Tumanov, Managing Director of Gazprom EP International, the document was signed by Andrey Bogachev, General Director of PVGazprom NGV, and Rustam Shamsutdinov, Deputy General Director for Sales and Service of Kamaz PTC.

The parties in principle agreed upon a possibility to develop a comprehensive proposal for Vietnamese customers to convert vehicles to liquefied natural gas (LNG). According to the document, PVGazprom NGV provides refueling services and Kamaz PTC supplies vehicles and provides maintenance, informs customers about the advantages of using LNG as a gas engine fuel and best operating practices.

“We are still fully engaged in the development of the Vietnamese NGV market,” said Sergey Tumanov. “One of the key segments in this project for us is road transport. We are confident that working closely with Kamaz we will be able to give it a new impetus and help popularize LNG in Vietnam as a fuel for various types of vehicles.”

“Vietnam is one of our main foreign markets. Among our promising tasks is adding NGVs to our line in this country. We can do it faster and more efficiently together with PVGazprom NGV,” confirmed Rustam Shamsutdinov.

Source: <https://www.gnvmagazine.com/en/kamaz-and-pvgazprom-ngv-signed-agreement-of-cooperation-for-lng-vehicles/>

1.3 India

State to get 27 more CNG stns by year-end

28th October 2021. By Faryal Rumi/TNN/

TOI PATNA: The state is likely to get 27 more compressed natural gas (CNG) stations by the end of 2021. Of these, six will come up in Patna, three each in Gaya, Rohtas and Samastipur, two each in Begusarai, Bhojpur, Jehanabad and Vaishali, and one each in Aurangabad, Kaimur, Muzaffarpur and Saran.

At present, 12 CNG stations are operational in Patna, two in Begusarai and one each in Rohtas, Gaya and Nalanda.

Sanjay Kumar Agarwal, the secretary of the transport department, held a meeting with the officials of GAIL Limited, Indian Oil Corporation Limited, THINK Gas and IndianOil-Adani Gas Private Limited on Wednesday to review the status of the new CNG stations. He directed the companies concerned to open new CNG stations in major cities so that the gas is easily available. State transport commissioner Seema Tripathi, additional secretary Sunny Sinha, joint secretary Pankaj Kumar, deputy secretary Shailendranath, officer on special duty Aajiv Vatsraj and other officials also attended the meeting.

“Work on installation of CNG stations is going on in different districts by four companies. Saran, Vaishali, Samastipur, Jehanabad, Bhojpur, Kaimur, Aurangabad and Muzaffarpur will get their first CNG stations by December-end while additional stations will come up in Patna, Begusarai, Rohtas and Gaya,” Agarwal told this reporter, adding that more CNG stations were being planned in Bihar with a view to promoting the use of cleaner fuel.

Talking about a spike in the number of vehicles using CNG across the state, the transport secretary said, “More than 10,000 CNG-operated vehicles are running in Bihar because it is 40% cheaper than petrol and diesel. Hence, more CNG stations are being set up so that people do not have to form long queues.”

Source: <https://timesofindia.indiatimes.com/city/patna/state-to-get-27-more-cng-stns-by-year-end/articleshow/87315502.cms>

1.4 India

More private buses in Kochi convert to CNG to remain afloat

29th October 2021. By John L. Paul



The first CNG buses in Kochi during their flagging off ceremony at the Vyttila mobility last year. | Photo Credit: THULASI KAKKAT

Operators urge State Government to waive road tax and offer subsidy to retrofit CNG kits

The skyrocketing diesel price, which hovers at ₹104 now, has resulted in over 80 private buses in Kerala getting retrofitted with CNG kits, considering the substantial rate difference of ₹40 between the two fuels.

The pre-pandemic prices of the two fuels were ₹64 per litre and ₹53 per kg respectively. “With odds stacked against them in the form of a massive increase in operational cost, many of the 12,500 private bus operators are eager to invest in the retrofitting of CNG kits, which come at over ₹4 lakh a piece. The ₹40 price hike for diesel saw a commensurate increase of ₹10 for CNG during the past 18 months in the State. This is apart from the much lesser air and sound pollution and the marginally higher fuel efficiency of CNG-run buses,” said a senior Motor Vehicles Department (MVD) official.

