

THE WORLD BIOGAS EXPO 2023

MAKING BIOGAS HAPPEN

EVENT GUIDE



THE WORLD BIOGAS SUMMIT 2023 AND BIOGAS INDUSTRY AWARDS 2023

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WELCOME TO THE WORLD BIOGAS SUMMIT AND EXPO 2023



A very warm welcome to the World Biogas Summit and Expo 2023.

At COP26, the Global Methane Pledge was

signed, committing signatory countries to cutting global methane emissions by 30% against 2020 levels **by 2030**. Recycling the 105bn tonnes of organic wastes humans produce every year can deliver **half** of this – so at our event this year, this target needs to be front of all our minds. This industry can - and must – reduce global temperatures by a vital 0.1 degrees.

In addition to the Global Methane Pledge, the current energy- fertiliser- and CO₂ crises have focused minds and fuelled demand for biogas/ biomethane, digestate and bio-CO₂ from AD, making a clear case for AD – a technology that is here today.

So together we must **#MakeBiogasHappen**.

To start with, here at the NEC in Birmingham (UK), we bring you the latest biogas technologies from around the world, as well as delegates from an anticipated 100 countries, to discuss what needs to happen to deliver biogas' potential this decade.



The World Biogas Expo is the largest annual tradeshow dedicated solely to anaerobic digestion (AD) and biogas and we are very excited to announce that we have sold out for the second year in a row.

Co-located alongside the Expo is the World Biogas Summit 2023, the global thought leadership forum on AD and biogas. To allow biogas enthusiasts from around the globe to also participate without flying into the UK in person, the Summit has again been made hybrid. We will hear from leading international political and industry figures such as Jennifer Sara, Global Director, Climate Change Group at the World Bank, Tim Gould, Chief Energy Economist at the IEA, Hennadiy Zhuk, Professor/Director, Gas Institute NAS of Ukraine and Kunal Shah, Chief Growth Officer and Managing Director – Asia of Anaergia.

The Expo and Summit are free to attend events aimed at facilitating the adoption of biogas globally. So what do they have to offer to you?

- Insights from a range of expert speakers with sessions dedicated to the key themes for our sector.
- Huge opportunities to network, build relationships and understand what new technologies are coming to the market.
- A place to meet and engage with international delegates, share expertise, and hear different perspectives from across the globe.
- Engagement with a wide range of exhibitors to find solutions and partnerships for your business.
- Side events such as the Local Authorities Lunch and Farmers' Breakfast .

Have a great show!

Charlotte Morton OBE, Chief Executive, WBA
Chris Huhne, Chairman, ADBA

CONTENTS

Welcome 3

Our Sponsors 7

Visitor Information 8

Global Market Overview 9

UK Market Overview 10-11

World Biogas Summit 2023

Theatre Programme 14-16

World Biogas Expo 2023

Engine Room Programme 17-19

Expo Floorplan 20-21

A-Z Exhibitor List 22-23

Exhibitor Profiles 24-44

About the Organisers 46

Disclaimer: Every effort has been made to ensure the accuracy of the entries in this Event Guide. The content and classification of entries is based on the latest information available to ADBA and WBA at the time of going to print. Consequently, any information that has changed since that time will not result in any amendments or reissue or reprinting of this publication. In no circumstances can ADBA or WBA accept any responsibility for any error, omissions or claims made in the event guide. Copyright: © ADBA and WBA. No reproduction, copying, image scanning, storing or recording by any means in any form, nor broadcasting or transmission through any medium, of any part of this directory is permitted without the express permission and consent of ADBA and WBA. All intellectual property rights reserved.

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VISITOR INFORMATION

HALL 8 OPENING TIMES

Wednesday 29 March 09:00-18:00

Thursday 30 March 09:00-16:00

BADGES

Please ensure that you wear your badge at all times. Badges can be collected at the main entrance of Hall 8 on arrival. Failure to present a badge will mean that you are unable to enter the show.

CANVASSING

Canvassing for orders by unauthorised persons is strictly prohibited. In any such instance, the right of expulsion will be exercised. Distribution of circulars and promotional materials by exhibitors must take place within their purchased stand area. Any marketing material found outside of a designated area will be removed and destroyed immediately.

CLOAKROOMS

Cloakroom facilities are available. They are located to the left of the Hall 8 main entrance. A £1 per item charge applies. Card only.

FIRST AID

In a medical emergency, call the Site Operations Centre on 0121 767 2222 (internal ext. 2222) giving the exact location of the casualty and details of any injuries sustained. Our team will arrange for all necessary assistance. You can also alert the nearest member of NEC staff.

INDEMNITY

The organisers accept no responsibility for statements made in the Event Guide, nor for any errors or omissions that may have occurred.

LOST PROPERTY

Located at the NEC Site Operations Centre on the Piazza, between Halls 1 and 2.

ORGANISERS' OFFICE

Should you have queries in relation to the show, please contact the Enriched Events team in the Organisers' Suite, located next to the main entrance.

REFRESHMENTS

The Coffee Stop is situated towards the centre of the show and offers a selection of hot and cold snacks, drinks and pastries. Alternatively, there are restaurants offering a further selection of food, situated at the back of the hall. All areas have seating. Further refreshments can be found outside the hall in the Piazza area. These include Starbucks, Subway, etc. NB – Please alert the vendors to any special dietary requirements prior to purchase.

SECURITY

In the interests of security, please keep personal belongings with you at all times. Please do not leave luggage or bags unattended. If you come across anything suspicious, please report it by dialing 6666 on the nearest security telephone. Alternatively, please inform the nearest member of NEC staff.

SMOKING POLICY

In accordance with the Health Act 2006, smoking (including the use of electronic cigarettes) is prohibited inside the NEC venue. The nearest designated smoking area to the show is located outside Atrium 1.

TAXIS

There is a taxi rank outside the Piazza main entrance. TOA Taxis: 0121 427 8888.

TOILETS

Toilet facilities are located at the very back of Hall 8, on the far right hand side, next to the World Biogas Summit conference theatre. There are also facilities outside the hall.

PHOTOGRAPHY

The organisers will assume unless otherwise instructed that all of those in attendance are comfortable with either having their picture taken or indeed being filmed at both the World Biogas Expo and AD & Biogas Industry Awards unless instructed not to do so. Should you have any concerns then please contact a member of staff.

AD AND BIOMETHANE: GO FOR GROWTH

As governments respond to the volatile energy markets and alternatives to natural gas become an increasingly attractive option for energy security and decarbonisation, the biomethane industry is growing rapidly and is expected to experience a sustained period of significant development.

This was highlighted most recently in BP's Energy Outlook 2023, which saw projected Compound Annual Growth Rate (CAGR) of the industry in Net Zero Scenarios rise from 10.94% in 2022 to 12.15% in 2023. While this is still some way off the 41.3% CAGR needed to reach full potential by 2030, it clearly indicates the right market signalling. Indeed, there have been significant announcements from major players in the oil and gas industry over the past few months that demonstrate how the biomethane industry is gearing up for expansion over the next few years.

In December 2022 BP purchased Archaea Energy Inc., one of the largest biomethane producers in the US, for £23.3 billion, following the acquisition of a ~29% stake in Gasrec just one year prior. Bioenergy is one of BP's five strategic transition growth engines. Shell also made headlines recently after it completed its acquisition of Danish firm Nature Energy for an estimated \$2 billion. Earlier this month, TotalEnergies expanded its renewables portfolio by purchasing Polska Grupa Biogazowa (PGB) in Poland, a country estimated to have the fourth-largest potential for biogas in Europe. Meanwhile, Goldman Sachs has pledged \$1 billion of investment in European biomethane.

Energy security remains a significant driver in the expansion of the industry, with the European market demonstrating the most significant ambition for growth globally due to the integral role that biomethane will play in achieving the REPowerEU ambitions. REPowerEU increased the EU targets for biomethane production to 35 bcm by 2030 – which would represent a 12.3% share of EU gas demand if the objectives of

energy demand reduction were met. However, recent IEA analysis suggests that while progress has been made, the EU is not yet on track to achieve its renewables targets. Therefore, the Biomethane Industrial Partnership has been set up to help the Commission deliver its ambitions, supporting public-private partnerships.

Further afield, the Indian market is heating up. The Union Finance Minister for India, Nirmala Sitharaman, announced this month that they would be funding more "waste to value" biogas plants under their GOBARdhan scheme. The announcement came as part of her budget speech in which she pledged Rs 10,000 crore funding for 500 biogas plants, with 200 being compressed biogas (biomethane) plants. It presents an exciting opportunity for the sector, and all eyes will be on India to see how the market develops.

While the growth is exciting, it is important to reflect on the key reason an expansion in the market is critical. The Global Methane Initiative (GMI) reports that an estimated 8,409 million tonnes of CO₂e of methane were emitted in 2022, as we are still failing to tackle the ever-pressing issue of methane, a potent short-lived climate pollutant with a greater warming power than carbon dioxide over its first 20 years in the atmosphere. After over a year from the Global Methane Pledge, a recent study by Malley, C.S. et al. (2023) has found that the 30% reduction of methane emissions could be achieved if all signatories of the Pledge were to implement their NDCs to their fullest extent. Simply by treating all readily available organic wastes through AD, WBA analysis shows that biogas alone could deliver 50% of the Pledge. Given the short time we have, it really is a no-brainer.



