



Engineer - Install - Maintain

The REA and CNG Services have been running the Green Gas Day since 2012. It is the largest industry gathering in the UK focused on green gases, including hydrogen, with over 300 people attending all previous years.

Along with actions to accelerate the roll out of energy efficiency measures and the deployment of renewables, green gases such as biomethane and clean hydrogen are key to reduce our dependency on fossil fuels and reliance on imported gas from Russia, as well as to deliver an energy future which is independent, secure, and stable.

The UK has been active in the development of green gas plants in the past decade, but more needs to be done to help us become self-sufficient. The growth of the green gas sector in the UK has been mostly supported by the Non-Domestic Renewable Heat Incentive (NDRHI) and, more recently the Green Gas Support Scheme (GGSS). According to Government statistics, the UK has 143 biomethane to grid projects registered under the NDRHI, with a further 31 projects in the pipeline. Another 45 biomethane plants are also expected to be developed over the life of the GGSS.

Green gases supplied for transport under the Renewable Transport Fuel Obligation (RTFO) have also been growing rapidly in recent years, particularly biomethane. Mobility is also likely to be one of the key sectors to kick-start the development of the clean hydrogen sector in the UK.

New financial models that are not reliant on subsidies are also emerging for biomethane plants with carbon capture and storage, which make biomethane carbon negative and particularly valuable for companies that need to offset their residual GHG emissions.

In the UK and in the world clean hydrogen is currently enjoying an unprecedented political and business momentum as a versatile and sustainable energy carrier, but the right policy and regulatory framework needs now to be in place to support the rapid scale up of this sector and deliver the necessary cost reductions. Policy to support clean hydrogen is developing at a fast pace in the UK and much innovation is being carried out to facilitate the safe and sound deployment of hydrogen production, injection into the gas network and different hydrogen applications. Innovative projects are underway that are integrating renewable electricity generation such as solar and wind with batteries and electrolysers, and injecting hydrogen into the National Transmission System.

WHY ATTEND?

The REA and CNG Services have been running the Green Gas Day since 2012. It is the largest industry gathering in the UK focused on green gases, including hydrogen, with over 300 people attending all previous years.

This year's Green Gas Day, will look at recent and future policy developments to support green gases such as biomethane and clean hydrogen, as well as the latest changes that will impact the green gas market.

UK Green Gas Day 2023 will also highlight the latest technical developments and showcase the industry's latest innovation on green gas production, connection to the grid, blending, process optimisation, adding value and green gas trading.

Come to UK Green Gas Day to meet project developers and operators, financiers, feedstock providers, waste hauliers, technology providers and government officials. Visit exhibition stands from all of the major suppliers to the green gas industry.

Who Should Attend?

- Green Gas producers
- Organic waste producers/processors
- Waste management companies
- Landowners
- Food manufacturers
- Sustainability managers
- Farmers
- Investors and Financiers
- Insurance companies
- Gas grid owners
- Gas shippers and suppliersGovernment bodies and Regulators
- Green Gas Equipment suppliers
- Local authorities
- Haulage companies
- Retailers
- Consultants

Pricing:

Delegate Bookings:

Early Bird: up to 30th June 2023

REA Member- £150+VAT GGCS Member- £150+VAT REA Non-Member- £220+VAT

From 1st July 2023

REA Member-£190+VAT GGCS Member- £190+VAT REA Non-Member- £270+VAT

For Exhibitor/Sponsorship Details

julie.lazenby@cngservices.co.uk 0121 247 8160

Directions:

By Car: The National Motorcycle Museum is located directly off Junction 6 of the M42, directly opposite the NEC

By Plane/Train: Birmingham International is a short taxi drive away

National Motorcycle Museum, Coventry Road, Bickenhill, Solihull, West Midlands. B92 0EJ

DRAFT AGENDA - Correct as of 01.06.23 Subject to Change

09:00-09:30- Refreshments and Registration 09:30-09:40- Welcome and introductions- TBC

