

Press Information from 2G Energy Ltd

19/04/2023

2G Energy embarks on UK's first 'Road to Net Zero Tour' – bringing innovative hydrogen technology to industries and businesses that are on the journey to low or zero carbon

Runcorn, 19/04/2023 – Industry and policymakers across the UK can discover how hydrogen power can fuel their journey to net zero as <u>2G Energy</u>, a leading manufacturer of combined heat and power (CHP) systems, takes its innovative technology on tour for the first time.

2G's 'Road to Net Zero Tour' will be the first of its kind to showcase a 100% hydrogen-powered CHP engine, giving business leaders, national and local policymakers and planners the opportunity to understand how a hydrogen CHP engine works. The technology can help the UK achieve its 2050 net zero ambitions.

Mark Holtmann, Managing Director of 2G said "Hydrogen is set to play a vital role as the UK looks for long-term ways to meet its carbon reduction targets. Hydrogen's importance has become increasingly clear over the past few months of energy supply upheaval and the impact of war in Ukraine.

"With our innovative 100% green hydrogen CHP system installed at Kirkwall Airport on the Orkney Islands, we wanted to bring this technology on the road to reach as many people as possible. We are committed to promoting hydrogen to achieve a net zero world and we want to demonstrate how CHPs can be integrated into a wide variety of industries and applications such as hospitals, schools, hotels and leisure facilities to provide energy reliability and resilience."

Working in partnership with Altrad Babcock, 2G installed the UK's first 100% hydrogen CHP solution at Kirkwall Airport in the Orkney Islands. Once fully commissioned, the CHP system will be integrated with the airport's existing heating system to meet some of the heating and power requirements of the main airport building. Funded by the Scottish Government, the CHP installation at Kirkwall Airport is part of a series of initiatives led by the European Marine Energy Centre (EMEC) in collaboration with Highlands and Islands Airports Limited (HIAL) to decarbonise the airport. A study undertaken by EMEC found that space and water heating demand in the airport terminal represented the biggest source of greenhouse gas emissions after aircraft operations.

The UK Government is committed to developing the low carbon hydrogen economy and has identified up to 20GW of potential hydrogen projects through to 2037. Even though there are already 2G CHPs operating on 100% hydrogen worldwide, there is no need to go entirely 100% hydrogen straight away. 2G's standard engines can run on blends of gases, including hydrogen at up to 40%, before a simple



engine retrofit is required to accommodate a higher percentage of hydrogen. Hydrogen-enabled CHP systems can use a blend of input gases and enable a gradual entry into the hydrogen economy – the sudden decommissioning or start-up of large infrastructure projects is not necessary – and these systems can reduce operational costs and carbon emissions.

Since 2012, 2G has successfully installed over 8000 CHP plants in 55 countries. 2G was presented with the COGEN Europe Technology & Innovation Award for the Kirkwall Airport project.

2G's 'Road to Net Zero Tour' is supported by the German Federal Ministry for Economic Affairs and Climate Action as part of the Renewable Energy Solutions Programme of the German Energy Solutions Initiative.

The tour will be stopping at the following locations across the UK:

10-11th May, All-Energy 2023, Glasgow

17th May, Centrica, Windsor

18th May, Bohr Ltd, Stone

19th May, Stepan, Manchester

22nd May, WB Power Services Ltd, Ilkeston

24th May, UK Hydrogen Fuel Cell Association Annual Conference, London

For more information or to register your attendance at one of the above locations, please contact:

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About 2G Energy

2G Energy AG is one of the world's leading manufacturers of combined heat and power generation systems (CHP) providing a decentralized supply of heat and electricity using reciprocating piston engines that run on natural gas, biomethane, biogas, sewage gas, landfill gas or hydrogen. The systems in the portfolio range from an electrical output of 20 to 4,500 kW. Customers range from farmers in municipalities, commercial enterprises, medium-scale, and big industrial companies to the energy sector. In addition to its headquarters in Heek, located in the "Münsterland" region in western Germany,



2G is represented by subsidiaries in several European countries as well as North America and has about 800 employees worldwide. Since its foundation in 1995, 2G has commissioned more than 8,000 systems throughout the world.

German Energy Agency (dena)

The German Energy Agency (dena) is a centre of excellence for the applied energy transition and climate protection. dena studies the challenges of building a climate-neutral society and supports the German government in achieving its energy and climate policy objectives. Since its foundation in 2000, dena has worked to develop and implement solutions and bring together national and international partners from politics, industry, the scientific community and all parts of society. dena is a project enterprise and a public company owned by the German federal government. dena's shareholders are the Federal Republic of Germany and the KfW Group. www.dena.de/en

German Energy Solutions Initiative

With the aim of positioning German technologies and know-how worldwide, the German Energy Solutions Initiative of the Federal Ministry of Economics and Climate Action (BMWK) supports suppliers of climate-friendly energy solutions in opening up foreign markets. The focus lies on renewable energies, energy efficiency, smart grids and storage, as well as technologies such as power-to-gas and fuel cells. Aimed in particular at small and medium-sized enterprises, the German Energy Solutions Initiative supports participants through measures to prepare market entry as well as to prospect, develop and secure new markets. www.german-energy-solutions.de/en

Renewable Energy Solutions Programme (RES Programme)

With the RES programme, the Energy Export Initiative of the Federal Ministry of Economics and Climate Action (BMWK) helps German companies in the renewable energy and energy efficiency sectors enter new markets. Within the framework of the programme, reference plants are installed and marketed with the support of the German Energy Agency (dena). Information and training activities help ensure a sustainable market entry and demonstrate the quality of climate-friendly technologies made in Germany. www.german-energy-solutions.de/res-programm.html





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