



UK Green Gas Day 2022

29th September 2022 | National Motorcycle Museum | Birmingham

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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.

In response to the energy price crisis and the Ukrainian situation, the European Commission has recently issued proposals to reduce the EU's dependence on Russian gas by two thirds before the end of 2022 as part of a plan to become independent from all Russian fossil fuels "well before 2030". Larger volumes of biomethane and clean hydrogen production will be needed to meet those goals.

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 electrolyzers, and injecting hydrogen into the National Transmission System.

WHY ATTEND?

This year's Green Gas Day will look at all 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 2022 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.

It will be a packed programme with both the conference and the exhibition.

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. If you are involved in or interested in Green Gas, then this is the one industry event in 2022 that you cannot afford to miss.

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 suppliers
- Government bodies and Regulators
- Green Gas Equipment suppliers
- Local authorities
- Haulage companies
- Retailers
- Consultants

Pricing:

Delegate Bookings:

REA Member- £175+VAT
GGCS Member- £175+VAT
REA Non-Member- £250+VAT

For Exhibitor/Sponsorship Details

Contact:

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

To book your delegate place visit: www.r-e-a.net/events

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

OUR AGENDA

09:00- 09:30 - Refreshments and Registration

09:30- 09:40 - Welcome and introductions- Dr Nina Skorupska CBE, REA's CEO

The role of green gas in delivering energy security and net zero

09:40- 09:45- Chaired by William Mezzullo- REA Green Gas and Hydrogen Chair, Centrica

09:45- 10:00- Can green gas help make Europe independent from fossil fuels?

Harmen Dekker, European Biogas Association

10:00- 10:15- Biomethane in the new energy reality following the Russian invasion of Ukraine

John Baldwin, CNG Services

10:15- 10:30- Government policy to support green gases (biomethane and hydrogen)

James Davis and George Lowe, Ella Deleersnyder and Cameron Davies, BEIS

10:30-10:40- Q & A

10:40- 11:00- Morning Tea/ Coffee break & Networking

Maximising revenues through energy markets, innovation, and extending the operating life of AD plants

11:00- 11:05- Chaired by David Hurren- Air Liquide

11:05- 11:20- Power, gas and carbon prices: what does the present and the future hold for green gas assets?

Liam Langshaw, Baringa Partners

11:20- 11:35- The market today for gas wholesales, RGGOs, and RTFCs and balance between market exposure and revenue security

Katrina Hillary, GEMS UK (Engie)

11:35- 11:50- Making green gas grid connections possible: the case for reverse compression

Alison Cartwright, CNG Services Ltd

11:50- 12:05- The value for money case for converting existing biogas CHP plants to biomethane

Lucy Hopwood, NNFCC

12:05- 12:15- Q&A

12:15- 13:25- Lunch/Networking

Creating value for green CO₂ in the short and medium term

13:25- 13:30- Chaired by Ellen Daniels, CEO of BCGA

13:30- 13:45- Green CO₂: Food grade and industrial grade, opportunities and challenges ahead

Christopher Carson, Biocarbonics

13:45- 14:00- Exploring the potential for negative emissions from green gas with carbon capture, utilisation and storage

Naser Odeh, Ricardo Energy & Environment

14:00- 14:15- Corporates and the voluntary carbon offset market – an AD opportunity?

Philipp Lukas, Future Biogas

14:15- 14:25- Q&A

14:25- 14:45 - Afternoon Tea/Coffee break and Networking

Decarbonising farming with rural biomethane

14:45- 14:50 - Chaired by Kiara Zennaro, REA

14:50- 15:05- Vision of a sustainable model for biomethane in agriculture

Mariam Ed-Dbali GRDF

15:05- 15:20- Lowering the carbon footprint of agriculture- the Grosvenor project

Charlie Steer, Grosvenor

15:20- 15:35- Connecting AD farms off the gas grid: virtual pipelines

Daniel Lambert, Acorn Bioenergy

15:35- 15:55- Off-Grid Biomethane- Rural Production and Supply

Richard Gueterbock, Food Chains and Angie Bywater, University of Southampton

15:55- 16:05 - Q&A

16:05- 16:20- Closing remarks from the REA Green Gas Chair- William Mezzullo, Centrica

16:20 Close

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 SBI (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.

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 Ed-Dbali, 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.