UK and EU Biomethane Market Update

09:40-09:45- Chaired by John Baldwin, CNG Services

09:45-10:00- Europe's biomethane plan- 12 months on

Harmen Dekker, European Biogas Association-Invited

10:00-10:15- UK Government policy- Green Gas Support Scheme and beyond

James Davis, DESNZ

10:15-10:30- GB Market udate and biomethane innovation in Bio-CO2, E-CH4 and Reverse Compression

John Baldwin, CNG Services

10:45-11:00- The Future Biogas Way

Philipp Lukas, Future Biogas- Invited

11:15-11:25- Q & A

11:25- 11:45- Morning Tea/ Coffee break & Networking

Future of Green Gas and the Gas Networks

11:45-11:50- William Mezzullo, Head of Hydrogen , Centrica- Invited

11:50-12:05 - National Infrastructure Commission - Report follow up

James Richardson, National Infrastructure Commission-Invited

12:20-12:35- Balancing deployment scenarios of biomethane and hydrogen

Angus Paxton, Poyry

12:35-12:50- View from the gas networks

James Earl, Energy Networks Association-Invited

12:50-13:05- Future of the gas grid

Nic Crowe, Grissan-Invited

13:05-13:20- Update from Republic of Ireland

Declan O'Sullivan, Gas Networks Ireland- Invited

13:20-13:30- Q&A with panel discussion

13:30-14:30- Lunch/Networking

Regulatory Session

14:30-14:35- Chaired by TBC

14:35-14:50- HSE, environmental permitting for site, spreading of digestate to land (end of waste/farming rules for water), planning

15:05-15:20- Negative impacts on projects if not done right with positive experiences of how to do this well

TBC

15:20-15:35- How to reform planning to help AD

TBC

15:35-15:45- Q&A

15:10-15:35 - Afternoon Tea/Coffee break and Networking

Commercial Developments

15:35-15:50- Chaired by David Hurren- Invited

15:50-16:05- Growth in biomethane as a transport fuel in UK

Phillip Fjeld,CEO ReFuels

16:05-16:20- Biomethanol or biomethane using green hydrogen and bio CO2

Bill Reid, Ex Ineos- Invited

16:35-16:50- Biomethane from manure with CCS

Charlie Steer, Grosvenor Estate Farms- Invited

16:50-17:05- Turning Gas into Money: Optimised Routes to Market

Rosanna Butters, Barrow Green Gas

17:05-17:15- Q&A

17:15-17:25- Closing remarks TBC

OUR SPEAKERS



Dr Nina Skorupska CBE FEI, Chief Executive, The Association for Renewable Energy and Clean

Technology (REA) Prior to joining the REA in 2013, Nina worked for 20 years for the RWE Group (and UK predecessors: National Power, Npower etc.) across fuel engineering and R&D, power station operations (where she was Npower's first female power station manager) and trading. Her last RWE role was CTO, Essent (RWE's Dutch business). She is a Board member of Transport for London (TfL), REAL (REA subsidiary), and more recently Royal BAM Group NV. She also advises Carbon Trust, National Grid ESO and Energy Research Accelerator (ERA) and others. She is a Fellow of the Energy Institute. She received her CBE in 2016 for her services to renewable energy sector and promoting diversity in the Energy Industry.



William Mezzullo is Head of Hydrogen at Centrica Energy Markets & Trading, and Chair of the

Renewable Energy Association's Green Gas & Hydrogen Forum. William is responsible for commercialising hydrogen development opportunities for Centrica. Prior to joining Centrica, he was a Fund Lead at JLEN, a FTSE 250 environmental fund. William has worked in the renewable energy industry since 2010, developing and building commercial-scale green gas anaerobic digestion plants, where he was Head of Projects at Future Biogas, one of the largest anaerobic digestion companies in the UK. He holds a PhD from the University of Bath in bioenergy.



Harmen Dekker, CEO, European Biogas Association

Harmen Dekker has worked for almost 15 years within the sustainability sector and is devoted to the mitigation of climate change. With both a technical as well as a business administration background he has built his career in the water and gas sector, where he has held various management positions. He joined the EBA after being involved in the biogas sector for over five years. During those years, he not only focussed on the expansion of biogas and in particular biomethane but also on the implementation of techniques such as bio-LNG, bio-Methanol, bio-Hydrogen and bioplastics.



