

ANGVA2U Info 19/2020 17th October 2020 (for ANGVA members only)

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1.0 Selected News / Articles

1.1 Europe

Reducing greenhouse gas emissions: Commission adopts EU Methane Strategy as part of European Green Deal

14th October 2020.

Brussels. Press Release: The European Commission presented today an <u>EU strategy to reduce</u> <u>methane emissions</u>. Methane is the second biggest contributor to climate change, after carbon dioxide. It is also a potent local air pollutant causing serious health problems. Tackling methane emissions is therefore essential to reaching our 2030 climate targets and the 2050 climate neutrality goal, as well as contributing to the Commission's zero-pollution ambition.

This strategy sets out measures to cut methane emissions in Europe and internationally. It presents legislative and non-legislative actions in the energy, agriculture and waste sectors, which account for around 95% of methane emissions associated with human activity worldwide. The Commission will work with the EU's international partners and with industry to achieve emission reductions along the supply chain.

Frans **Timmermans**, Executive Vice-President for the Green Deal, said, "To become the first climate-neutral continent, the European Union will have to cut all greenhouse gases. Methane is the second most powerful greenhouse gas and an important cause of air pollution. Our methane strategy ensures emissions cuts in all sectors, especially agriculture, energy, and waste. It also creates opportunities for rural areas to produce biogas from waste. The European Union's satellite technology will enable us to closely monitor emissions and help raise international standards."

Commissioner for Energy Kadri **Simson**, said: "We have adopted today our first strategy to tackle methane emissions since 1996. While the energy, agriculture and waste sectors all have a role to play, energy is where emissions can be cut the quickest with least costs. Europe will lead the way, but we cannot do this alone. We need to work with our international partners to address the methane emissions of the energy we import."

One of the priorities under the strategy is to **improve measurement and reporting** of methane emissions. The level of monitoring currently varies between sectors and Member States and across the international community. In addition to EU-level measures to step up measurement, verification and reporting standards, the Commission will support the establishment of an international methane emission observatory in partnership with the United Nations Environment Programme, the Climate and Clean Air Coalition and the International Energy Agency. The EU's Copernicus satellite programme will also improve surveillance and help to detect global super-emitters and identify major methane leaks.

To **reduce methane emissions in the energy sector**, an obligation to improve detection and repair of leaks in gas infrastructure will be proposed and legislation to prohibit routine flaring



and venting practices will be considered. The Commission will engage in a dialogue with its international partners and explore possible standards, targets or incentives for energy imports to the EU, and the tools for enforcing them.

The Commission will improve reporting of **emissions from agriculture** through better data collection, and promote opportunities to reduce emissions with support from the Common Agricultural Policy. The main focus will be on best practice sharing for innovative methane-reducing technologies, animal diets, and breeding management. Targeted research on technology, nature based solutions and dietary shift will also contribute. Non-recyclable organic human and agricultural waste and residue streams can be utilised to produce biogas, bio-materials and bio-chemicals. This can generate additional revenue streams in rural areas and avoid methane emissions at the same time. The collection of these waste products will therefore be further incentivised.

In the **waste sector**, the Commission will consider further action to improve the management of landfill gas, harnessing its potential for energy use while reducing emissions, and will review the relevant legislation on landfill in 2024. Minimising the disposal of biodegradable waste in landfills is crucial to avoid methane formation. The Commission will also consider proposing further research on waste to biomethane technologies.

The Commission will also review the Effort Sharing Regulation and will consider expanding the scope of the Industrial Emissions Directive to cover methane emitting sectors not yet included in its scope.

Background

On a molecular level, Methane is more powerful than carbon dioxide. It contributes to tropospheric ozone formation, and is a potent local air pollutant which causes serious health problems. At the end of its lifecycle, methane is transformed into carbon dioxide and water vapour, contributing further to climate change. Reducing methane emissions therefore contributes to both slowing down climate change and improving air quality.

The Impact Assessment for the EU's 2030 Climate Target Plan concluded that stepping up the level of ambition for reductions in greenhouse-gas emissions to at least 55% by 2030 would require an accelerated effort to tackle methane emissions. While the EU produces 5% of global methane emissions domestically, it will encourage international action as the largest global importer of energy and as a strong player in the agriculture and waste sectors.

Source: <u>https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1833</u>

1.2 Europe EBA welcomes biogas focus in EU Methane Strategy

15th October 2020.



The European Biogas Association (EBA) has welcomed the "holistic approach" of the Methane Strategy to accelerate the reduction of methane emissions using biogas and biomethane.