WORLD BIOGAS
ASSOCIATION

GOVERNMENT ENDORSES NET ZERO ROLE OF AD

Nine months have passed since the last World Biogas Expo and in that time the UK has seen three prime ministers. The cogs of the civil service have continued to turn but needless to say, the changing administrations have led to significant delays on some key pieces of policy. However, several announcements are on the horizon.

The outcome of the Consistency in Household and Business Recycling Consultation is due imminently and is expected to jump start the market for food waste operators. ADBA's Food Waste Working Group have been hard at work coordinating AD site visits for local authorities – just ~35% of whom are currently providing separate food waste collections.

Also eagerly anticipated is the publication of the Biomass Strategy by the new Department for Energy Security and Net Zero (DESNeZ), expected in spring/summer this year. The wide ranging Strategy which will outline how all forms of biomass should be used to support decarbonisation across the power, heat and buildings, industry, transport, agriculture and land use, land use change and forestry, and bioeconomy sectors.

And finally, the DESNeZ is expected to release its response to Chris Skidmore MP's Net Zero Review, Mission Zero, imminently. Lauding the opportunities that net zero can bring to the economy, the Review presented over 120 recommendations for action the government must take if it is to achieve net zero. Skidmore's team have subsequently launched the Mission Zero Coalition to produce themed reports to support the delivery of the Review's recommendations, with dedicated networks covering local authorities and industry among others.

As the deadline for commissioning for eligible tariff guarantee and extension applications under the Non-Domestic RHI looms, 141 biomethane plants are now registered under the scheme. Two years into the Green Gas Support Scheme (GGSS), it has received 20 applications, 14 of which have submitted tariff guarantees, and one plant that is now fully registered on the scheme, but we expect to see this scale up.

While the gas-to-grid expansion of the UK market ticks along, there is still a distinct lack of off-grid support, failing to service communities



that just will not be able to decarbonise through touted technologies such as heat pumps. Indeed, at full potential, AD could provide enough biogas to cover 200% of off-grid energy demand. The Biomass and Net Zero Strategies must urgently recognise the potential of biogas in this area of the UK.

Also disappointing was the decision to include anaerobic digestion technologies in the Electricity Generators Levy. The Levy applies a 45% tax to generators producing over 50GWh of electricity per annum. While it provides some allowances for associated costs, it fails to provide allowances for investment unlike the Energy Profits Levy applied to the oil and gas sector.

Despite delays elsewhere, government published its first Environmental Improvement Plan, marking five years since the publication of the 25 Year Environment Plan. The Plan brings together targets and actions designed to improve the natural world, with clean air, clean water, and maximising resources and minimising waste as some of its key goals. Continued measures to tackle ammonia emissions and agricultural run-off, upgrades to wastewater AD sites, a target to reduce household food waste by 50% and a continued focus on measures to improve soils are all considered in the Plan.

Other key areas of policy to watch out for this year include a continued focus on Carbon Capture and Storage as well as the development of a Land Use Framework for England and work on minimum requirements for carbon codes and the agricultural soil carbon markets.

The Plan actively endorses the importance of AD and its importance as a technology in achieving net zero and the importance of food waste recycling in achieving other environmental goals; *“The measure that will make the biggest impact in driving progress towards our targets is requiring separate food waste collections”*. Furthermore, it recognises the need to manage emissions from digestate in a way that *“is consistent with the continued growth of the digestate market”*. Taken together, these represent a marked shift in favour of the industry and bodes well development, not just in DESNeZ but across government departments.





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WORLD BIOGAS SUMMIT PROGRAMME DAY 1 29 MARCH

All timings BST Doors open – 09:00

09:30 – 09:45

Welcome and Overview of the Global Anaerobic Digestion and Biogas Industry

- **Charlotte Morton OBE**, Chief Executive, **World Biogas Association**

09:45 – 10:20

Mobilising Finance Behind Structural Change and the Role of Biogas in the Drive to Deliver the Global Methane Pledge

Keynote: • **Jennifer Sara**, Global Director for Climate Change Global Practice, **World Bank**

An expert in infrastructure and sustainable development Jennifer Sara will consider how we should be putting our waste to work for green growth.

10:30 – 11:15

The Benefits of Real-Time Monitoring and Data Visualization in Biogas Operations

Keynotes: • **Amir Akbari**, CEO, **anessa** and **Ricky Maylin**, Co-Director, **ONM Energy**

- (Chair) **Giulia Ceccarelli**, Public Affairs Lead, **World Biogas Association**

Experts in plant optimisation and operational improvement Amir and Ricky will share their insights into how to make AD plants 'sing'.

11:15 – 12:15

Big Oil and Biogas

The oil majors see biogas as integral to their becoming integrated energy providers and are engaged in massive mergers and acquisitions to get a foothold in the sector. This Q&A conducted by WBA (World Biogas Association) Chief Executive Charlotte Morton will delve into their respective roadmaps to 2050. **Participants tba.**

- (Chair) **Charlotte Morton OBE**, Chief Executive, **World Biogas Association**

12:15 – 13:15 Lunch Break

13:15 – 14:15

Mobilising AD and Biogas to Deliver the Net Zero Transition

This expert panel considers what is required to accelerate biogas production globally, addressing the issues of policy, regulation and build standards.

- **Maureen Walsh**, Director of Federal Policy, **American Biogas Council**
- **Kunal Shah**, Chief Growth Officer (CGO) & Managing Director, Asia, **Anaergia**

Accelerating Biomethane Production at Scale Globally
Kunal Shah will draw on Anaergia's experience of developing biogas globally and share insight into some of the challenges experienced and the techniques used to overcome them.

- **Dr Gerard J. Ostheimer**, Global Lead for Sustainable Bioenergy, **BioFuture Campaign**

Accelerating uptake of Bio-based Fuels, Chemicals, and Materials
The Clean Energy Ministerial is a high-level international process that enables government collaboration to accelerate the clean energy transition. The BioFuture Campaign is focused on de-risking biomass feedstocks by showing governments how to bring more sustainable biomass to market and by increasing confidence in sustainability governance

- **Nikhil Moghe**, Partner, **KPMG**

The Emerging Biogas Space in India

Nikhil Moghe will give an overview of the potential, ambition and what is required to allow rapid delivery of biogas development

🕒 14:30 – 15:15

Driving the Transport and Industrial Decarbonisation Revolution

Biomethane/renewable natural gas (RNG) as a transportation fuel and industrial energy source offers an economically viable, available for immediate deployment, and scalable solution for decades to come. Hear from Hexagon Agility's experts on driving energy transformation with CNG and LNG natural gas fuel systems for commercial vehicles and Mobile Pipeline® X-STORE® lightweight high-capacity gas distribution modules.

- (Chair) **Wasundara Doradeniya**, Analyst, **World Biogas Association**
- **Filippo Munna**, Director of Mobile Pipeline EMEA, **Hexagon Agility**
- **Milosz Szymaniak**, Sr. Business Development Manager of Commercial Vehicles, **Hexagon Agility**

🕒 15:30 – 16:15

Biogas and Regenerative Systems from Farm to Food Waste

Food systems are linked to many global challenges and are the world's second-largest emitter of greenhouse gas emissions after the energy sector. With the potential to contribute up to 37% of the climate mitigation needed to reach 2030 climate goals (World Economic Forum), biogas has a key role to play. This expert panel will present scalable models from farm to fork.

- (Chair) **Amaya Arias Garcia**, Innovation and Renewable Gas, **Nortegas/ WBA R&D Working Group**
- **Dr Oscar Schoumans**, Senior Scientist, **Wageningen University & Research**
Enhancing Bio-Fertilisers to Meet Local Need
- **Laurence Molke**, CEO, **Cycle0**
- **Erik Pras**, Global Director Marketing & Sales, **Biotec**
Biogas: the Added Value of Bioplastic in Packaging and Waste Management

🕒 16:30 – 17:30

Biomethane – the Foundation Stone of Tomorrow's Green Gases

AD and biogas are increasingly viewed as the key to decarbonising a raft of industrial processes, either acting as baseload to a hydrogen future or delivering platform chemicals for bio-refining and future fuels. This panel considers some of the pathways for biomethane out to 2030 and beyond.

