

## ANGVA2U Info 15/2020 25th August 2020 (for ANGVA members only)

ANGVA2U Info aims to share information, data, and news related to NGV 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 France

## Total opens its largest CNG station in France

24<sup>th</sup> August 2020. Author: PetrolPlaza Correspondence Pablo Plaza

# 100% dedicated to CNG distribution, Total will operate Gennevilliers station on behalf of France's energy syndicate SIGEIF SEM.

Total opened its largest CNG station in France's port of Gennevilliers, Europe's second largest river port. 100% dedicated to the distribution of CNG, Total will operate the station under its own brand on behalf of the energy syndicate SIGEIF SEM, reports Gaz Mobilité.

Open to the public round-the-clock, 7 days a week, Gennevilliers CNG station is equipped with four filling tracks for heavy-duty vehicles.

The site is equipped with NGV1 and NGV2 pumps allowing up to four simultaneous fill-ups. CNG, CNG20, CNG50 and CNG100 – depending on the biogas mix rate – will be available at the station.

The facility has a credit card payment terminal and will also authorises payments via the Total and AS24 Eurotraffic cards.

Total station at Gennevilliers is connected to the GRTgaz network.

Source: https://www.petrolplaza.com/news/25404

## 1.2 India India looks to blend biogas with natural gas

11th August 2020. IANS. .



The Indian government is considering blending biogas with natural gas to boost the domestic availability of biofuels and reduce reliance on imports. According to a report by the <u>New Indian Express</u>, Oil Secretary Tarun Kapoor said the gas distribution sector is rapidly expanding and a portion must come from bio-sources.

During a World Biofuel Day webinar, Kapoor said:

"They cannot be completely (dependent) on liquefied natural gas or domestic gas, that scope is anyway limited."

The plan for biogas follows a move to blend ethanol extracted from sugarcane with petrol, and mixing diesel with biodiesel extracted from non-edible oil.

Kapoor said India is largely an agricultural economy and there are lots of agricultural residues available, with potential to produce biofuels. Discussing the three main biofuels - ethanol, biodiesel, and biogas - Kapoor said: "If we are able to exploit these three, we can reduce our dependence on import of crude to a large extent and import of gas also."

To implement these plans, Kapoor called for including appropriate technologies, involving skilled and professional workers, and financial institutions to help get the ball rolling. Kapoor sought support from state governments, according to the report, as agricultural residues and other wastes may come from municipal solid waste or other forms of wastes that must be collected, separated, managed, and supplied to various plants.

Source: <u>https://www.bioenergy-news.com/news/india-looks-to-blend-biogas-with-natural-gas/</u>

## 1.3 United Kingdom

**Biomethane connected to UK gas network for first time – National Grid** 

13<sup>th</sup> August 2020. Reporting by Nora Buli in Oslo; editing by Nina Chestney.

According (Reuters) - Britain's National Grid said on Thursday that biomethane has been connected to the transmission system for the first time, as part of efforts to decarbonise the gas network.

The renewable gas biomethane has been produced by Biocow Ltd's Murrow anaerobic digestion plant in Cambridgeshire from cattle manure and straw.

The pipeline will support flows of up to 15,000 cubic metres of biomethane per hour, enough for the annual gas consumption of 10 average households each hour.

"Alongside hydrogen, biomethane will play a critical role in the journey to Britain achieving net zero," said Ian Radley, head of gas systems operation at National Grid.

Britain has a goal of reaching net zero greenhouse gas emissions by 2050 which will require a huge increase in renewable energy and investment to increase the stability of its energy networks.

*Source:* <u>https://uk.reuters.com/article/uk-britain-biomethane/biomethane-connected-to-uk-gas-network-for-first-time-national-grid-idUKKCN259113</u>

## 1.4 Germany Germany playing catch-up in LNG-fueled long-haul market

6<sup>th</sup> August 2020. By Adnan Bajic

The distribution of liquefied natural gas (LNG) as fuel for long-distance haulage has only recently started gaining momentum in Germany.





The segment has been experiencing a boom across Europe for a while, German LNG Terminal, the joint venture aiming to build and operate an LNG terminal in Brunsbüttel, said in its statement

Compared to countries such as Spain, Italy, the UK, the

Netherlands and China too, there is still enormous potential and a lot of catching up to do. This has been highlighted in a forecast by the Federal Ministry of Transport and Digital Infrastructure (BMVI), showing that hauling capacity in Germany will grow by at least 39 per cent by 2030 compared to 2010.