John Baldwin, Managing Director, CNG Services Ltd

John started his career as a graduate engineer in British Gas and BGE&P and worked on projects including South Morecambe, CATS and Armada. He then worked in Transco looking after the National Transmission System (NTS) in the period 1995 – 98 when many of the first wave of CCGTs were built as well as the UK-Continent Interconnector and a £350 Million expansion of the NTS. He has been President of the SBGI (Society of British Gas Industries, now known as the EUA) and is a former Chairman of the Renewable Energy Association Biogas Group. His company CNG Services Ltd is a niche EPC Contractor and consultant in biomethane and hydrogen. John is also a Director of CNG Fuels who are building a national network of Bio-CNG filling stations connected to the high pressure gas grid and is a Director of Barrow Shipping Ltd which is the leading shipper focused on renewable gases. He has 39 years experience in the gas industry, fossil and renewable



David Hurren, TUK CEO Air Liquide Biogas Solutions Europe

David Hurren graduated from Imperial College in Chemical Engineering. For most of his career he has worked in the Industrial Gas industry, apart from a 4 year spell in water & wastewater treatment. For the past 23 years he has worked for what is now Air Liquide UK, setting up and leading Air Liquide's Biogas operations in the UK over the past 5 years. Air Liquide cover all parts of the Biomethane supply chain and in the UK, from AD to Gas to Grid Facilities, a virtual pipeline supplying Industrial heat users from the NTS, as well as supplying over 20 gas refuelling stations for trucks and buses. David is vice chair of the REA Green Gas committee as well as being founding chair of the BCGA(British Compressed Gas Association) TSC on Alternative Energy and also is President of the BCGA for the next 2 years, tied to both Hydrogen and Biogas. He is also Go Chair of Gas Vehicle Network and on the advisory boards for ADBA and Gasworld.



Philipp Lukas, CEO, Future Biogas

Future Biogas has over 125 employees dealing with all aspects of AD operations, from feedstock acquisition and biology through operations and maintenance, to all aspects of financial, regulatory and sustainability reporting. It has developed, built and operates 11 plants across East Anglia and Midlands, and now also takes on turnarounds and distressed assets. In the last 2 years Future Biogas has been working to develop the next generation of biogas plants that decarbonise farms, make green gas and sequester carbon." Association (EBA).



Kiara Zennaro, Head of Heat - Green Gas Lead, REA

Kiara joined the Association for Renewable Energy and Clean Technology (REA) in 2007.

She heads the heat team of the REA, overseeing the activities of the REA focused on the challenge of decarbonising heat. She also leads the Green Gas Forum of the REA, which has represented the biogas industry in the UK since 2004, playing a major role in delivering the expansion of this sector In the UK. More recently she has set up a working group especially dedicated to clean hydrogen and its uses, aimed at moving the hydrogen agenda forward within Government. Her previous role involved providing technical support in a wide range of subjects, including operational and regulatory issues relevant to biowaste treatments.



Lucy Hopwood, Director & Lead Consultant for Bioenergy & Anaerobic Digestion

Lucy has worked in AD for the past 18 years. She comes from an agricultural background and originally specialised in feedstock supply to the bioeconomy, focusing on agricultural, forestry and waste production systems before moving her focus to associated treatment and conversion technologies. Lucy and her team provide strategic advice, planning and technical support on bioenergy policies, technologies and markets to de-risk developers and investors decisions and to provide technical support to policy makers to help shape the future policy landscape.

OUR SPEAKERS



Alison Cartwright, Senior Project Manager, CNG Services Ltd

Alison Cartwright has spent the last 11 years working in the biomethane industry. She is currently working as a senior project manager for CNG Services, bringing together innovative solutions to facilitate multiple plants to be able to connect to the gas grid. A chartered mechanical engineer with a MSc in Renewable Energy Systems, she has worked on both connecting new biomethane projects to the grid and in day to day operations of biogas plants.



Mariam Moatassim, GRDF, Project Manager/EU Public Affairs, Gaz Réseau Distribution France

Mariam is a Project Manager in the Department for Strategy of GRDF (Gaz Réseau Distribution France) where she contributes to policy development and European strategy around the uses of biomethane, especially in transport. In this role, she represents and promotes low-carbon mobility through biomethane for vehicles (BioNGV), and more generally the potential of biomethane to decarbonise tomorrow's energy. Previously to starting at GRDF, Mariam worked for the French Government Office for European affairs.