- **Dr Keith Simons**, Chair of Policy & Innovation Technical Committee / Head of R&D Sustainable Fuels, **SHV Energy / World Biogas Association**
- **Cinch Munson**, VP Commercial Development, **Oberon Fuels**
Biogas Pathway to rDME
- **Pierre Emmanuel Pardo**, Innovation Manager, **SUEZ**
Biogas, the Renewable Carbon of Tomorrow

🕒 17:30 Day 1 close

*Schedule subject to change

Scan the QR code to view speaker profiles:

SCAN ME



WORLD BIOGAS SUMMIT PROGRAMME DAY 2 30 MARCH

All timings BST Doors open – 09:00

10:00 – 10:05

Welcome to Day 2

- **Charlotte Morton OBE**, Chief Executive, **World Biogas Association**

10:05 – 10:35

Biogas and Biomethane in Ukraine – Experience, Technologies, Difficulties and Prospects

- Keynote: • **Hennadiy Zhuk**, Professor/Director, **Gas Institute NAS of Ukraine**

The potential of biogas upgraded to biomethane and role in the post-war regeneration

10:45 – 11:15

Outlook for Biomethane

- Keynote: • **Tim Gould**, Chief Energy Economist, **International Energy Agency (IEA)**

Moderated by **Chris Huhne**, Chairman, **ADBA**

11:30 – 12:00

Raising Debt and Equity for Biogas Projects

- Keynote: • **Michael Ware**, **Green Giraffe**

Moderated by **Chris Huhne**, Chairman, **ADBA**

Michael will share his insights into project finance as a world expert on raising debt for biogas projects, having raised over €1 billion to date

12:15 – 13:00

Women in Biogas and the Diversity Dividend

Research tells us that more diverse teams make better decisions and also greater returns on investment. This expert panel will exemplify how women in biogas are making a meaningful impact on the global industry.

- (Chair) **Suad Al Hosni**, Biogas Specialist
Introduction to the Women in Biogas Working Group
- **Leidiane Ferronato Mariani**, Co-founder of the Mulheres do Biogás network, founding partner, **Amplum Biogás**

12:30 – 14:00 Lunch Break

14:00 – 15:30

Brazil, India and Indonesia – the World's Largest Emerging Markets with Ambitious Biomethane Targets

This panel considers the potential, ambition and what is required to enable delivery in the world's largest emerging markets, presenting compelling opportunities for investors, developers and technology suppliers.

- **Gabriel Kropsch**, VP, **ABiogas**
- **Felipe Souza Marques**, Director Presidente, **CIBiogas**
- **K R Raghunath**, Founder & CEO, **KIS Group**
The Energy Transition with Biomethane – Unilever, a Case Study of Asia's Largest Decarbonisation & Energy Transition Project

15:30 Day 2 close

*Schedule subject to change

ENGINE ROOM PROGRAMME DAY 1 29 MARCH

All timings BST

⌚ 10:30

Welcome

- **Chris Huhne**, Chair, **Anaerobic Digestion and Bioresources Association**

⌚ 10:35 – 11:00

Increased Biogas Performance Under Challenging Operating Conditions in New Biofilm-Plug Flow Reactor

Modular systems that can start small and grow to meet demand, integrating a new process design that delivers a 75% increase in biogas production.

- **Sponsored Keynote: Dr Espen Govasmark**, Director of Department Research and Development, **Antec**

⌚ 11:15 – 12:00

The New Frontiers for Biogas Processes and Technology

Research and innovation are the lifeblood of any industry. This expert panel will present the cutting-edge developments for optimising biogas use and production.

- (Chair) **Charlotte Marcel**, Technical Strategy Lead, **Anaerobic Digestion and Bioresources Association**
- **Anna Alessi**, Project & Communications Manager, **Biorenewables Development Centre (BDC)**
An Overview of the Work of the BDC, at the Forefront of Developing the Bio-Circular Economy – and its Current R&D Portfolio in the Biogas Space
- **Philip Marr**, AD Consultant and Manager of Brotherton iFarm, **Agrii**
Forage Crops for AD Biogas Plants: A summary of results from the Brotherton iFarm forage trials and biogas plant to aid decision making on feedstock choices and management practices
- **Alex Lee**, Commercial Director, **Cromwell Polythene**
Food Waste, Which Bag is Best? An exploration of the pros and cons of using compostable and polythene liners to collect food waste

⌚ 12:15 – 13:00

Nutrient Management with Digestate

The world is currently experiencing a global mineral fertiliser crisis, provoked by high energy prices, and farmers are acutely feeling the impact. Digestate is a ready replacement, and the EU is calling for farmers to shift to organic fertilisers wherever possible. This expert panel will present options for effectively incorporating digestate into a nutrient management plan sensitive to environmental need.

- (Chair) **Jo Goad**, Policy Analyst, **Anaerobic Digestion and Bioresources Association**
- **Dr. Keren Tadmor**, Head of Microbiome Department, **SGTech**
- **Dr. Michael Wilkinson**, Principal Environmental Consultant, **Stoford**
- **Tony Wimpenny**, Director, **BohrEnergy** – Optimising outputs with IOT (the internet of things).
- **Dr Gary Lyons**, Senior Scientific Officer, **AFBI**
Environmental Challenges & Potential Solutions for Improved Digestate Nutrient Management

⌚ 13:15 – 13:45

The Role of the Energy Independent Farm in Meeting the COP26 Methane Pledge

In 2023, the world's first biomethane-powered, energy independent farm was delivered by Bennamann in partnership with New Holland, enabling farmers to power their farm and fuel their tractors via fugitive methane emissions captured from the waste streams. This talk will explore the global expansion of the biomethane-powered energy independent farm and its ability to facilitate the 30% methane emissions reduction committed to by 105 countries in the COP26 Methane Pledge.

- (Chair) **Leanne Williams**, Lead Analyst, **Anaerobic Digestion and Bioresources Association**
- **Dr Chris Mann**, Chairman and Chief Technology Officer, **Bennamann Ltd**
- **Gilles Mayer**, Business Director, **New Holland**

18 PROGRAMMES

⌚ 14:00 – 14:45

Life Cycle Assessments of Biogas Production

Sustainability reporting, certification and measures to avoid emissions exceeding regulatory limits, this expert panel considers how to maximise revenues from plant optimisation.

- (Chair) **Leanne Williams**, Lead Analyst, **Anaerobic Digestion and Bioresources Association**
- **Lucy Montgomery**, Senior Consultant, **NNFCC**
Sustainability Reporting – Process and Pitfalls: The requirements for sustainability reporting, the process, and the implications, as well as the most common pitfalls we have observed in the last 6 years
- **Finn Boykew**, Sustainability Manager, **Future Biogas**
- **Tim Elsome**, General Manager, **FMBioenergy**

⌚ 15:00 – 15:45

Ireland – Potential, Ambition Delivery

The European Commission has identified Ireland as the country in the EU with the highest potential per capita to produce biogas. The Irish Government has set up the ambitious target of delivering up to 5.7TWh of biomethane by 2030. This expert panel will present an overview of the Biogas and Biomethane sector in Ireland, including current and planned deployment, key regulatory aspects and funding opportunities available.

- **Andrea Munoz Garcia**, Lead on Ireland, **NNFCC**
An overview of the Biogas and Biomethane sector in Ireland, including current and planned deployment, key regulatory aspects and funding opportunities available
- **Yvette Jones**, Renewable Gas Project Manager, **Gas Networks Ireland**
- **Seán Finan**, CEO, **IrBEA**

⌚ 16:00 – 17:00

Plant Optimisation

- (Chair) **Charlotte Marcel**, Technical Strategy Lead, **Anaerobic Digestion and Bioresources Association**
- **Rory Deledda**, Global Product Manager Biogas Solutions, **Air Products**
Selecting the Right Membrane for the Job: Presentation on the general capabilities of the membrane and the markets where they can serve best. Further examples on how certain designs work and what their benefits are in terms of flexibility, costs and operation.
- **Jean-Philippe Burtin**, President **Biogaz Vallée**, / CEO, **Boréa**
Biogas Labour Market in France: People, professionalism, recruitment and retention – the key ingredient to plant optimisation
- **Mhamed Bendaoud**, Director of Operations, **Biogas View**
Optimising Your Anaerobic Digestion Site with Specialised Software: How digitalisation can help anaerobic digestion operators to optimise their processes and comply with regulatory requirements
- **Ian Hunter**, General Manager Renewables, **Camlin Group**
Maximising Uptime and Efficiency in Biomethane Food-Waste Plants with Real-Time VOC Monitoring:
We present our real-time VOC monitoring technology, BioSpec VOC, and show how the data from such systems can be used to protect and optimise the plant, thereby maximising profitability and enabling the full potential of food waste feedstocks to be realised

⌚ 17:00 Day 1 close

*Schedule subject to change

ENGINE ROOM PROGRAMME DAY 2 30 MARCH

All timings BST

⌚ 10:00

Welcome

- **Chris Huhne**, Chair, **Anaerobic Digestion and Bioresources Association**

⌚ 10:05 – 11:00

Carbon Markets – AD's New Frontier?

This expert panel will consider CO₂, the green carbon molecule, and how it can be tracked, traded and marketed.

- (Chair) **Leanne Williams**, Policy Lead, **World Biogas Association**
- **Nick Primmer**, Policy Adviser, **Future Biogas**
CO₂ Removals Certificates: Insight into accreditation and market for certificates, including the development of appropriate carbon methodologies.
- **John Baldwin**, Managing Director, **CNG Services Ltd**
The Increasing Demand for Bio-CO₂: Presenting the bio-CO₂ ladder and market pulls for bio-CO₂ out to 2050.

