

ANGVA2U Info 02/2020 4th February 2020. (for ANGVA members only)

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1.0 Selected News / Articles

1.1 Kazakhstan

Almaty Welcomes 60 Articulated Golden Dragon CNG Buses

www.busworld.org 21st January 2020



**ASTANA
MOTORS**



Chinese bus manufacturer Golden Dragon buses has delivered 60 new 18-meter articulated CNG buses to Almaty, Kazakhstan. The buses are produced at the Astana Motors automobile assembly plant in Kazakhstan. The order was given to Golden Dragon in July 2019 by the Almaty state-owned bus company Almatyelectrotrans.

Golden Dragon has established comprehensive cooperation ties with Astana Motors in Kazakhstan. All the 60 BRT buses are expected to be running in Almaty, in January 2020, operated by the Almaty state-owned bus company Almatyelectrotrans. The buses are equipped with wheelchair facilities, baby carriages, standing area backrest, pillars, armrest rings, necessary security systems, video surveillance, information, communication with dispatchers, as well as air conditioning. These articulated low-floor buses can accommodate up to 150 passengers, of which 36 seats. All buses meet the requirements of the Euro 5 standard.

For Golden Dragon Kazakhstan is one of the key markets because of the strategic geographic location and as connection for China with Europe. Kazakhstan is part of the ancient Silk Road which was built over 2,000 years ago. Today this artery is being revitalized, further deepening the economic and trade ties and promoting two-way investments between China and countries in the region.

Many years ago, Chinese bus makers delivered city buses and intercity buses to Kazakhstan. Golden Dragon has been growing steadily since its entry and has established a solid presence in the country. For this order Golden Dragon developed several sample bus models for test purposes. Engineers from Astana Motors were invited to participate in the production of Golden Dragon buses from welding to painting, giving opportunities for the bus operator to implement a more localized assembly process. After being assembled, these Golden Dragon buses will be fully tested in a number of stringent environments, including alpine areas and continuous uphill roads. As part of the mobile service, Astana Motors technical specialists will provide after-hours service in the territory of the bus fleets.

Today more than 6,000 buses with a service life of more than 12 years today run along the city routes of Kazakhstan. There is an acute need for updating the bus fleets. To solve it, a program of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan and DBK-Leasing JSC was launched and is being implemented.

Source: <https://www.busworld.org/articles/detail/4998/almaty-welcomes-60-articulated-golden-dragon-cng-buses>

1.2 Canada

Natural gas, not electric, considered for city's bus fleet

By Tyler Kula. www.sarniathisweek.com 29th January 2020



It's too early and too expensive, city staff say, for Sarnia to switch to electric buses. But compressed natural gas could be another option.

Two conventional and one care-a-van bus in the city's fleet of 29 – 22 of which are conventional buses – are up for replacement in 2020 and Sarnia city council had asked transit to look into electric power for the replacements, in a bid to reduce emissions.

While the industry overall is moving in the direction of electric, transit superintendent Andrew Savor said, it's currently too expensive for Sarnia to consider the change. The buses themselves are priced at about \$1.4 million per electric vehicle, compared to \$550,000 per diesel bus, making their overall cost more expensive, even with fuel savings factored in, Savor said, in a recent report to council.

On top of that, required upgrades to electrical infrastructure, needed extra staffing with certification to maintain electric vehicles, the vehicles' significantly shorter range – 200 versus 470 kilometres – and the impact of cold weather on performance means a switch isn't financially viable now, he said.

Other municipalities have had significant maintenance issues with hybrid buses, so going to hybrid vehicles isn't recommended, he said.

Council, at its Jan. 20 meeting, agreed with the report, but asked transit to take a closer look at compressed natural gas as an alternative. Buses using the fuel are priced at \$570,000 and the emissions reduction is estimated at 300 grams of carbon dioxide per kilometre. The city report has diesel at 2,680 grams per kilometre, and natural gas at 2,364. Electric would be 1,078 grams per kilometre, factoring in emissions from electricity production.