The impact of diesel price crossing the ₹100-mark was so much that the around half-a-dozen outlets that carry out retrofitment have a waiting list of up to a month.

Demand for subsidy

Citing how the rise in operational cost had resulted in the number of city buses in Kochi alone falling to 350 from 600 during pre-COVID days, K.M. Navas, secretary, Kerala Bus Transport Association (KBTA), said diesel price had nearly doubled in a year. “In this situation, the Government must incentivise the retrofit of CNG kits in buses and permit such buses to operate for at least five more years than conventional buses that have to be scrapped after 15 years,” he added.

The State Government must waive road tax at least for a year and provide subsidy to retrofit CNG kits for the private bus sector to stay afloat, said M.B. Satyan, president, Kerala State Private Bus Operators Federation.

Six buses

Among the first in the State to retrofit a CNG kit in a bus was George Joseph, a city-based operator, whose sixth bus which was converted to CNG was rolled out on Wednesday. “Bus operators like me were compelled to shift to CNG, since approximately ₹2 lakh had to be spent for each bus to resume service after the pandemic situation for repair works, to replace batteries that ran out of charge and worn out tyres, for insurance, and GPS installation. The State Government that provides over ₹100 crore each month to the KSRTC should at least help us with interest-free loans for CNG conversion,” he said.

Operational cost

The demand for retrofitting CNG kits in buses is such that an average of one bus is rolled out with the new fuel option each day in Kerala after September, said Ajay Pillai, the Enakulam unit head of IOC-Adani Gas.

This is because bus operators are assured of saving 40% in operational cost vis-a-vis diesel, he added and attributed the higher transmission cost (distance that the gas has to travel through pipelines) for CNG costing relatively higher in Kochi than in metro cities like Mumbai.

Geo John Palatty who runs a CNG retrofitment centre in the city said all slots had been booked till November 25. “We carried out retrofitment of 40 buses pan Kerala, during the past year,” he said.

Source: <https://www.thehindu.com/news/cities/Kochi/more-private-buses-in-kochi-convert-to-cng-to-remain-afloat/article37242035.ece>

1.5 Pakistan

SINDH GOVT TO PROCURE 250 BIOGAS BUSES FOR KARACHI

2nd November 2021. Web Desk



KARACHI: Commissioner Karachi Muhammad Iqbal Memon on Tuesday chaired a meeting to review progress on construction of Karachi’s Red Line BRT project, ARY News reported.

According to details, the Karachi commissioner chaired a meeting with civic agencies regarding utilities relocation under the Karachi Red Line BRT project.

The Karachi commissioner told the meeting that 250 “state-of-the-art” bio-hybrid buses will run under Red Line BRT project to provide people with a zero-emission mass transit system.

In August this year, the Sindh government had awarded the contract for the civil work of the much-awaited Red Line Bus Rapid Transit (BRT) project to be constructed in Karachi.

The contract signing ceremony for the design and construction supervision of the RED Line BRT corridor was held in Karachi.

Talking to the media after the contract signing ceremony, Sindh Transport Minister Awais Qadir said that the Red Line BRT project would be constructed with the help of the Asian Development Bank (ADB) and the share of the Sindh govt in the construction of the transport project would be 70pc.

Red Line BRT

The Red Line will span 26 km from Safoora to Tower. It is expected to have an average daily ridership of 625,000 passengers.

The route of the 26-kilometer BRT Red Line project will connect Model Colony to Johar Complex en route Jinnah Avenue and Malir Cantt while the buses will run through University Road, Hassan Square and Numaish roundabout.

24 stations would be constructed on this line which will run from Malir Halt to Numaish via Model Colony, Safoora Goth, King Cottages, Met Office, NED University, Safari Park, Nipa, Urdu University, Masjid Baitul Mukarram, Civic Centre, Askari Park, Dawood University and Society Office.

It would be the first-ever transport project to be run without any subsidy by the government, whereas, a wide cycling track will also be built along with the bus route.