⌚ 11:00 – 12:00

Biogas and the Digital Revolution

- (Chair) **Charlotte Marcel**, Technical Strategy Lead, **World Biogas Association**
- **Kristina Rabecaite**, CEO and Founder, **PPAYA Ltd**
Power & Gas Purchase Agreements Incorporating Blockchain: Securing the best price for your energy in the current market.
- **Gareth Selby**, CTO and Co-Founder, **Inclusive Energy**
Digitising Last-Mile Biogas to Unlock Value: This presentation looks at the work of Inclusive Energy that has created digital monitoring and software solutions for small to medium scale biogas in the Global South. Through digitisation Inclusive Energy is able to bring the benefits of operations, maintenance and fault monitoring, payment services and access to carbon credits.
- **Joshua Riddett**, Founder, **Easy Crypto Hunter**
Cryptocurrency Mining on Renewable Energy: Up to £1.27/KWh: Cryptocurrency mining has been historically one of the most profitable ways to monetise your power generation. Easy Crypto Hunter prides itself on making the Cryptocurrency space 'easy' and accessible for investors with no prior knowledge.

⌚ 12:15 – 13:00

Emissions Control

This expert panel will consider the Industrial Emissions Directive and its implications for the biogas industry and consider robust leak detection and repair planning and execution to remain within regulatory limits.

- **Ewart Cox**, MD, **Assentech**
- **Amanda Lake**, Water Process lead for Europe, **Jacobs Engineering**

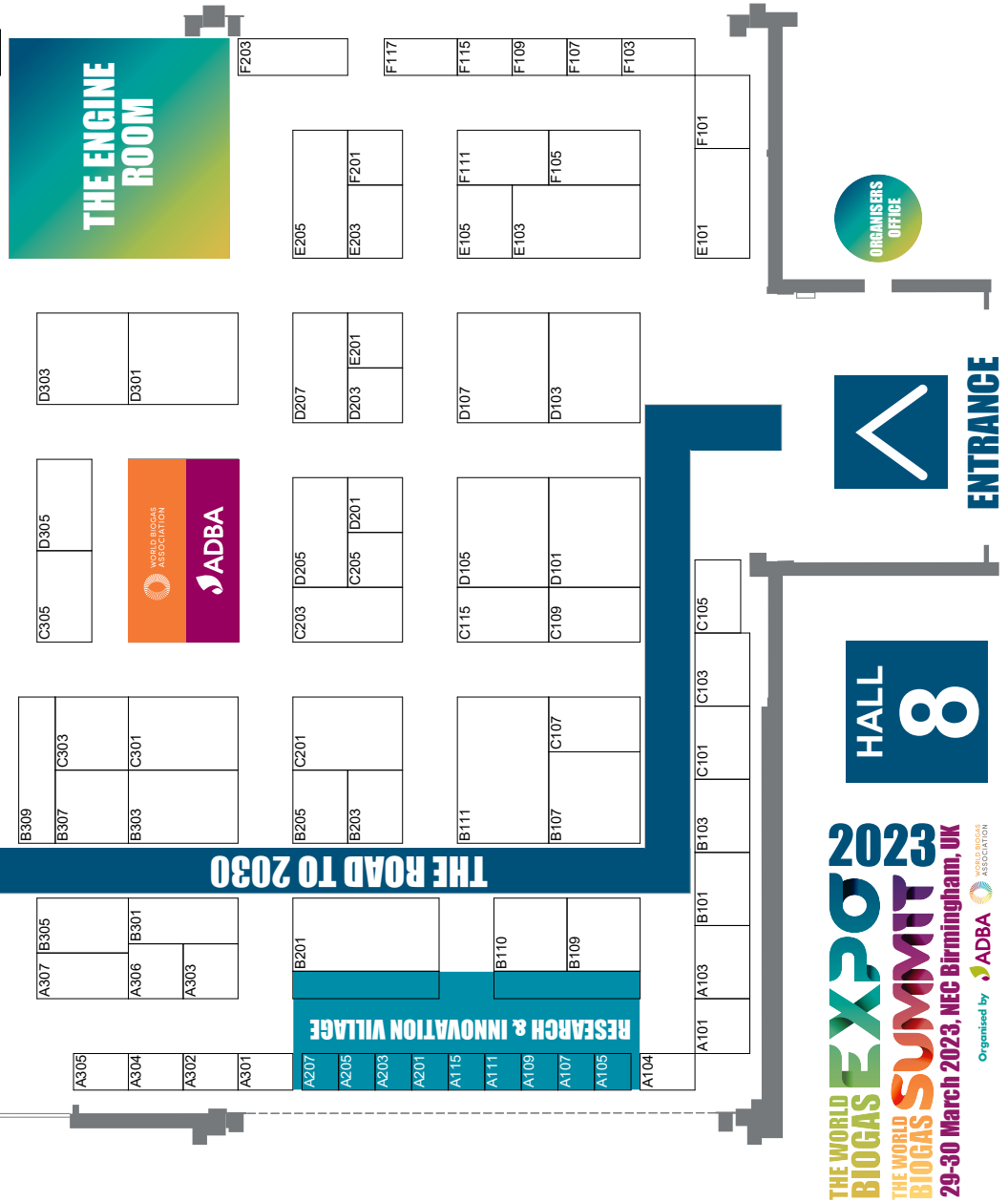
⌚ 13:00 Day 2 close

*Schedule subject to change

Scan the QR code to view speaker profiles:

SCAN ME





A-Z EXHIBITOR LIST

Company	Stand	Company	Stand
2G ENERGY LTD	C401	BMP GREENGAS	C404
AB ENERGY UK LTD	B110	BOHR	A305
A-CONSULT	D101	BORGER UK LTD	D505
ADICOMP	E103	BPC INSTRUMENTS	F107
ADVANCED BACTERIAL SCIENCES	A207	BRIGHT RENEWABLES	C205
AGRICO / WANGEN PUMPS & MIXING EQUIPMENT	A402	BUDISSA BAG (UK & IRELAND) LTD	A502
AGRII BIOGAS SOLUTIONS	F103	C.F. NIELSEN A/S / KINETIC BIOFUEL A/S	F602
AGRIKOMP	E403	CAPSTONE	A500
AGRIVERT	D403	CELTIC CHEMICALS	C405
AIR LIQUIDE	A306	CERES ENERGY	D305
AIR PRODUCTS	B205	CETOGENIX	A201
AIRCO PROCESS TECHNOLOGY	C607	CHEMIRON CARBON	C301
ALLISON ENGINEERING	B301	CLAIRION LTD	B701
ALLTECH	A401	CLARKE ENERGY	D207
ALLVALVES	B103	COLLOIDE ENGINEERING SYSTEMS	B601
ALPS ECOSCIENCE	E101	COMAP GROUP	E503
AMUR	F117	CPL ACTIVATED CARBONS	B107
ANAERGIA	E405	CROMWELL POLYTHENE / BDC	A107
ANDIDRAIN LTD	F502	CYCLEØ	D701
ANESSA	B303	C-ZERO MARKETS	A509
ANTEC	F401	DESOTEC UK	F405
APROVIS ENERGY SYSTEMS GMBH	F101	DMT ENVIRONMENTAL TECHNOLOGY	C409
ARB PROCESS ENGINEERING	C503	EASY CRYPTO HUNTER	E504
AROL ENERGY	E501	EC POWER A/S	F115
ATLANTIC PUMPS	E602	ECO VERDE ENERGY	B201
AXENS	E501	ECOMONDO	A703
BARROW	D305	ECONWARD	E401
BAUER	C603	EDINA	A508
BENAMANN	D303	EKI ENERGY SERVICES LTD	C105
BIO360 EXPO	A803	ELAFLEX LTD	D411
BIOCONSTRUCT GMBH	C303	EMS INDUSTRIES LTD	C107
BIO-DYNAMICS TANKS LTD	C203	ENVITEC BIOGAS UK	C702
BIOG GMBH	E203	ESMIL GROUP	C201
BIOGASJG	D407	EUROTRON INSTRUMENTS (UK) LTD	D409
BIOGEST	E201	EXEON	A101
BIORENEWABLES DEVELOPMENT CENTRE	A105	FERRO BIO GROUP	A303
BIOTEC	E407	FLUID RENEWABLES	D501
BIRCH SOLUTIONS UK LTD	B703	FLUITECO PRETREATMENT HOUSE	F111
BLENDED PRODUCTS LTD	A403	FM BIOENERGY	C109
		FOGMAKER UK & IRELAND	F501