Bus emissions likely constitute about one-third of the greenhouse gas emissions from Sarnia, Savor said, basing the estimate on a City of Guelph analysis of that municipality's emissions.

Sarnia city council last year declared a climate emergency and the city has received grant money to plan for climate change adaptation.

Council is correct that the industry is moving towards electric vehicles, but it's a burgeoning field at this point, he said. "We're still very much on the forefront."

A report on the natural gas option – Savor is checking into the fuel type's prevalence in other cities' bus fleets, if there have been maintenance concerns, and other considerations – is expected back likely in March, he said.

Plans are to continue replacing a couple of buses every few years, to keep the fleet up to date, Savor said.

Sarnia is still waiting on confirmation of the spending plan it submitted to make use of a \$27.7-million shared-government transit grant, he said.

Source: <https://www.sarniathisweek.com/news/local-news/natural-gas-not-electric-considered-for-citys-bus-fleet>

1.3 Pakistan

Off & on closure of CNG stations adds to people's sufferings

By N. H. Zuberi. www.brecorder.com 2nd February 2020



The closure of CNG stations for a longer duration due to non supply of gas by Sui Southern Gas Company (SSGC) has forcing user of CNG vehicle owners to go back to petrol and diesel.

Due to prolonged closure of gas supply to CNG stations, people are facing a great deal of problems operate their vehicles concerted long ago on CNG

from petrol or diesel. Majority of vehicles running on gas are no more able to operate on petrol or diesel due non use of oil for operating vehicles since long. Carburetors of vehicles running on gas only since lone become defective and they can not be switch on petrol of diesel at a go. The Carburetors either need to be replaced with new one or repaired. The Carburetors used on gas since long can not be repatriated and only alternative is that to replace them, claimed the motor mechanics.

More than 90 percent of all public transports including minibuses, buses, taxi and rickshaws operating in the city have been converted on CNG. It recalled that after introduction of CNG in vehicles and frequent increase in diesel and petrol prices conversion of all types of vehicles including cars, buses, rickshaws etc on CNG started on massive scale and gaining momentum with the passage of time to save fuel expenses.

Now a number of vehicles owners had parked their vehicles in parking areas owing to non-availability of gas and unaffordable price of conversing from CNG to petrol or diesel. Only those vehicles are on roads which are on petrol, diesel or on both CNH and petrol diesel these days.

The closure of CNG stations is not only affecting specific people, who travel by buses but is also striking the bread and butter of those people who earn their livelihood through CNG such as taxi drivers, auto drivers, loaders and many others. Reports have been received that many pick-and-drop service providers serving office going people in general and ladies in particular have expressed their inability to ply vehicles on the days CNG station remain closed. General public faces many problems due to shortage of buses on roads while this situation could create many more hurdles in future.

The current week also saw a huge rush of people at bus stops waiting for busses and mini busses as buses were taking too long to reach their designated stops because of being a few in numbers. Due to non-availability of public transport, peak factors on ride-hailing services (two, three and four wheelers) have also severely hit cash-strapped consumers.

CNG rickshaw owners have placed a 1.5 liter bottle of petrol to show customers that they are using petrol, which justifies high transportation charges.

Non availability of busses and mini busses proved to be a great burden on the pockets of consumers as rickshaw and taxi drivers are demanding exorbitant fares while peak factor on ride-hailing services has remained a constant irritant owing to lack of public transport.

Source: <https://www.brecorder.com/2020/02/02/567206/off-on-closure-of-cng-stations-adds-to-peoples-sufferings/>

1.4 Myanmar

Loan OK'd for Yangon waste-to-energy plant

by Htoo Thant. www.mmtimes.com 03rd February 2020



Workers collect garbage in downtown Yangon. Ko Ko Htay/The Myanmar Times

Parliament has approved a €50 million (K80.6 billion / US\$55.05 million) loan from Poland to finance Yangon's waste-to-energy biofuel plant project. The construction of the plant will start in May and will be completed in 2022. Once completed, the facility will be able to process

1,000 tonnes of the 2,500 tonnes of waste produced daily in Yangon.