Source: <https://arynews.tv/sindh-govt-biogas-buses-karachi/>

1.6 Pakistan

Four killed, six hurt in CNG station blast

30th October 2021. By Imtiaz Ali.



The bomb disposal squad gathers evidence from the site of an explosion at a fuel station in North Nazimabad on Friday evening.— Shakil Adil / White Star

KARACHI: Four men were killed and six others including two women wounded in an explosion at a fuel station in North Nazimabad on Friday evening, police and rescue services said.

DIG-West Nasir Aftab told Dawn that the blast occurred at a petrol pump /CNG station near Abdullah College.

Sharing initial reports, he said that the explosion took place in the electric room of the fuel station. He confirmed the death of four people and wounds to six others. Ruling out the possibility of any sabotage, he said it appeared to be an accident.

The bomb disposal squad was called in to ascertain the exact nature of the blast and its probable causes.

An Edhi Foundation spokesperson, whose ambulances had shifted the dead and injured to the Abbasi Shaheed Hospital, said one of the dead was identified as Sultan Imran, 50, while the identity of remaining three could not be made till late in the night.

Nazimabad SHO Ayazudin said that apparently it was a cylinder blast at Byco Pump in North Nazimabad's Block-A. He said that two women — Alia Humayun and Humera Waqar — were among the six persons who suffered injuries as a result of the explosion. The remaining injured are Abdul Waheed, 30, Sohail Ishaq, 35, Abid Mohammed and Waqar Siddiq, 24.

The police were investigating the incident, said the area SHO.

Heavy contingent of police and paramilitary Rangers reached the scene and cordoned off the area.

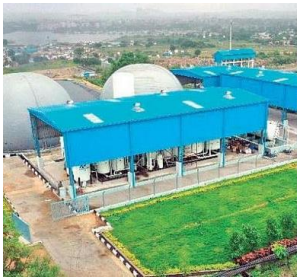
Source: <https://www.dawn.com/news/1654808>

1.7 India

First-of-a-kind biogas plant begins ops at Jawaharnagar dumpyard

27th October 2021. By Express News Service.

Through the CBG, the total potential of waste to cause environmental degradation gets reduced substantially, while reducing the demand for land for waste disposal and carriage cost.



Compressed Biogas Plant (CBG) established at Jawaharnagar dumping yard

HYDERABAD: The Compressed Biogas Plant (CBG) established at Jawaharnagar dumping yard commenced its operations. It is the first project in the country where landfill gas is being purified and converted into automotive fuel. CBG, is produced by anaerobic decomposition of municipal waste. The plant is a wholly owned subsidiary of Ramky Enviro Engineers Limited (REEL).

The byproduct will be supplied to Bhagyanagar Gas Limited (BGL) and then distributed through its retail outlets all over Hyderabad. The landfill gas generated within the capped landfill is extracted through strategically placed gas wells. These gas wells are connected through a piping network to a flaring station. Landfill gas has the potential for conversion into automotive gas. This alternative fuel can replace diesel. Through the CBG, the total potential of waste to cause environmental degradation gets reduced substantially, while reducing the demand for land for waste disposal and carriage cost.

Byproduct can replace diesel

This plant converts waste gas into compressed biogas (renewable natural gas). The byproduct will be supplied to Bhagyanagar Gas Ltd and then distributed through its retail outlets all over Hyderabad. Landfill gas has the potential for conversion into automotive gas and can replace diesel.

Source: <https://www.newindianexpress.com/states/telegana/2021/oct/27/first-of-a-kind-biogas-plant-begins-ops-at-jawaharnagar-dumpyard-2376198.html>

1.8 United States of America

Idaho dairy and Shell to open natural gas facility

26th October 2021. By Autum Robertson - BoiseDev Reporter



Photo courtesy: Autum Robertson

A natural gas facility could come to Wendell.

Shell Oil Products US will soon start construction of dairy manure to a renewable natural gas facility. It would be co-located at the Bettencourt Dairies, a family-owned commercial dairy headquartered in Wendell.

“We are excited to see this investment being made at Bettencourt Dairies,” Idaho Dairywomen’s Association CEO Rick Naerebout said. “It demonstrates the commitment of Idaho’s dairy industry in meeting sustainability expectations and being part of a solution to reducing greenhouse gas emissions.”