A-Z EXHIBITOR LIST

Company	Stand	Company	Stand
FRESENIUS UMWELTECHNIK	A104	NZERO GROUP	A203
FUCHS LUBRICANTS	F507	OMEX ENVIRONMENTAL LTD	F403
G.A.S.	C305	ONLINE LUBRICANTS	F109
GAS DATA	E604	ORANGE COUNTY	A301
GAS ENGINE EXCHANGE	A307	ORBIS ENVIRONMENTAL AND SAFETY	F504
GASWORLD	A600	P&M PUMPS	D107
GEN-C	B503	PEMO PUMPS	D405
GENESIS	D601	PENTAIR	D105
GENTEC	B111	PERISSINOTTO SPA	D405
GO GREEN PELLETTING SOLUTIONS LTD	A304	PETERS MIXER	C505
GREENCROP	F409	PRIVILEGE FINANCE	B201
GREENLANE BIOGAS	B505	PRM WASTE SYSTEMS	B309
HAHN PLASTICS LTD	A501	PRO GASES UK	B203
HAPPY FISH	A205	QED	B305
HEAT AND POWER SERVICES LTD	E103	REALISTIC AGRI	C602
HITACHI ZOSEN INOVA	A506	ROTO PUMPS	C501
HOFSTETTER ENVIRONMENTAL	A115	ROTO SPIRAL LTD	A503
HOPES GENERATION LTD	C703	RWM & LETSRECYCLE LIVE	A801
HOST GROUP - BIOENERGY SYSTEMS	D201	SAVECO	B401
HRS HEAT EXCHANGERS	B603	SGN COMMERCIAL SERVICES	F105
HUESKER LTD	F407	SGTECH	A111
HUNING ANLAGENBAU GMBH & CO. KG	C103	SILOSTOP AGRI	D503
INSPECTAHIRE	A602	STEVERDING RÜHRWERKSTECHNIK GMBH	C403
KEENAN	A401	SUMA	C101
KIS GROUP	F201	TANK CONSULT LTD	A404
KONRAD PUMPE GMBH	E205	TECNO PROJECT INDUSTRIALE	C601
LANDIA	D103	TEDOM	D507
LAT WATER	D205	TEMA PROCESS BV	C701
LITTLE OAK ENERGY	B101	THÖNI THOENI	F604
LIVELAB	C604	TJETJEN VERFAHRENSTECHNIK GMBH	E205
LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY	D401	TRANSAIRVAC INTERNATIONAL LTD	F203
MARSH COMMERCIAL	C115	ULSTER SHREDDERS	A103
MAVITEC GREEN ENERGY	B109	UMWELT- UND INGENIEURTECHNIK	A601
MBC CHEMICAL INDUSTRIES SA	A303	UNISENSOR CARBOSCAN	D203
MORTIMER ENGINEERING SERVICES / BDC	A109	UZ KIMYA LTD	B307
NEW HOLLAND	D303	VOGELANG	D301
NFU ENERGY	E105	WOLF SYSTEMS CONSTRUCTION LTD	C407
NIJHUIS SAUR INDUSTRIES	B504	ZEBRA EM	A701
NNFC - THE BIOECONOMY CONSULTANTS	A302		

EXHIBITORS • ADBA member • WBA member

2G ENERGY

C401

www.2-g.com

A combined heat and power (CHP) system is the perfect partner for your AD plant. A 2G biogas CHP generates renewable energy via on-site electricity and heat generation, increasing profit and saving on energy costs, and reducing a business's reliance on the national grid.



Advanced Bacterial Sciences Ltd

A207

www.abs.eco

Advanced Bacterial Sciences Ltd is a science-led organisation creating innovative microbial solutions for human and planetary benefit and bringing associated products and services to market. ABS' environmentally benign bacterial products boost efficiencies, cut maintenance / running costs, regenerate natural systems, reduce regulatory infringement and health risks and greenhouse gas emission.



A-CONSULT

D101

www.aconsult.co.uk

Operating across Europe, A-Consult has +30 years of experience installing over 8,500 precast concrete tanks of which more than 1,500 have been used for primary / secondary digesters, digestate storage and mixer / reception tanks.



**agrico/
WANGEN PUMPS**

A402

[www.edie.net/partner/
agrico-engineering-sales-ltd](http://www.edie.net/partner/agrico-engineering-sales-ltd)
www.wangen.com

Agrico, established in 1978, is a specialist in heavy duty pumping and mixing equipment. The main agents for EISELE & WANGEN UK. Our equipment is proven worldwide for its high quality, robust design using the latest technologies and giving long working-life with reliable continuous operation.



AB ENERGY (UK) LTD

B110

www.gruppoab.com

AB is the acknowledged global reference for energy sustainability solutions: natural gas and biogas cogeneration, biomethane and air emissions treatment. For 40 years we have been working alongside our customers helping them to improve their competitiveness with energy savings while reducing their environmental footprint. Our customers rely on us to develop their "better way", so they perform at their best.



Agrii

F103

www.agrii.co.uk

Agrii's national trials network is designed to empower growers and agronomists to farm successfully now and in the future. Our trials help to provide the UK AD industry with a unique insight into commercial feedstock production. Our services include advice on feedstock production, nutrition, protection and improved digestate efficiency.



Adicomp S.r.l.

E103

www.adicomp.com

Adicomp is an Italian company also based in the United States, specialized in the compression and treatment of different types of gas. With 25 years of experience and more than 9,500 skids in operation worldwide, Adicomp is today one of the world's leading players in designing and manufacturing compressor packages for biogas, biomethane, natural gas, landfill gas, carbon dioxide and hydrogen.



EXHIBITORS • ADBA member • WBA member

agriKomp

E403 •

www.agrikomp.com

agriKomp is a leading international technology provider building biogas and biomethane plants, with an established UK service and repowering division. We develop and manufacture all the major components of our biogas plants and offer reliable and proven technology, with over 30 biomethane plants amongst our 1,000+ installations.



Air Products Membrane Solutions

B205

www.MembraneSolutions.com

Air Products designs, manufactures and sells membrane separators for Methane/CO separation and biogas dehydration. We serve as the membrane vendor and work closely with system builders to provide sizing, design recommendations, and technical support to ensure reliable field operation.



Agrivert

D403 • •

www.agrivert.co.uk

Agrivert provides expert engineering, consultancy, and technical and operating solutions for organic waste treatment in the UK and internationally. Agrivert offers a full range of services to solve organic waste management challenges with proven innovative solutions. Having designed, built, owned and operated their own organic waste treatment plants, Agrivert has hands-on experience and knowledge in designing and building new anaerobic digestion plants, enhancing existing front-end systems, and operating anaerobic digestion plants with the utmost proficiency.



Airco Process Technology

C607

www.aircoprocess.com

Airco Process Technology design and deliver next-generation biogas upgrading and carbon capture technologies. We want to be an industrial leader and technological innovator of reliable decarbonization plants supporting the restoration of climate globally. Share your ideas and visions with us - we have the solution.



Air Liquide

A306 • •

www.energies.airliquide.com

Our expertise covers the entire biomethane value chain: from the production of biogas, its purification into biomethane, and distribution to our customers. Air Liquide operates more than 20 biomethane production sites and 23 assets for gas supply sand refuelling stations.



Allison Engineering Ltd

B301 •

www.allison.co.uk

Established specialist for biogas flow metering, analysis, desulphurisation, upgrading. Full UK and Ireland coverage for supply, installation, commissioning and maintenance.



Alltech / KEENAN

D201 •

www.alltech.com/keenan

At Alltech, we help farmers feed the world, raise healthy plants and animals, and protect the environment through nutrition and scientific innovation by driving on-farm productivity and results through maximising feed efficiency.



EXHIBITORS • ADDBA member • WBA member**Alps Ecoscience****E101** •www.alpsecoscience.co.uk

Alps Ecoscience is an environmental consultancy helping AD, biogas and waste management facilities optimise performance to maximise energy release and resource recovery. Our team of biologists, engineers and environmental scientists support clients to maximise the conversion efficiency of feedstock for greater yield and a lower carbon footprint.

**Anessa****B303** •www.anessa.com

anessa is a software company specializing in the biogas industry that has developed robust and sophisticated software products to assist clients in assessing, validating, monitoring, and operating anaerobic digestion plants. These innovative software solutions are computerising the task of anaerobic digestion project assessment and optimisation. Our products are designed to bring intelligence and analytics into the workflow of engineering consultants, project developers and facility owners. Our goal is to help our clients achieve success with their projects as well as provide viable long-term solutions to improve our environment by increasing the number of biogas projects globally.

**Amur****F117** •www.amurenergy.co.uk

AD operator Amur, knows how to drive innovation and unlock the potential of AD. We help boost performance, by optimising gas yields with selective feedstocks and additives. Our AD lab enables our customers to understand the potential of feedstocks quickly. Challenge Amur to get the best from your AD.

**Antec Biogas****F401** •www.antecbiogas.com

Antec is a global energy technology company, headquartered in Oslo, Norway.

Its ground-breaking plug-flow biogas technology turns biomass into energy and biofertilizers in record time. Antec delivers modular AD reactors at scale for industries, farmers and communities anywhere in the world. In addition, Antec develops, builds and owns plants in partnership with biomass owners to accelerate renewable energy production

**Anaergia****E405** • •www.anaergia.com/uk

Anaergia, a global leader in anaerobic digestion, organics recovery and conversion. Our uniquely-capable range of products (including the OREX extrusion press) and over 20 years of experience means we offer complete solutions for the generation of biogas, from agricultural products and manures through to OFMSW, into clean energy, fertiliser and recycled water.

**APROVIS****F101**www.aprovis.com

APROVIS is a manufacturer of innovative technologies for gas treatment and exhaust systems. Our expertise is in gas dehumidification and purification as well as emission reduction of exhaust gases and heat recovery from CHP units. We are experts in specific individual components and compact system solutions.

