

## **2G Energy's first 'Road to Net Zero Tour' in May made waves in the energy industry and beyond, provoking both diverse discussions and direct action to the hydrogen agenda in the UK**

Runcorn, 08/08/2023 – A leading manufacturer of combined heat and power (CHP) systems travelled the length and breadth of the UK from the 10<sup>th</sup>-22<sup>nd</sup> May 2023, transporting their innovative 100% hydrogen fuelled CHP engine across the UK to industry and policymakers to discover how hydrogen power can fuel the journey to net zero.

2G's ['Road to Net Zero Tour'](#) was the first of its kind to showcase a 100% hydrogen-powered CHP engine, providing business leaders, national and local policymakers and planners the opportunity to see firsthand and understand how a hydrogen CHP engine works. CHP engines can help the UK achieve its 2050 net zero ambitions.

**Mark Holtmann**, Managing Director of 2G reflects on the success of the tour:

"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."

"The 2G Road to Net Zero Tour has demonstrated to the UK that our innovative technology is indeed a reality and not just an idea or theory. Our extensive knowledge and experience can help provide education within the energy industry and beyond into how hydrogen as a zero emissions fuel can be realised in a wide variety of applications such as hospitals, schools, hotels and leisure facilities to provide energy reliability and resilience. Networking with business and policy makers throughout the tour has provided the 2G team with unique and well-rounded insights to the energy mix of the future."

Working in partnership with Altrad Babcock, 2G installed the UK's first 100% hydrogen CHP solution at Kirkwall Airport in the Orkney Islands. 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. Currently deployed as part of an extended trial, the CHP system has been integrated with the airport's existing heating system to meet some of the heating and power requirements of the main airport building.

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. CHP engines can help the UK achieve its

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2050 net zero ambitions. 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 part of a collaboration with the German Energy Agency (dena) in order to highlight the hydrogen fuelled CHP engine installed at HIAL as an outstanding lighthouse project.

The project 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 visited 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 Energy Association Annual Conference, London

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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 decentralised supply of heat and electricity using reciprocating piston engines

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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 950 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. [www.dena.de/en](http://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](http://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](http://www.german-energy-solutions.de/res-programm.html)

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