The plant will be able to produce 30 tonnes of [compressed natural gas](#) daily, 40 tonnes of liquefied carbon dioxide, 180 tonnes of derivative waste fuel, and 250 tonnes of compost.

“The yearly income from these products will be at least K1.75 billion, or €50,000, “said U Maung Maung Win, deputy minister of Planning, Finance and Industry. “The loan will be repaid with the income generated by the project.”

The loan is repayable over 62 years at 0.1 pc interest a year.

The facility will be located at Htein Pin landfill in Hlaing Tharyar township, which is the main dump of Yangon.

The city’s seven million people in 33 townships dispose of 2,500 tonnes of waste a day, including 150 tonnes of industrial waste, and 2.4 tonnes of medical waste. About 1,500 tonnes of waste are sent daily to Htein Pin landfill.

There are other negotiations for the processing of garbage in Yangon, including one from a German company under the build-operate-transfer system. – Translated.

Source: <https://www.mmtimes.com/news/loan-okd-yangon-waste-energy-plant.html>

1.5 Germany

Shell plans expansion of German Bio-LNG station network

www.lngworldnews.com 17th January 2020



Illustration purposes only (Image courtesy of Shell)

The Hague-based LNG giant Shell is planning to push for further decarbonization of heavy-duty transport in Germany by expanding its LNG station network to 35-40 facilities.

Shell said that the initiative is providing the transport industry the opportunity to cut its CO2 footprint. In the first step, the CO2 emissions could be reduced by up to 1 million tons per year by the mid-2020s.

The company noted it plans to use Bio-LNG in order to support the decarbonization of its German LNG-supply chain. Shell is also looking to convert its fleet to run on the chilled fuel.

Following regulatory approvals, Shell aims to open stations in Recklinghausen, Hermsdorf, Kirchheim / Teck, Weinsberg as well as the Cologne area in the coming months.

Possible locations for the planned gas liquefaction plant are currently being examined in order to soon begin with the necessary evaluations, approval applications, and appropriate public participation, Shell said.

Source: https://www.lngworldnews.com/shell-plans-expansion-of-german-bio-lng-station-network/?utm_source=lngworldnews&utm_medium=email&utm_campaign=newsletter_2020-01-20

1.6 Turkey

Shell and Turcas Petrol open Turkey’s first LNG station

www.lngworldnews.com 14th January 2020



Image courtesy of Turcas Petrol

The Hague-based LNG giant Shell in cooperation with Turcas Petrol opened the first liquefied natural gas filling station in Turkey.

The facility opened in Sapanca on the Istanbul-Ankara highway that facilitates the highest volumes of international transport traffic.

In a brief statement through its social media channels, Turcas Petrol said the opening of the facility marks the start of a new era in Turkey's road transport offering a new alternative fuel for the segment.

With the facility, Turkey becomes the fourth European country where Shell has established an LNG fueling station.

Establishing the facility was the company response to the growing demand for alternative energy sources in Turkey.

Source: https://www.lngworldnews.com/shell-and-turcas-petrol-open-turkeys-first-lng-station/?utm_source=lngworldnews&utm_medium=email&utm_campaign=newsletter_2020-01-16

1.7 Cambodia

LNG imported from China to Cambodia

Chea Vannak. Khmer Times. 16th January 2020



A container ship carrying five LNG vessels from the northern port of China has arrived at the port of Sihanoukville. Chinese Embassy

Local business Cambodian Natural Gas Co Ltd and Chinese firm CNOOC Gas Power Group Co Ltd teamed up in importing liquefied natural gas (LNG) to distribute within Cambodia's market.

The company's officers said the cooperation is to import the LNG supply demand in the local market, as the company focuses on hotels and restaurants in the first-step plan.

Pheng Sros Choronei, administration officer at Cambodia Natural Gas, said yesterday that the LNG containers were shipped from China and arrived at Cambodia's Sihanoukville port on Tuesday.