**Andidrain Ltd****F502** •www.andidrain.co.uk

Andidrain Limited are an industrial services company working throughout the UK and covering all aspects of industrial cleaning for our customers in the AD biogas industry; utilities; construction; industrial; highways; environmental; waste Management and public sectors. We are often approached to undertake difficult, complex and large-scale industrial services work.



EXHIBITORS • ADBA member • WBA member

ARB Process Engineering C503



www.arbprocessengineering.co.uk

Established in 2016 and based in Northern Ireland, ARB Process Engineering Ltd has been involved in over 80 Anaerobic Digestion projects across Northern Ireland, Republic of Ireland and UK ranging from 150KWe to 5MWe both CHP and Gas to Grid.

ARK Agriculture \ Silostop Agri D503



www.arkagriculture.com

ARK Agriculture are the leaders in silage storage, supplying unique sloping and vertical walled silage clamps, OXY SEAL oxygen barrier silage sheets, Secure Cover netting and accessories for biogas and livestock production.

Arol Energy E501



www.arol-energy.com

For the last decade, we have been the French specialist for biomethane production and biogas upgrading. We offer tailored processing units for every project. These units are converting biomass gases into energy. Arol Energy is offering two processing technologies: membrane upgrading and amine scrubbing upgrading.

Atlantic Pumps E602



www.atlanticpumps.co.uk

Atlantic Pumps specialises in pumps for aggressive and abrasive applications, with a focus on being the fastest and the most responsive pump partner in the AD and Biogas industry. Come and have a chat about how we can help.

Axens E501



www.axens.net

Axens group provides a complete range of solutions for the conversion of oil and biomass to cleaner fuels, the production and purification of major petrochemical intermediates, the chemical recycling of plastics, all natural gas treatment and conversion options along with water treatment and carbon capture. The offer includes technologies, equipment, furnaces, modular units, catalysts, adsorbents and related services.

Bauer FAN Separator C603



www.Bauer-at.com

FAN Separator pioneered the screw press separation technique in the 1980s and with continual development, we are the market leaders in liquid/solid separation for biogas, food, paper and agricultural industries. Bauer also provide a comprehensive range of helical rotor and centrifugal pumps, and submersible mixers for the AD market.

Bennamann D303



www.bennamann.com

Bennamann is an SME company developing, manufacturing, marketing and deploying innovative technology for the commercially viable local production, distribution and use of biomethane fuel sourced from the fugitive methane emissions of organic waste, including livestock farm manure slurry. We work in partnership with CNH Industrial and their New Holland brand.

Bio360 Expo A803



www.bio360expo.com

Bio360 Expo is an international assembly point comprising a large international exhibition and multi-track conference programme dedicated to advancing bioenergy, the bioeconomy and atmospheric carbon removal, in order to create a circular and renewable society, in contrast to the current model still dominated by dead-end fossil fuels.

EXHIBITORS • ADDBA member • WBA member

bioconstruct GmbH  **C303** •
www.bioconstruct.com

Over the last 20 years we have built and successfully commissioned over 300 AD plants, as well as several wind and solar projects, developing an extensive infrastructure to optimise their performance, covering all elements of AD servicing, operations and maintenance.

BIO-DYNAMICS TANKS Ltd  **C203** •
www.bio-dynamics.be/en/

Bio-Dynamics is specialised in building tanks for wastewater treatment plants, biogas plants and for industrial and agricultural applications. Bio-Dynamics has over 30 years of experience in the treatment of industrial waste water and environmental engineering. Bio-Dynamics is specialised in the building of round tanks with a diameter starting from 14.5 feet (4.5m) to 164 feet (50m) and up to 66 feet (20m) in height, with or without roof, underground or over ground level.

BioG GmbH  **E203** •
www.biog-biogas.com/en/

BioG, headquartered in Utzenaich in Austria, develops, plans, manufactures and operates technical plants to generate energy from residual materials. Residual materials are materials that were previously unused, such as field residues (maize straw, rape straw, etc.), catch crops and manure. But food waste is also one of BioG's basic materials for the world's most commonly used gas, methane (CH₄).

Biogas Sales UK  **B103** •
www.biogassalesuk.com

Established in 2021 after more than four years in the AD industry supplying bio-CO₂ from AD plants, we are here to advise AD owners on selling their bio-CO₂ to the market, with many contacts in industry looking for an alternative source of bio-CO₂.

BiogasJG B.V. **B103** • **BiogasJG**
D407
www.biogasjg.com

BiogasJG B.V. supports biogas producers globally in managing their desulphurisation process and improving their methane production. We supply additives that can be supplied directly into the digester as well as products that can clean gas as an end-of-pipe solution. With our partners, we provide biological services to improve the biological process and to increase methane production.

BIOGEST  **E201** •
www.biogest.at

BIOGEST is a pioneer brand offering full-service biomethane and biogas plant solutions worldwide and is headquartered in Vienna, Austria. With more than 30 years in the business, BIOGEST has built 170+ projects in over 20 countries. The tried and tested BIOGEST technology is created to customize green gas projects from strategic planning to co-investment, construction, operation, maintenance, and management of plants. BIOGEST engages in converting organic waste into clean and renewable energy to combat the rise in waste produced and satisfy the growing energy demand.

Biorenewables Development Centre  **A109 R&I Hub** •
www.biorenewables.org

The Biorenewables Development Centre (BDC) is an open-access R&D biorefinery centre, working at the interface between academia and industry to convert plants, microbes and biowastes into profitable biorenewable products. The BDC team of biologists, chemists, and business development specialists offers a unique combination of multi-disciplinary expertise coupled with pilot-scale processing capabilities in one coordinated centre.

EXHIBITORS • ADBA member • WBA member

Biotec Biologische Naturverpackungen GmbH & Co. KG **BIOTEC**

E407
www.biotec.de

We develop and produce sustainable biopolymer compounds made from plant-based renewable resources. As a world leader in fully biodegradable materials, our GMO-free and plasticiser-free products return to their source to complete the natural life cycle that ends where it begins.

Birch Solutions UK LTD

B703 •
<https://birchsolutions.co.uk>

The leading provider of servicing, maintenance, consultancy, and expertise, we work with AD plants in multiple sectors to maximise your revenue and reduce input costs through wastewater technical services and maintenance, liquid digestate treatment services and expert biological support.



Bohr LTD
A305 •

www.bohrens.com

With over 100 years Clean Energy, Natural Gas, Hydrogen and Biomethane experience, Bohr has an established R&D legacy for developing technology to improve productivity, reliability and safety. Unveiling advanced systems for gas sampling and analysis in biomethane and hydrogen.



Borger UK Limited
D505 •

www.boerger.uk

Leading pump manufacturer Borger says that at the World Biogas Expo it will continue with the promotion of its range of BioSelect solids separators, macerators, Solids feed technology and its Maintenance-In-Place (MIP) rotary lobe pumps. Borger adds that it receives a consistently strong response to its pumps, Bioslect, designed for the easy and highly effective separation of slurry at farms and AD plants, will once again be the centrepiece of the company's stand.



Blended Products
A403 •

www.blendedproducts.com

We supply high quality specialist chemicals and gases, blending chemical expertise with exceptional service and tailored solutions to a wide range of industries. We ensure a safe, environmentally friendly solution for almost any application requiring the use of chemicals and gases.



BPC Instruments AB

F107
www.bpcinstruments.com

BPC Instruments is a global Swedish-based technology company developing and offering analytical instruments enabling more efficient, reliable, and higher quality of research and analysis for industries in renewable bioenergy and environmental biotechnology. The result is not only higher accuracy and precision, but also significant reduction in time consumption and labour requirement for performing analysis. BPC Instruments' innovative products offer high quality hardware and software based on deep knowledge and experience of target applications. The solutions are the first of their kind, making the company a pioneer in its field. Today, BPC Instruments exports to 60+ countries around the world. BPC is listed on the Spotlight stock market in Sweden.



bmp greengas GmbH

C404
www.bmp-greengas.com

bmp greengas is Europe's leading distributor of biomethane and the expert for green gases. We have been developing efficient solutions for tomorrow's energy supply since 2007. At the same time, we make the energy transition economical and plannable for our partners. As a subsidiary of Erdgas Südwest GmbH and part of the EnBW Group, energy expertise is firmly anchored in our DNA. With this know-how, we want to drive the growth course of green gases internationally together with our partners.



EXHIBITORS • ADBA member • WBA member**Bright Renewables** **C205**
www.bright-renewables.com

Bright Renewables is a global industry leader in membrane biogas upgrading technology. Bright's product and technology portfolio include standardized containerized PurePac biogas upgraders, CO₂ liquefaction technology, virtual pipeline, and carbon capture. Bright also offers service support and predictive maintenance. And bio-CNG and bio-LNG applications in addition to biomethane.