The new EU strategy acknowledges the high potential of biogas to reduce methane emissions in agriculture and boost rural development.



The EBA described the Methane Strategy as a "fundamental step" to ensure this reduction and achieve climate-neutrality by 2050. According to the EU Executive body, 53% of emissions caused by human activity come from agriculture, followed by waste (26%).

Agricultural emissions are avoided when methane emitting feedstock, such as manure from animal farming and biowaste, are treated in a biogas plant. In a biogas production facility, methane is captured and utilised instead of being naturally released into the atmosphere during manure storage.

The support for biogas production from agricultural waste, as outlined in the Methane Strategy, is a "positive step" to recognise the role of the sector as a booster of rural development, and is an "excellent example" of sector integration, according to the EBA.

As of 2023, EU Member States are obliged to implement the separate collection of bio-waste. One of the best available recycling options is anaerobic digestion for biogas production, which delivers better environmental outcomes than incineration or landfill.

According to the EBA, the cross-sectoral perspective adopted by the Methane Strategy enhances the potential of biogas to reduce methane emissions in non-energy sectors, and provides a key to scale-up biogas and biomethane.

Susanna Pfluger, secretary-general of the EBA, said: "The Methane Strategy shows that biogas and biomethane are a key part of the solution to reduce methane emissions in the agricultural and waste management sectors.

"Biogas and biomethane can turn the re-use of waste into an opportunity, being a source of rural development and shaping our circular economy."

Source: <u>https://www.bioenergy-news.com/news/eba-welcomes-biogas-focus-in-eu-methane-strategy</u>

1.3 France Honeywell announces 100th biomethane grid injection in France

14th October 2020.



Honeywell announced the installation of its 100th biomethane grid injection to France's primary gas distribution operator, GRDF.

Honeywell's grid injection stations act as a gatekeeper to the gas network. The stations measure flow and gas compositions

and check them for compliance, add an odour to the gas to help with leak detection, and collect and transmit operating data to GRDF for monitoring and recording.

In addition to GRDF in France, Honeywell has delivered biogas injection stations to major gas suppliers in the UK, Germany, Denmark, and Belgium. To date, the firm has implemented more than 210 stations in Europe.

Manufactured at Honeywell's facility in Lognes, France, the injection stations incorporate advanced capabilities such as injection and control systems, fiscal flow measurement, gas quality analysers, gas odourisation systems and data telemetry for data collection.



Srikumar Srinivasan, vice-president and general manager of process measurement and control for Honeywell Process Solutions, said: "Injecting biogas into the grid is a relatively new concept that holds transformational potential for the global energy industry.

"As the largest supplier of biogas injection stations in the world, Honeywell is positioned to advise and collaborate with other energy companies on similar projects.

"With 100 biogas injection stations delivered, the capacity for biomethane injection in the gas distribution network operated by GRDF is now comparable to the consumption of 500,000 new households heated with gas."

"Honeywell is determined to take part in the success of biomethane injection in France," said Xavier Passemard, biomethane director at GRDF. "Since 2011, with its robust product portfolio, Honeywell has become a trustable partner, from experiments and tests to industrial production."

Source: <u>https://www.bioenergy-news.com/news/honeywell-announces-100th-biomethane-grid-injection-in-france/</u>

1.4 United States of America Chevron, Brightmark form RNG JV

15th October 2020.

Chevron U.S.A. Inc. and Brightmark LLC have formed a joint venture to produce and market dairy biomethane, a form of renewable natural gas (RNG), **Kallanish Energy** reports.

The joint venture is Brightmark RNG Holdings LLC.

Equity investments by both companies will fund the construction of infrastructure and commercial operation of dairy biomethane projects in multiple states.

The commercial-scale projects will be located in Florida, Michigan, New York and South Dakota, according to media reports.

Chevron will purchase the RNG produced from these projects and market the RNG in California for use in vehicles operating on compressed natural gas.

"Chevron is committed to improving how affordable, reliable, ever-cleaner energy is developed and delivered, investing in companies addressing GHG emissions and progressing lower-carbon technologies," said Andy Walz, president of Americas Products for Chevron, in a statement.

Chevron is based in San Ramon, California.

Brightmark, with headquarters in San Francisco, California, has launched 23 RNG projects in nine states.

Source: <u>https://www.kallanishenergy.com/2020/10/15/chevron-brightmark-form-rng-jv/</u>



1.5 Germany Wärtsilä to build CO2-neutral bio-LNG plant in Germany

8th October 2020. By Adnan Bajic.

The Finnish technology group Wärtsilä has been contracted to supply and build a plant for the production of CO2-neutral liquid transport fuels.