OUR SPEAKERS



Daniel Lambert, Downstream & Innovation Director, Acorn Bioenergy

Prior to joining Acorn as Downstream & Innovation Director, Daniel Lambert was at Air Liquide for five years, where he led downstream commercial activities and energy management for Air Liquide's fast-growing green gas business in the UK. He previously worked for ENN, developing a biomethane fuelling stations venture in the UK and Netherlands, and managing solar energy projects in Italy and Germany.



Christopher S. Carson, Managing Director, BioCarbonics Limited

Christopher is the Managing Director for UK based BioCarbonics Limited, a supplier of liquid CO₂ from renewable energy sources. He is also the Founder and Director of boutique consulting firm Carbonic Solutions BV, focused on the development of CO₂ sources and CO₂ markets. Christopher comes from the Industrial Gases and Oil & Gas industries, specifically focused on business and market development, where he has over 35 years of experience.



Katrina Hillary, Senior Originator, ENGIE Power Limited

Katrina helps developers and investors ensure they are maximising their revenue stream from power and gas generation assets. Katrina is responsible for negotiating long term gas and power purchase contracts ensuring a route to market is provided for the commodity and any surrounding certificates. Gas and power generators can trade their commodities via ENGIE's contracts and either create bankability by ENGIE providing revenue security or access the shorter-term wholesale markets.



Naser Odeh, Associate Director and Head of CCUS and Biofuels at Ricardo Energy and Environment

Naser is a chartered chemical engineer and a chartered member of the Engineering Council in the UK with 18 years' experience in low carbon technologies. He has undertaken many strategic studies in the UK and internationally and has several widely-cited publications in Energy Policy and Energy Conversion & Management where he has also served as a peer reviewer. Naser has also led and participated in many webinars and panel discussions on topics related to bioenergy, CCUS and energy from waste. In his current role, he leads on strategic growth and planning within Ricardo in the areas of heat decarbonisation and combined heat and power, biofuels and carbon capture and storage technologies. He works closely with Government and industry on innovation in CO₂ capture and utilisation and biofuels including biomethane and bio-hydrogen. Within Ricardo, he has recently led the development and design of a new innovative concept called BIOCCUS, focusing on biomass-based pyrolysis combined heat and power with biochar production and carbon capture and utilisation. Naser has worked with a wide range of clients within the chemicals and petrochemicals, oil and gas, power generation, district heating and water sectors on industrial decarbonisation.



James Davis, Head of Biomethane, Clean Heat Directorate, BEIS

James recently started as head of Biomethane in BEIS and has responsibility for delivering the Green Gas Support Scheme (GGSS) Mid Scheme Review, and developing policy to support AD and biomethane, following the GGSS. Prior to this, James led on the design and delivery of the Green Gas Levy. James has several years of experience of energy policy in Government, including on heat networks, onshore wind, and energy efficiency.



Ella Deleersnyder, Policy Adviser, BEIS

Ella joined the biomethane policy team as a policy adviser in mid-2021, first focusing on delivering the Green Gas Support Scheme, and now coordinating the mid-scheme review and engaging in longer-term policy work relating to feedstocks. Prior to joining the Civil Service, Ella worked as a security researcher in think tanks and international organisations such as the OECD.

OUR SPEAKERS



Cameron Davies , Policy Adviser, BEIS

Cameron is a policy adviser within BEIS' Hydrogen and Industrial Carbon Capture Directorate focusing on hydrogen strategy, including hydrogen's role within the energy system and implementation of the UK Hydrogen Strategy. Cameron joined BEIS in 2020 to work on policy in relation to the international clean energy initiative Mission Innovation, including the Clean Hydrogen Mission co-launched by the UK.



George Lowe, Senior Policy Adviser – Biomethane Team, Clean Heat Directorate, BEIS

George works as a policy professional in the Clean Heat Directorate in BEIS, where he focuses on biomethane policy. This has included setting up the Green Gas Support Scheme and working on longer-term policy for biomethane post-2025. George has been at BEIS for over 2 years now, and before that also worked in the Department for Exiting the EU (DExEU) in 2019-20. Prior to joining the civil service, George worked as a consultant at PwC, with a particular interest in healthcare and local government advisory work.



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 campaign. 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.



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, focussing 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 EXHIBITORS