Celtic Chemicals Ltd**C405**
www.celticchemicals.co.uk

Celtic Chemicals Ltd manufacture trace element solutions for biogas plants and stock the Terravis range of Ferric Hydroxides, Enzymes & powdered trace elements. Our liquid and powder trace elements are produced to order to customer requirements with short production and delivery times. Ferric Hydroxides, for plants of all retention times, are available on 2-3 day lead times.

**BUDISSA-BAG****A502**
www.budissa-bag.co.uk

BUDISSA BAG GmbH have been specialists in storage & preservation of forage, grain & moist feeds for over 25 years. Recognised globally with their leading brands of large scale bagging machinery, 7-layer oxygen barrier film, vacuum films and protective covers used on the largest farms & anaerobic digester sites around the world.

**Ceres Energy/Barrow Shipping****D305**
www.ceresenergy.co.uk
www.barrowgreengas.co.uk

We deliver unique opportunities to our clients, combining Ceres' fossil gas expertise with Barrow's comprehensive knowledge of the green gas market.

**Capstone****A500**
www.capstonepowersolutions.co.uk

Capstone Power Solutions works with you to build a smarter energy infrastructure with a range of renewable Capstone microturbine, gas compressors and IOT solutions. Our microturbines cleanly and effectively run on methane gas from landfills, wastewater treatment facilities, food processing facilities and agricultural waste. Rather than simply venting or flaring the methane gas, the microturbines can convert this free fuel to clean and reliable electricity for use at the site or surrounding areas.

**Cetogenix****A201**
www.cetogenix.co.nz

Cetogenix is a clean technology company focused on developing sustainable solutions to tackle climate change at a global scale. Our technology targets the billions of tonnes of organic waste generated world-wide and addresses the growing demand for renewable energy and materials.

**Carbon Zero Markets Ltd****A509** •
www.c-zero-markets.com

C-Zero provides a safe and transparent route to market for producers of RGGOs and REGOs from biogas and all other renewable energy sources. This enables us to help clients understand the range of solutions and options for the pathway to carbon zero who we then work with to best meet their unique business needs and sustainability goals.

**Chemviron Carbon****C301** •
www.chemviron.eu

Chemviron is the European Operation of Calgon Carbon Corporation, which is a global manufacturer, supplier, and developer of activated carbons, filter aids, innovative treatment systems, value-added technologies and services for optimising production processes and safely purifying the environment. Chemviron is committed to ensuring the sustainable provision and availability of reactivated and virgin carbons, a core business for the Company.



EXHIBITORS • ADBA member • WBA member

Clairion Ltd

B701

www.clairion.com

An innovative Climate tech company specializing in gas treatment technology - offering clean and efficient applicable solutions to producers of biogas-based energy and polluting emitting industries. Its patented technology based on novel absorption and separation processes enables customers to optimize processes to better deal with operational, budgetary and environmental challenges.



ComAp

E503

www.comap-control.com

ComAp designs and delivers smart control solutions for power generation and energy management that empower the world's transition to sustainable energy. By combining our expertise, innovative mindset and new technologies, we build highly flexible, intuitive and scalable solutions that support our customer's power control needs anytime, anywhere.



Clarke Energy

D207

www.clarke-energy.com

The largest authorised distributor and service partner for Jenbacher gas engines, projects Clarke Energy, a KOHLER Company, delivers include those incorporating gas engines, biogas upgraders, battery energy storage systems, CO₂ capture and heat pumps.



CPL Activated Carbons

B107

www.activated-carbon.com

A leading supplier of activated carbon purification solutions for the biogas and biomethane industry. In addition to a broad range of FiltraCarb® media, we supply our VOCSorber® mobile filters in various sizes. Spent carbon can be recycled at our thermal reactivation facility in Immingham. ISO9001, ISO14001 and UK REACH accredited.



Colloide Engineering Systems

B601

www.colloide.com

Colloide has over 20 years of success and experience in providing renewable energy solutions to the agricultural, industrial and municipal sectors, supplying innovative solutions and upgrading existing systems. Colloide have developed a digestate treatment system that not only targets effective management of ammonia emissions but by recovering valuable resources also enables a zero-waste solution. The recovered resources are products of agricultural value and present an opportunity to achieve a zero pollution digestate management system.



Cromwell Polythene Ltd

A107 A109 A111

(Shared stand with BDC)

www.cromwellpolythene.co.uk

We are proud to be an independent, family-run business, committed to supply products for the capture and containment of waste and recyclables. It is our mission to be the most resourceful company in plastics, supplying products that help make the world cleaner, greener, and more economical.



EXHIBITORS • ADBA member • WBA member**Cycle0**
D701 •www.cycle0.com

Cycle0 is a leading integrated producer of biomethane for vehicles (Bio-G2V) and grid injection (Bio-G2V). We build, own and operate small to medium-scale, distributed biomethane plants in Europe and beyond. Manufactured by our subsidiary, FNX, our skid-mounted, modular upgrading and liquefaction systems are fully tested in-house; making for easy deployment at any production site. We use proprietary technology to capture and convert distributed and often remote sources of waste feedstock from the Agri-food industry and produce Bio-CNG and Bio-LNG without needing a direct pipeline connection.

**EC POWER A/S**
F115www.ecpower.eu

With over 25 years of experience, EC POWER is Europe's leading manufacturer of combined heat-and-power units in its class. Our XRGI-Æ units offer a high degree of utilisation, making this a cost-effective energy technology. This forms the foundations of XRGI-Æ BIOGENIC, running on biogenic gases generating heat and power on-site.

**DESOTEC**
F405www.desotec.com/en

DESOTEC protects our planet through circular filter solutions for clean water, air and soil. We are a developer, producer and supplier of sustainable mobile purification solutions, based on activated carbon. Our complete solutions include the supply of a range of mobile adsorption systems and the recycling of used activated carbon.

**ECOMONDO**
A703 •www.ecomondo.com

ECOMONDO, the annual and leading circular economy exhibition, takes place in Rimini, Italy from 8-11 November 2022; 14,000m², 1,000 exhibitors and 70,000 visitors, providing opportunities for municipalities, commercial and industrial companies, and service businesses to meet, find new partners and suppliers, and strengthen existing relationships.

**DMT Environmental Technology**
C409 •www.dmt-et.com

DMT is a leading total solutions provider offering gas to grid, bio-CNG, bio-LNG locally or central, or virtual pipeline options. Our technologies, products and services offer the best solutions in biogas conditioning and upgrading.

**ECONWARD**
E401 •www.econward.com

ECONWARD has shaped a way to tackle organic waste challenges by integrating its BIOMAK® at the front end of a waste processing site such as an Anaerobic Digestion plant to optimise and increase energy production. ECONWARD's goal is to build a solid, profitable bridge between both waste and energy sectors.

**Edina**
A508www.edina.eu

Edina is a turnkey energy solutions provider. We are the authorised distributor for MWM hydrogen-ready gas engines and a tier 1 system integrator for battery energy storage solutions.



EXHIBITORS • ADBA member • WBA member

EKI Energy Services Ltd

C105

www.enkingint.org

EKI Energy Services Ltd. (EnKing International) is a leading Carbon Credit Developer & Supplier across the globe. EKI is 14+ years old and is global market leader with its deep expertise. The company works in the realm of climate change, carbon offset solutions and carbon asset management. The company is today present in 16+ countries and has 3000+ clients across 40+ countries worldwide. As on date, EKI has supplied over 180+ million offsets.



ESMIL Group / Prodeko-Elk

C201

www.esmil.eu

Esmil Group is a leading global manufacturer of equipment for wastewater treatment and a provider of advanced water treatment and "Zero Waste" solutions for various industries. Esmil has gained vast experience in the field of digester treatment. From bench scale studies, right the way through to full scale size plant we strive to offer BAT (Best Available Technology) using state of the art membrane separation and dewatering processes.



ELAFLEX LTD

D411

www.elaflex.co.uk

ELAFLEX is a leading international specialist for refuelling equipment and safe connections for the transfer of dangerous goods and sensitive fluids. Our hoses, couplings, expansion joints and nozzles provide quality engineered, durable products, built to last. A sound investment both in terms of performance and total lifetime cost.



Eurotron Instruments (UK) Ltd

D409

www.ei-uk.com

Eurotron Instruments are the market leaders and experts in Gas and Emissions Analysers and test equipment which include pressure and temperature calibrators, to optimise process operations, understand and reduce emissions and work in a safer environment.



EMS INDUSTRIES LTD

C107

www.emsindustriesltd.com

At EMS Industries Ltd we manufacture ram pumps for the wastewater and the biogas industries, specialising in performance, quality and durability; each pump is customised for the individual job to ensure maximum efficiency.



Exeon Limited

A101

www.exeon.co.uk

Exeon is a family run company that specialises in dust extraction and odour control for the waste industry.



EnviTec Biogas UK Ltd

C702

www.envitec-biogas.co.uk

Based in the heart of Staffordshire since 2007, we offer design, construction, installation, service and maintenance of biogas plants and technical equipment, utilising all aspects of organic input substances.



Fluid Renewables

D501

www.fluidrenewables.com

Fluid Renewables mission is to drive environmentally friendly renewable energy sources forward. Our innovative products include supportive probiotic additives that increase organic waste to energy conversion within anaerobic digestion to optimise biogas production. We support our partners worldwide advancing green energy projects towards a more sustainable and net zero future.