"Vehicles fueled by LNG are perfectly suited to use in long-haul transport. Not only do LNGfueled engines produce much lower air pollutant emissions, they are also considerably quieter and therefore make it possible to carry out deliveries in residential areas outside of normal times of day, which could help to solve traffic density problems," explains **Friedrich Lesche**, business development alternative drives, Iveco Magirus.

LNG engines could also run on renewable, biogenic or synthetic, climate-neutral LNG, without any problem.

Furthermore, any air/fuel ratio (blend) of fossil, biogenic and/or synthetically produced LNG is possible without difficulty.

"However, to achieve this, in Germany, we need more investments in the creation and expansion of infrastructure for the use of LNG as an alternative fuel," Lesche adds.

Commenting on LNG as fuel, **Rolf Brouwer**, managing director of German LNG Terminal, noted that it makes a significant contribution to reducing air pollutant emissions in the mobility sector.

"We want to invest in an LNG infrastructure in Brunsbüttel so that we are able to efficiently and competitively meet the increasing demand with Germany's first import terminal for LNG," **Brouwer** said.

*Source:* <u>https://www.offshore-energy.biz/germany-playing-catch-up-in-lng-fueled-long-haul-</u> market/?utm\_source=lngworldnews&utm\_medium=email&utm\_campaign=newsletter\_2020-08-07

## **1.5 United States of America**

## **California's Rolling Blackouts Cast Further Doubt on Electric Vehicles' Future**

20<sup>th</sup> August 2020. Ben Lieberman



For all the hype, and all the subsidies, electric vehicle (EV) sales are barely a rounding error compared to internal combustion engine

vehicles. 2019 was the best year yet for EV sales in the U.S., but they still accounted for <u>less</u> than 400,000 of the 17 million new cars and light trucks purchased. This is not nearly good enough for those who see climate change as an existential threat and for which transportation contributes <u>nearly a third</u> of American greenhouse gas emissions. Proponents of the failed 2019 Green New Deal promised a <u>"goal to replace every combustion engine vehicle</u>" over a 10-year time span, and similar proposals will undoubtedly return regardless of the outcome of the upcoming elections. However, California's rolling blackouts underscore the difficulties that a massive scaling up of EVs would entail.

The problem is that EVs don't really reduce emissions of carbon dioxide or smog-forming compounds very much if <u>coal is still a significant part of the electricity mix</u>. That is why supporters of more EVs also support much more renewable electricity. And this is where the blackouts provide a teachable moment.

The wind doesn't always blow and solar power stops at sundown, which is why these intermittent renewables need to be backed up, either by other electricity sources that can quickly and economically fill the gap when needed, or batteries that have enough stored power to do so. But in California—where natural gas, coal, nuclear, and hydroelectric are all on the hit list—there isn't always enough non-renewable electricity to fill the void. And at present, <u>battery storage is minimal compared to the need</u>. The shortfall is especially bad right after sundown on extremely hot days, when solar cuts out but demand for air conditioning doesn't wane until later in the evening. Hence the rolling blackouts.

An agenda requiring order-of-magnitude increases in both EV sales and renewable generation would make things far worse for electric reliability as well as for affordability.

First, there is the increased demand if electricity is going to supplant all or most of the transportation energy currently provided by the 142 billion gallons of gasoline Americans used in 2019. By one estimate, an all-EV America would require another <u>13 percent more electricity</u>, which, if provided by wind turbines, would require an estimated 31,000 square miles.

Then there is the extreme cost of scaling up stationary battery storage to fully back up renewables (some estimates reach in the <u>trillions</u>), especially if done concurrently with an equally ambitious scaling up of EV batteries. Each alone would be a big challenge and a strain on some of the needed resources like <u>cobalt</u>, <u>lithium</u>, <u>and rare earths</u>. Together, both would seem impossible, especially if attempted over the span of less than two decades.

For these and other reasons, the California rolling blackouts are an early warning should we travel further down the path toward subsidizing or mandating more EVs along with more renewable electricity.

*Source:* <u>https://cei.org/blog/california%E2%80%99s-rolling-blackouts-cast-further-doubt-electric-vehicles%E2%80%99-future</u>

## 1.6 China

# **Guangzhou hydrogen energy sector expected to top 200B yuan in a decade** 13<sup>th</sup> August 2020. By Erin Kilgore

## The H2 industry in China's Guangdong province is expected to hit \$28.6 billion by 2030.



The capital of Guangdong province in China has announced that the Guangzhou hydrogen energy industry is predicted to break the 200 billion yuan (approximately \$28.6 billion) by 2030.