Courtesy of Wärtsilä

The plant will liquefy gas from the natural gas grid to produce carbon-neutral LNG. It will have a capacity of approximately 100,000 tons per year and will be located in Cologne, Germany, Wärtsilä said in its statement.

"The use of LNG as an emissions-reducing fuel in the

marine and transportation industries is already well established, and to introduce bioLNG which can be mixed with LNG is the next obvious step in enabling a CO2-neutral transportation fuel," said Antti Kuokkanen, VP Gas Solutions.

The feedstock for bioLNG is based on biological waste material e.g. liquid manure and food waste. The feedstock is fed to an anaerobic digestion reactor that produces biogas, which is then upgraded to biomethane and injected into the natural gas grid.

Green gas certificates are issued along with the injected biomethane, which then permits operators at other locations, such as liquefaction plants producing bioLNG, to buy the certificates and utilize the biomethane.

The Wärtsilä scope for this project includes the engineering, the civil works, installation, and commissioning of the plant. The plant will include a gas treatment system based on Wärtsilä's Puregas CA technology, a liquefaction unit utilizing Wärtsilä's Semi-Dual Brayton technology, storage tanks, truck filling stations, and all necessary safety flare and auxiliary equipment.

The plant is expected to be fully operational by autumn 2022, Wärtsilä said.

Source: <u>https://www.offshore-energy.biz/wartsila-to-build-co2-neutral-bio-lng-plant-in-germany/?utm_source=lngworldnews&utm_medium=email&utm_campaign=newsletter_20_20-10-09_</u>

1.6 France HAM commissions mobile LNG fueling unit in Calais

6th October 2020. By Adnan Bajic.

Spanish LNG services provider HAM Group has designed and manufactured a new mobile LNG station for C4T Europe in Calais.



Courtesy of HAM Group

The unit is located near the Port of Calais and the Eurotunnel in the Industrial Zone of Transmarck.

HAM Group said in its statement the mobile unit will be in operation until the construction of the fixed gas station, which will also be designed and built by HAM.



By setting up the mobile unit, the two companies have managed to shorten start-up times for the new LNG-CNG station.

The mobile service station allows refueling compressed natural gas to cars, light vehicles and trucks; and liquefied natural gas to heavy vehicles.

Source: https://www.offshore-energy.biz/ham-commissions-mobile-lng-fueling-unit-incalais/?utm_source=lngworldnews&utm_medium=email&utm_campaign=newsletter_2020-10-07

1.7 Iran Call for Expanding CNG Use 10th October 2020.

CNG is almost five times cheaper than unsubsidized gasoline. Common sense and economic wisdom demand a collective shift to the cost-effective fuel



Retrofitting vehicles, especially vans, with compressed natural gas can substantially cut fuel costs, head of the CNG Department of state-run National Iranian Oil Products Distribution Company said.

"A van uses at least 750 liters of gasoline per month that

costs 19 million rials (\$64). CNG (750 cubic meters/month) costs 3.8 million rials (\$12) and helps save \$52," Mohammad Hossein Bageri was quoted as saying by IRNA.

Each cubic meter of CNG is sold for 5,000 rials (1.6 cents) and a liter of subsidized gasoline costs 15,000 rials (5 cents) and non-subsidized fuel 30,000 rials (10 cents).

Source: https://financialtribune.com/articles/energy/105659/call-for-expanding-cng-use

1.8 Iran CNG Filling Stations Are Economically Unfeasible

14th October 2020.



The unprecedented rise in currency rates and low margins of fueling stations are pushing the CNG retail sector to the brink of insolvency, a member of the board of directors at Iran's CNG Association said.

"Although costs associated with developing and running

a CNG station has increased ten-fold in the past five years, the profit margin for retailers remains as low as 3,000 rials (1 cent) for one cubic meter and has not increased since 2018," Mohsen Johari was quoted as saying by ILNA.

The cost of CNG business is increasing not the profit. "This is a disincentive to CNG suppliers" and apparently pushing gas station owners to the wall, Johari said.

"Unless station owners are offered some relief in utility bills and taxes, most may have to declare insolvency sooner or later."

Source: https://financialtribune.com/articles/energy/105725/cng-filling-stations-are-economicallyunfeasible



1.9 Nigeria We'll deploy CNG to all NNPC stations by December, says Kyari 13th October 2020. By John Ofikhenua.



Abuja: R<u>etailing stations operated by the Nigerian National</u> Petroleum Corporation (NNPC) would have the Compressed Natural Gas (CNG) by December, Group Managing Director (GMD) Malam Mele Kyari, said on Monday.

