

ASIA PACIFIC NATURAL GAS VEHCLES ASSOCIATION To lead and promote Asia Pacific NGV Industry towards sustainable growth

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1.0 Selected News / Articles

1.1 Spain

HAM Group opens Albacete LNG Station 11th May 2020. By Adnan Bajic

Spanish LNG services provider HAM Group has opened an LNG and CNG service station in Albacete.



Image courtesy of HAM Group

The company notes the station is located at a strategic point in the communication between the center and the east of the Iberian Peninsula.

It is located a few minutes from the Alicante motorway, also known as A-31, which connects Madrid with Albacete and

Alicante, one of the most crowded freeways.

The station has been opened in cooperation with the logistics company Transportes Ojechar. The company is looking to switch its fleet to using liquefied natural gas as fuel.

HAM Group noted the facility will provide liquefied natural gas (LNG) and compressed natural gas (CNG).

With the opening of this new service station in Castilla-La Mancha, Grupo HAM currently has 47 gas stations that allow refueling CNG and / or LNG, distributed in different parts of Spain and Europe.

Source: https://www.offshore-energy.biz/ham-group-opens-albacete-lngstation/?utm_source=lngworldnews&utm_medium=email&utm_campaign=newsletter_2020-05-12j

1.2 Czech Republic

Innogy Energo to test BioCNG at 63 sites 11th May 2020. Author: PetrolPlaza Correspondent Pablo Plaza

Drivers of CNG cars will have the opportunity to refuel BioCNG for the first time in the country.



© Innogy Energo

Innogy Energo s.r.o., currently the largest public network of CNG stations in the Czech Republic, has announced its plan to test 100% renewable gas in its 63 CNG filling stations located throughout the country by the end of June.

Innogy obtains the bioCNG from the Rapotín Energy

Recycling Center (ECR), which belongs to the Energy financial group holding.

"Biomethane is a full-fledged alternative to electromobility, but at significantly lower input costs. It is as renewable as electricity produced from the sun or wind and does not require any additional engine modifications. Its great advantage is the seamless injection into the gas infrastructure as well as into CNG vehicles," said Zdeněk Kaplan, CEO of Innogy Energo.

"Biomethane is one of the fuels of the future. Compared to other conventional biofuels, it has the lowest greenhouse gas emissions and the lowest life cycle energy consumption, especially if it is produced from biodegradable waste," Kaplan added.

ECR Rapotín produces biomethane in the Šumpersk region. Its transformation process is certificated by the International Biomass and Biofuels Certification System (ISCC EU). Once injected into the distribution system, biomethane can be consumed anywhere and both for energy equipment and transport.

"The possibility of storing biomethane in the distribution system and consumption at any connected point is its great advantage. This is also why it is perceived as part of solving many problems at once, whether it is the energy recovery of waste, reducing air emissions in transport or reducing carbon dioxide emissions in the energy mix of fuels," says Martin Vrtiška, sales director of the Energy financial group.

Source: <u>https://www.petrolplaza.com/news/24706</u>

1.3 China

China ponders subsidies, cheaper technology for its hydrogen roadmap

13th May 2020 Authors: <u>Sambit Mohanty</u> <u>Sebastian Lewis</u> <u>Fred Wang</u> Editor: <u>Manish Parashar</u>

HIGHLIGHTS

China initially focusing on the transportation sector

Eyes development of advanced carbon capture technology

Looking at proposals for subsidies on fuel cell vehicles

Singapore — From considering subsidies on fuel cell vehicles to finding ways to encourage consumption in new sectors, China is pushing ahead with plans to make hydrogen a key component in its energy mix as Asia's leading energy consumer looks to shed its dependence on fossil fuel imports as well as clean up its skies.

With the country focusing on adoption of hydrogen fuel cell vehicles in a small number of pilot cities, a policy which helped kick-start the widespread use of electric vehicles, analysts said Beijing needs to urgently push cost-effective technologies to effectively produce hydrogen from coal, which is available in plenty in the country.

"China is taking a fast-track route in pursuing hydrogen and fuel cell development. The country is currently focusing mainly on the use of hydrogen in transportation but it has eyes on other applications too, such as heating of buildings," Edgare Kerkwijk, board member of the Asia Pacific Hydrogen Association, told S&P Global Platts.

The views echoed comments from Roman Kramarchuk, Platts head of Scenarios, Policy and Technology Analytics, who recently said the transportation sector provides ones of the best opportunities in countries, such as South Korea, China and Japan.

Industry sources and analysts said development of reliable and durable carbon capture technology remains at the forefront of hydrogen production in China through coal gasification.

"In countries like China, Carbon Capture, Use and Storage (CCUS) technologies will need to be used if hydrogen from coal is to have a place in the era of energy transition while taking care of the climate change emergency," said Ravinder Malhotra, regional hydrogen expert and president of the Hydrogen Association of India.

However, CO2 emissions in hydrogen production from coal amounts to 19 mt of CO2 per every 1 mt of hydrogen produced, which is twice the amount of CO2 produced compared with hydrogen produced from natural gas.