#### The city has been doubling down on its efforts to develop an H2 system with sophistication.

The goal of the Guangzhou hydrogen energy growth <u>will be to help fill the sustainable power</u> source gap currently faced in China. This, according to Guangzhou Municipal Development and Reform Commission deputy director Chen Jianrong when addressing the media.

The city plans to construct an H2 fuel industrial chain that will already have reached a production value higher than 60 billion yuan in the next five years. This industrial system will include everything from hydrogen fuel production to its production, storage, transportation and usage and, by 2030, it will have an estimated value of about 200 billion yuan, said the deputy director.

#### There are already more than 20 Guangzhou hydrogen energy projects in this Chinese city.

The city has already gained more than 20 H2 fuel projects. Investments in those projects have reached higher than 4 billion yuan in that city alone. The Guangdong capital will also be exploring additional uses for H2 as a fuel in different industries across the country. Among those that are already seen to have the greatest potential include public transportation vehicles, mechanical equipment, shipping and drones. Those are all under exploration for possible use in the near future.

The Chinese government has implemented a range of added support policies with H2 in mind. They have been designed to help push forward <u>hydrogen fuel cell research</u> in development. This has been a growing effort over several years, said Li Can from the Chinese Academy of Sciences.

The Guangzhou hydrogen energy projects are far from the only ones of that nature in the country. China has been investing heavily in this renewable fuel source to help reduce its dependence on fossil fuel and boost its self-reliance in the new forms of energy it chooses to replace those older options.

*Source:* <u>https://www.hydrogenfuelnews.com/guangzhou-hydrogen-energy-sector-expected-to-top-200b-yuan-in-a-decade/8540341/</u>

### 1.7 China

## Siemens Energy launches its first green hydrogen production project in China

20<sup>th</sup> August 2020. Bioenergy International

Siemens Gas and Power GmbH & Co. KG (Siemens Energy), part of Germany-headed global technology major Siemens AG and Beijing Green Hydrogen Technology Development Co., Ltd., a subsidiary of China Power International Development Ltd. (China Power), have signed an agreement on providing a hydrogen production system for a hydrogen fueling station to be located in Yanqing District, in the Chinese capital Beijing.



Siemens Gas and Power GmbH & Co. KG (Siemens Energy), part of Germanyheaded global technology major Siemens AG and Beijing Green Hydrogen Technology Development Co., Ltd., a subsidiary of China Power International Development Ltd. (China Power), have signed an agreement on providing a hydrogen production system for a hydrogen fueling station to be located in Yanqing District, in the Chinese capital Beijing.

The Yanqing District in Beijing is one of the three main competition areas for a major sporting event in 2022. The green hydrogen production solution provided by Siemens Energy will help guarantee the hydrogen supply for public transportation during and after the event.

In September 2019, Siemens signed a Memorandum of Understanding (MoU) on cooperation in green hydrogen development and comprehensive utilization with State Power Investment Corporation Ltd (SPIC), which is the ultimate controlling shareholder of China Power. The hydrogen production project is the result of a close partnership between the two companies. The two sides also plan to further expand their cooperation on green hydrogen projects.

The decarbonization of the energy systems is a challenge that every country must face. Siemens Energy is the company that can provide its customers with significant support in this process – no matter if they are states or companies. Promoting the application and development of renewable hydrogen is of great significance for China to build a modern and cleaner energy system. Together with our partner SPIC, we are making an important contribution to tackling climate change and reducing carbon emissions, said Christian Bruch, CEO of Siemens Energy.

#### Skid-mounted PEM system

The 1 MW green hydrogen production solution is the first of its kind to be built by Siemens Energy in China. The project is expected to be delivered in May 2021.

SPIC is committed to working together with Siemens Energy to continue our cooperation in the field of clean energy and to leverage the complementary advantages of both parties. Together we will contribute to the development of clean energy in order to cope with climate change together, said Qian Zhimin, Chairman of SPIC.

As the core equipment of the hydrogen integrated energy station, Siemens Energy's PEM (Proton Exchange Membrane) electrolyzer system Silyzer 200 can produce high-quality hydrogen at an industrial scale. In addition, the hydrogen production system responds quickly, the start-up time under pressure is less than one minute, and it can be directly coupled with renewable energy.

In order to meet customer needs of saving space and being flexible, Siemens Energy has adapted its hydrogen production system into a customized solution, which is also its first skid-mounted megawatt green hydrogen production system in China.

End

Source: <u>https://bioenergyinternational.com/technology-suppliers/siemens-energy-launches-its-first-green-hydrogen-production-project-in-china</u>