<u>According to him, the deployment will be extended to independent</u> retail stations as the NNPC plans to replicate the plants in about 200 to 300 non-NNPC owned petrol stations by the end of 2021.

Kyari, who spoke with reporters in Abuja after "The Value chain Third Annual Lecture & Awards, said: "We are deploying in all our stations. Like we said, by December we will deploy it in all NNPC stations. We would have deployed it to all our retail stations. We are expanding and by next year, we will see this deployed in 200 to 300 stations across the country, not only NNPC stations."

The lecture has "*The role of media in the Nigerian Petroleum Industry Reform & Investment*" as its theme.

On the topic, Kyari said the new media defies what the corporation does. He decried the setback that adversarial journalism and fake news pose to national development and urged the conventional media to serve as a veritable validation source to the social media news.

The NNPC boss said: "There is a journalism now that has come. It is called new media or fake news. Today, journalism is on people's telephone handset. You can have an individual not a corporate entity with a million audience. There is no control over what he does.

"So, companies should refocus on the new media as wrong information is planted on the minds of the people and you will never able to take it out."

He sought a synergy between the corporation and the media in order to have an avid understanding for exactly what the corporation does.

<u>Presenting his paper, the African Petroleum Producers' Organisation (APPO) Secretary-General, Dr. Omar Farouk Ibrahim, noted that most of the journalists covering the oil and gas beats, lack insight of the industry and the issues involved.</u>

He bemoaned the dearth of entering qualification and standard that permeates the Nigerian media industry. Ibrahim urged the National Assembly to address the issues of Petroleum Industry Bill (PIB) and that lawmakers should enact a law to be called Energy Journalists Fund.

According to him, petroleum is a critical sector, which its information deserves a special attention as such a fund in the rank of the Petroleum Technology Development Fund (PTDF) is desirable for the promotion of oil and gas journalism in Nigeria.

The Technical Adviser, Gas Business & Policy Implementation to the Minister of Petroleum Resources, Justice Derefaka, said the sector is so technical for the understanding of even engineers and to say the least, the journalists.

Source: https://thenationonlineng.net/well-deploy-cng-to-all-nnpc-stations-by-december-says-kyari/



1.10 Thailand Toyota buys Egat's first REC for fuel 9th October 2020. By Yuthana Praiwan



Mr Viboon says Toyota bought 10,000 RECs for 500,000 baht from Egat.

State-run Electricity Generating Authority of Thailand (Egat) has started trading its Renewable Energy Certificates (REC), with Toyota Motors Thailand the first buyer to support efforts to reduce greenhouse gases.

REC is an economic incentive aimed to encourage power plant

owners to produce electricity from clean fuels. Each REC, which certifies the bearer generates one megawatt-hour (MWh) from renewable energy resources, can be traded as an energy commodity.

This market-based instrument was first introduced at the 2015 UN Climate Change Conference, also known as the Paris Accord.

Egat governor Viboon Rerksirathai said Toyota bought 10,000 RECs for 500,000 baht from Egat as part of the company's zero greenhouse emission policy.

The purchase indicates part of the carmaker's production cost went to promoting renewable energy.

Egat converted electricity output to the REC format from its 78.7-megawatt Mae Klong hydropower plant in Kanchanaburi, a pilot project.

The agency adopted REC last year and is authorised by the Netherlands-based International REC Standard to certify power plants participating in the scheme.

According to Egat, its power generation facilities and independent power producers can altogether cut greenhouse gas emissions by 10 million tonnes a year.

Egat deputy governor Jiraporn Sirikum said Egat is in talks with other multinational firms that have indicated interest in REC.

REC has drawn interest from companies in the US, including Facebook, Google and Procter & Gamble, as well as British-Dutch multinational Unilever, said Mr Viboon.

Ninnart Chaithirapinyo, chairman of Toyota Motor Thailand, said REC is one channel that supports the company's plan to cut greenhouse gas emissions by 30% within 2025.

The company has developed its production process to be more environmentally friendly, installing rooftop solar panels at plants in Samut Prakan and Chachoengsao.

Energy Minister Supattanapong Punmeechaow said Egat wants other energy firms, including Ratch Group, Global Power Synergy, Gulf Energy Development and Electricity Generating, to join REC trade.

Over the long term, REC trade should be widely recognised by the public, similar to share sales in the stock market, Mr Supattanapong said.

Source: <u>https://www.bangkokpost.com/business/1999115/toyota-buys-egats-first-rec-for-fuel</u>