"The current CCUS technologies may enable reduction of CO2 emissions to as low as 2 kg of carbon dioxide per kg of hydrogen produced while advanced technologies when developed and deployed may emit only 0.4 kg of CO2 per kg of hydrogen produced," Malhotra added.

CHINA LEADS WAY IN PRODUCTION

China is the world's largest hydrogen producer, with more than 20 million mt of the gas produced each year, accounting for about one-third of the world's production volumes. This means, by comparison, China's hydrogen supply is about three times that of the entire Europe, the latter at around 7 million mt/year.

Despite heavy reliance on LNG and thermal coal as mainstream supply fuels, China has started to place some emphasis toward cleaner and lower-emission forms of energy.

China is leading the world in coal gasification technology, being a prime builder and operator of this production pathway, said an Australia-based source, adding:

"Producing hydrogen with sub-bituminous coal is off-the-shelf technology today. China also has the syngas clean-up technologies needed for hydrogen production."

Production costs for hydrogen using mature coal gasification technology remains much lower than that via electrolysis, said analysts.

China is the largest coal producer in the world, with 3.75 billion mt of coal produced in 2019, mainly in the Shanxi, Shaanxi and Inner Mongolia regions. The country is also the largest coal importer, with inflows of about 220 million mt of coal every year.

Considering costs involved and an abundant supply, the coal gasification production pathway is one of the key mainstream hydrogen production method for China's energy future, said analysts.

CHALLENGES TO OVERCOME

Deciding who the offtakers of hydrogen are and how to transport the gas are crucial factors to consider too, added the Australia-based source.

However, he said carbon capture technologies in China have yet to achieve scale. "It's pertinent to deal with the carbon dioxide emitted from coal gasification. There are a couple of small scale carbon capture projects in progress in China but nothing at scale so far."

Like most other Asian countries, China's challenge is not only how to slash the production cost of lower CO2 projects and draw in investors, but also finding ways to diversify usage beyond oil refining, fertilizers and petrochemicals, said analysts.

On the policy side, China's position on fuel cell vehicle subsidy is gradually becoming clearer, with recent government draft policies and consultation documents giving insights to Beijing's thinking around how to develop the sector.

A Draft Development Plan for the New Energy Vehicle Industry 2021-2035 was realized at the end of last year. It places a focus on the development of hydrogen vehicle technology and the construction of hydrogen fuel infrastructure and storage.

Building on this, a recent consultation announcement said the government would focus on subsidies for fuel cell vehicles in select cities and regions, with the intention of establishing a hydrogen energy and fuel cell vehicle industry value chain. Together, these documents suggest that achieving breakthroughs in the development of core technologies and a wider adoption of hydrogen vehicles will be at the core of China's ambitions to develop its hydrogen sector.

Source: https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/051320-china-ponderssubsidies-cheaper-technology-for-its-hydrogen-roadmap

1.4 Indonesia

Indonesia to discuss how to continue biodiesel program amid falling fuel prices 6th May 2020. Reuters

Indonesia started unrolling an ambitious biodiesel programme in late 2018, with the aim of soaking up excess supplies of palm oil and curb expensive fuel imports, which was a big contributor to the country's persistent current account deficits



JAKARTA: Indonesia's ministry of economic affairs is set to discuss how the country will continue its ambitious <u>biodiesel</u> programme, a ministry official told Reuters on Wednesday.

The economic affairs ministry will meeting on Wednesday to decide the government's next moves to ensure the continuity of a mandate which requires biodiesel to have 30 per cent bio-

content (B30) made from palm.

"We want to discuss how to keep the continuation of B30 (programme)," MusdhalifahMachmud, Deputy Minister for Food and Agriculture told Reuters in a text message.

Indonesia started unrolling an ambitious biodiesel programme in late 2018, with the aim of soaking up excess supplies of palm <u>oil</u> and curb expensive fuel imports, which was a big contributor to the country's persistent current account deficits.

However, a historic crude oil rout this year has made palm oil - of which Indonesia is the biggest producer - less attractive for biodiesel feedstock.

Malaysia, the world's second biggest palm oil producer delayed a nationwide rollout of a B20 biodiesel mandate last month due to movement curbs imposed to contain the <u>coronavirus</u> outbreak.

State energy company PT <u>Pertamina</u>, which is developing refineries to process palm oil into fuel, asked parliament to cap prices for some crude palm oil (<u>CPO</u>) in February.

B30 is the highest palm-based bio-content in biofuels ever used. The government plans to launch the B40 programme between 2021 and 2022.

Indonesia is targeting biodiesel consumption of 14.2 million kilolitres (KL) in 2022, more than double the 6.26 million KL in 2019, but <u>Maritime</u> and <u>Investment</u> <u>Affairs</u> minister <u>LuhutPandjaitan</u> admits going beyond B50 will be difficult without higher CPO production.

Source: <u>https://energy.economictimes.indiatimes.com/news/oil-and-gas/indonesia-to-discuss-how-to-continue-biodiesel-program-amid-falling-fuel-prices/75572987</u>

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