Liam Langshaw, Baringa Partners

Liam helps developers, investors, and large energy users to create value and reduce risk while driving towards a low-carbon future. He specialises in renewable power and gas at Baringa, with experience spanning energy strategy, commercial advisory and project execution. Recently, Liam has led large-scale Corporate PPA programmes on 7+ TWh demand, structured innovative private wire business models, and provided commercial support for biomethane-to-grid developers. Assurance Scheme.



Richard Gueterbock, Director, Food Chains

Richard Gueterbock has spent over 30 years in the agri-food sector, in marketing, sales and business development roles. This has included on-site bio-energy and emissions reduction across the food supply chain, championing on-site digestion for industrial sites as well as involvement in bio-energy policy formulation. Formerly Sales and Marketing Director of Clearfleau, a supplier of on-site, factory digestion systems, Richard is involved in a range of biogas projects, including for companies like Brewdog, rural use of Biomethane as an HGV fuel and development of smaller on-site AD projects. He was part of a team that produced a wide-ranging report on decarbonisation of agriculture titled "Farm of the Future- Journey to Net Zero" for the Royal Agricultural Society of England (RASE)- see www.rase.org.uk/ reports.



Angela Bywater, Environmental Biotechnology Network Co-Manager, University of Southampton

Angela has spent 20 years working in AD, with involvement in a number of projects/publications for government, the Royal Agricultural Society of England, the International Energy Agency and academic journals. She is joint manager of the BBSRC Environmental Biotechnology Network (formerly AD Network), a research project which provides funding and links to more than 1100 academics and industry members. She also is co-owned Methanogen UK who manufactured small farm and micro-scale anaerobic digesters. Projects includes LEAP's micro-AD project near London's Kings' Cross, a 'dog do gas lamp digester' and a number of other farm, household and community projects. She has run her own household digester for more than 10 years and is part of the University's 'Circular Bioeconomy' team, demonstrating a solar-powered mobile digester and science activities to thousands of people.



Charlie Steer, Arable Manager, Grosvenor Farms

Charlie grew up on his family's small farm in East Cheshire which his parents ran alongside their professional careers. Charlie studied agriculture at The University of Reading and graduated in 2010. He is now the arable manager for Grosvenor Farms LTD, a mixed dairy and arable enterprise on the outskirts of Chester. He is responsible for the management of the combinable and forage cropping on the farm, agronomy, staff, machinery and nutrient management; in short, all the farming operations involved in growing combinable crops and at each 'end' of the cows on the 3,500 head dairy enterprise. In addition twelve percent of the farms area is now managed for environmental enhancement under the higher tier stewardship scheme. Charlie is a 2019 Nuffield farming Scholar, the title of which is 'The Circular Farm, Minimising input for maximum output in a mixed farming system". As a result of travelling the world exploring circular economy solution for agriculture has resulted in the current development of a 60 Million KWh gas to grid AD project at Grosvenor Farms.



Ellen Daniels, CEO, British Compressed Gases Association

Ellen brings a fresh perspective to industry leaders and organisations, merging her background in politics, policy and public affairs, with her experience in taking a collaborative approach to change management, steering progress, tackling challenge and running campaigns. Taking the helm at the BCGA in February 2020, Ellen was tasked with driving change and modernisation at a well-established traditional trade association. Since then, Ellen has steered the Association through the challenges of the pandemic and Brexit, while introducing digital innovation, a brand new identity and new routes to membership, while maintaining a focus on diversity and launching a major public health camapign. The BCGA is the UK membership body for the highly-regulated compressed gases industry, which is key to a number of industries including IT, steelmaking, refining, welding, chemical processing and electronics as well as being crucial in food production and healthcare. A campaign launched by Ellen for an outright ban on the retail sales of Nitrous Oxide has received significant media attention and a Parliamentary debate, with the Home Secretary now looking at the proposal.

OUR EXHIBITORS SO FAR....