"The demand of LNG consumption in Cambodia will increase as we see the ongoing demand of using the LNG in other countries going high," Choronei said.

The company plans to expand to 25 provincial capitals. Currently it focuses on Phnom Penh and Preah Sihanouk provinces.

According to the Chinese embassy in Cambodia, CNOOC Gas & Power Group Co Ltd teamed up with Cambodia Natural Gas Group to achieve China's export of natural gas to Cambodia for the first time. The embassy wrote on its Facebook page dated on Tuesday stating that the close relationship of the two countries opened up new investment between them.

"Under the leadership of the leaders of the two countries, the China-Cambodia joint construction of the 'Belt and Road' has continued to go deeper and further," the embassy said.

"CNOOC seized the new opportunity of 'going-out-of-country' and achieved the strategic plan in Southeast Asia and Cambodia Natural Gas, which relied on CNOOC's professional capabilities to take the steps of storage, transportation and sales. Both parties worked together to make the first use of LNG in Cambodia and supplied some of the Cambodian energy market and it will open a new chapter in the application of clean energy in Cambodia," the embassy wrote.

CNOOC Gas & Power Group Co Ltd is an enterprise in China with its main office in Beijing. It operates in the Natural Gas Distribution industry.

Source: <https://www.khmertimeskh.com/50680059/lng-imported-from-china-to-cambodia>

1.8 USA

OCTA debuts America's largest hydrogen bus fuelling station

by Sam Mehmet (Intelligent Transport). 3rd February 2020



Credit: Orange County Transportation Authority (OCTA)

OCTA has also announced the roll out of 10 new hydrogen fuel cell electric buses, as well as 10 plug-in battery electric buses which are expected to be in operation in 2021.

As part of a \$22.9 million investment, the [Orange County Transportation Authority \(OCTA\)](#) has joined with local, state and federal officials to mark the debut of the largest transit-

operated hydrogen fuelling station in the U.S. and 10 new hydrogen fuel cell [electric buses](#).

“We are very happy to be leading the way toward a cleaner and greener future that keeps the residents of Orange County moving, while keeping the air they breathe healthy with zero emissions,” said OCTA Chairman, Steve Jones.

The new hydrogen fuelling station was unveiled at OCTA's Santa Ana Bus Base. OCTA officials were joined at the event by representatives from the partners in the project, including the California Air Resources Board (CARB), South Coast Air Quality Management District and Center for Transportation and the Environment (CTE).

“We are proud to be working with all of our partners to set a strong example as a large urban transit operator making a positive impact on the environment,” said OCTA CEO, Darrell E. Johnson. “We will continue to explore the use of zero-emission technology to ensure we deliver a balanced and sustainable transportation system for Orange County's future.”

“California's transit agencies are leading the revolution to zero-emission transportation by taking action to replace their fossil-fuel powered buses with the very cleanest models available,” said CARB Chair, Mary D. Nichols. “The Orange County Transportation Authority is among the state's and the nation's leaders in this crucial effort. This project will accelerate the commercialisation of hydrogen fuel cell powered buses. It also showcases today's hydrogen fuelling facility to keep those zero-emission buses powered up and clearing the air.”

OCTA's project is said to align with California's Innovative Clean Transit Rule, a first-of-its kind regulation in the U.S. that sets a goal for public transit agencies to gradually transition to 100 per cent zero-emission bus fleets by 2040.

Source: <https://www.intelligenttransport.com/transport-news/95432/octa-debuts-americas-largest-hydrogen-bus-fuelling-station/>

2.0 ANGVA related / participated events

- i. The 6th LNG Supply, Storage & Transportation Philippines Forum 2020. Marquis Event Place, Bonaficio Global City, Manila, Philippines. 10 – 11 March 2020. This event is organized by All Events Group (AEG), Singapore and supported by ANGVA. More information on this event at: www.lng-world.com

Other events will be published as and when they are confirmed.

3.0 End

Any comments and suggestions on the topics and information covered and to be covered in future are most welcome. Please send your comments and suggestions to Lee Giok Seng at email: leegs@angva.org