The news release said that when the RNG facility opens it’s expected to produce around 400,00 MMBtu (a unit used to measure energy value or heat content), a year of negative carbon intensity RNG with cow manure from the dairy. RNG can be used in natural gas vehicles.

Shell Downstream Bovarius is part of the US anaerobic digestion projects that are low carbon intensity for heavy on-road transport

“Shell’s Bovarius project in Wendell is part of our growing portfolio of RNG production and distribution assets supporting low-carbon intensity renewable compressed natural gas as fuel for heavy-duty, on-road transport,” Shell general manager Karel Kapoun said. “It’s a pleasure to do business in Idaho, where the dairy industry has demonstrated an eagerness to play a role in supporting decarbonization of on-road transport.”

In the news release, the Idaho Dairywomen’s Association said it believes this Shell would be one of many ‘sizable investments’ the dairy industry would see in the months to come.

“The Bettencourt’s are one great example of how our farmers in Idaho and in Utah can help the dairy industry achieve its commitment to carbon neutrality by 2050,” vice president of Sustainability for Dairy West Marissa Watson said. “This project demonstrates how technology can support farmers who are working to be good stewards of our air, land, and water.”

[Source: https://boisedev.com/news/2021/10/26/shell-natural-gas-facility/](https://boisedev.com/news/2021/10/26/shell-natural-gas-facility/)

1.9 Norway

Gasum completes first truck-to-ship bioLNG bunker in Norway

29th October 2021. Bioenergy International. Storage & Logistics



Gasum Oy has completed a truck-to-ship bunker of liquefied biomethane (LBG or bioLNG) for the first time to an offshore supply vessel in Norway. The fuel was delivered to Lundin Energy Norway’s Island Crusader (photo courtesy Gasum)

Finland-headed gas and energy company Gasum Oy has completed the bunkering of liquefied biomethane (LBG

or bioLNG) for the first time to an offshore supply vessel in Norway. The fuel was delivered to Lundin Energy Norway's Island Crusader vessel.

Lundin Energy Norway is a leading oil and gas company that aims to reach carbon neutrality across its operations by 2023. Battery hybridization of all supply and stand-by vessels on fixed contracts is part of its decarbonization strategy.

The truck-to-ship bunkering was performed to Lundin Energy Norway's supply vessel Island Crusader at the Risavika harbour, close to Stavanger. The Island Crusader is a battery hybrid that runs on liquefied gas.

According to Gasum, LBG aka bioLNG is currently the cleanest maritime fuel available. It can reduce fuel emissions during its lifecycle by up to 90 percent.

BioLNG is also interchangeable and blendable with liquefied natural gas (LNG) that is becoming used more frequently as a fuel in maritime operations. Using LNG reduces greenhouse gas (GHG) emissions by up to 21 percent compared to conventional fossil marine fuels.

We are very happy to support Lundin Energy Norway on its journey towards carbon-neutral operations. Biogas is a way to significantly reduce the maritime sector's emissions and it is available already today which makes it a viable option for companies, said Gunnar Helmen, Gasum.

The Norwegian oil and gas business is facing stricter emission targets going forward. BioLNG as offshore vessel fuel is an efficient solution to meet these targets. One reason is that a large number of these vessels are already running on LNG.

The biogas is produced from organic waste and contributes to the circular economy. Gasum owns and operates a number of biogas plants throughout the Nordics, and is aiming for increased biogas production. It also has biogas upgrading to biomethane, and biomethane liquefaction plants.

Gasum's goal is to reach cumulative carbon emission reductions of million tonnes by increasing its biogas production. By 2025 the energy company intends to make 4 TWh of biogas available on the market from the company's own production and that of its certified European partners.

Together with supporting politics we can increase the Norwegian biogas production significantly and contribute in making waste to energy pushing for the green shift, and we can do it today, Gunnar Helmen concluded.

Source: <https://bioenergyinternational.com/storage-logistics/gasum-completes-first-truck-to-ship-biolng-bunker-in-norway>

End