EXHIBITORS • ADBA member • WBA member**Fluiteco S.r.l****F111**www.fluiteco.com

With more than 25 years of experience and hundreds of satisfied clients all over the world, Fluiteco continues to be the landmark with his specialized wastewater filtration treatment equipment. Thanks to our professional R&D team, our range is always evolving and constantly improving, in fact we represent the best choice in terms of quality and reliability. The extraordinary performances of our machines are ensured by the quality of our components and by our highly professional production team.

**Fresenius Umwelttechnik****A104**www.freseniusinstruments.com/en

In its more than 175-year history, Fresenius has developed into a leading group of companies in Germany for chemical, biological and physical analysis. The company also offers consulting services. As one of the leading international suppliers of gas analysing equipment for industrial applications, we are guided by clear values: quality, customer orientation and innovation. We focus on technologically innovative and high quality solutions for the sustainable economic success of our customers.

fresenius
Umwelttechnik**FM BioEnergy****C109**www.fmbioenergy.co.uk

FM BioEnergy provides a range of products and services to help biogas operators gain greater control of the AD process. From trace elements, enzymes and silage additives to biological consultancy, gas leakage detection and feedstock supply, we support our clients to maximise their methane yields and optimise their biogas output.

**FUCHS LUBRICANTS (UK) PLC****F507**www.fuchs.com/uk

Keeping the world moving, that is what drives us. We don't just develop lubricants; we develop efficient and sustainable lubrication solutions. We partner with our customers, provide insights and move their world - with unconditional reliability. It is the basis of our work, aspiration, and promise, both internally and externally.

**Fogmaker UK & Ireland****F501**www.fogmaker.uk

Fogmaker Fire Suppression Systems have over 250,000 applications Worldwide including Automotive, Passenger Transport, Waste Management, Construction, Agricultural, Mining, Forestry, Marine, Generators and Rail. We are very pleased to announce that we have recently saved a Bio Generator Plant from destruction by extinguishing a fire in the engine generator room.e.

FOGMAKER**G.A.S.****C305**www.gas-dortmund.de

G.A.S. is a German based manufacturer of analytical equipment that serve as on-line monitors on landfill/ biogas plants and specifically test for siloxanes or terpenes and by this assure the process safety avoiding engines breakdowns and downtimes. The unique analytical solution became ASTM-standard D-8455 in 2022.

**Gas Data Ltd****E604**www.gasdata.co.uk

Since 1991, Gas Data has been manufacturing instruments that analyse gases for industrial applications. By listening to our customers and focusing on specific applications, we are constantly developing and improving innovative fixed and portable instruments that are recognised performance leaders in their fields.



EXHIBITORS • ADBA member • WBA member

Gas Engine Exchange

A307 •

www.gasengineexchange.com

Gas Engine Exchange is an equipment supplier specialising in zero hour, surplus and used gas engines. With twenty years experience in the energy industry, we have a wide customer base across the world and can find the equipment you need for your project or sell the surplus assets you have.



GENTEC CHP

B111

www.gentec.cz/en

We are a Czech manufacturer of cogeneration units in power ranges from 50 kW to 10 MW for natural gas, biogas, and other gases. Our company believes that cogeneration is an important part of the future of energy sector. Innovation and new technologies are close to us. We build our units from the highest quality components from renowned world manufacturers. We are constantly striving to move forward and improve our products. We place emphasis on flexibility and functionality of structural design of our units.



gasworld

A600

www.gasworld.com

gasworld is the focal point for global industrial gas news, views and intelligence" – a mission statement we've upheld since 2003. We provide current and topical news on our industry leading media platform, as well as hosting globally recognised events and providing in depth market analysis via our Business Intelligence unit. Our ever-evolving brand and products ensure that we're the authoritative voice keeping you at the forefront of the industrial gas sector. In 2019 gasworld launched H2 View to address the growing interest in the Hydrogen Economy around the world.



Go Green Pelleting Solutions Ltd

A304 •

www.gogreenpelletingsolutions.co.uk

Go Green Pelleting Solutions can Design , supply and install all Pelleting and process lines for AD, Biomass and Feedmills throughout the UK. We bring solutions to clients waste streams by adding Value by way of pelleting to use as Fertiliser, Combustion or Animal Feed.



GEN-C

B503 •

www.gen-c.co.uk

GEN-C is a gas engine spare parts and support company for leading brands MWM, MAN and Jenbacher, and the exclusive UK distributor for Motortech and RS Motor, supplying genuine parts, systems and upgrades for gas engines, specialising in the AD sector.



Greencrop

F409 •

www.greencrop.co.uk

Greencrop supplies the unique Sepcom range of horizontal and vertical separators for digestate, slurry and sludge waste. Sepcom submersible and external pumps and mixers. Sepcom micro filters for removal of fine particles. We also manufacture Dribble Bars and Slurry Tankers to specific requirements.



Genesis Agri Ltd

D601 •

www.genesisagri.co.uk

Genesis Agri Ltd supply and distribute the Industry leading nutrient management technologies including Livestock Water Recycling, BAUER-FAN Group and Mastek Slurry Solutions. Genesis Agri Ltd cover the UK & Ireland.



Greenlane Biogas

B505 • •

www.greenlanerenewables.com

Greenlane is a pioneer in the rapidly emerging renewable natural gas (RNG) market. As a leading global provider of biogas upgrading systems, we help waste producers, gas utilities, and project developers do more with biogas, helping them turn a low-value product into a high-value low-carbon renewable resource.



EXHIBITORS • ADBA member • WBA member

HAHN Plastics Ltd
A501
www.hahnplastics.com

HAHN
PLASTICS

For over 25 years, HAHN has been the European leader in the production of recycled plastic products. Combining technical expertise with state-of-the art technology, we develop high quality, innovative products from waste plastics, including our hani® Biofilter Raised Floor, which supports the process of deodorisation in many industrial settings.

Happy Fish
A205
www.happyfish.bio

happyfish
WE CARE

Bio based development and production company from Latvia, EU. We develop and produce niche bio based chemical products and services.

Heat & Power Services Ltd
E103 •

HPS
Heat & Power Services

www.heatandpowerltd.co.uk

Heat and Power Services (HPS) Limited, based in the South of England, UK, is a market-leading provider of maintenance services within the natural gas and biogas sectors with field engineering support UK wide.

Hitachi Zosen Inova | **Hitachi Zosen**
AG | INOVA

A506 • •
www.hz-inova.com

Hitachi Zosen Inova specialises in the production of turnkey dry and wet AD plants coupled with standardised gas upgrading plants for biomethane production. Our gas upgrading units are assembled and tested in our Qualimétha certified factory in Germany and then dispatched for fast completion and smooth commissioning on site. The engineering of our plants ensures a high performance process for optimal profitability. Our references encompasses more than 100 plants in operation in Europe as well as in USA/CAN.

Hofstetter Environmental
A115
www.hofstetter-gt.ch

HOFSTETTER

Hofstetter Switzerland is a company who is present on the market with environmental solutions since 1970. Invented concept of flare, biogas conditioning, cogeneration and many other technologies like biogas upgrade, CO₂ liquefaction and CO₂ trapping.

Hopes Generation Ltd
C703
www.hopesgeneration.co.uk



Mechanical and Electrical support in the Biogas power generation sector.

HoSt Group
D201 •
www.host.com

HoST
BIOENERGY SYSTEMS

HoSt Group, a global family company since 1991, provides biogas plant solutions for every industry and waste. HoSt developed a full-technology and maintenance service suite built around bioenergy: anaerobic digestion, biogas upgrading, CO₂ capture and liquefaction, bio-LNG, and renewable heat and electricity through thermal conversion of (wood) waste and RDF.

HRS Heat Exchangers
B603 • •
www.hrs-heatexchangers.com

HRS
heat exchangers

HRS operates at the forefront of heat transfer technology, focusing on managing energy efficiently. We are committed to providing innovations that help AD plant operators maximise energy consumption, waste and CO₂, whilst lowering fuel bills and improving final product quality without harming the environment. With 40 years' experience in the anaerobic digestion and biogas sector, specialising in the design and manufacture of an extensive range of turnkey systems and components, incorporating our corrugated tubular and scraped surface heat exchanger technology, HRS units are compliant with global design and industry standards.

EXHIBITORS • ADBA member • WBA member

Huesker Ltd

F407

www.huesker.co.uk/agriculture/applications

Huesker's synthetic fabrics are synonymous with supreme quality and durability. Over the past 30 years, the company has evolved into a supplier of full range systems for the agricultural market. Our many years of experience and in-house manufacturing facilities enable us to provide a rich variety of top-performance products.



Konrad Pumpe GmbH & Tietjen Verfahrenstechnik GmbH

E205

www.pumpegmbh.de

Founded in 1830 as a smithy, today Konrad Pumpe GmbH is an innovative specialised company for plant engineering, producing customised equipment and machine systems for biogas plants, primarily processing steel and stainless steels.



Huning Anlagenbau GmbH+Co.KG

C103

www.huning-anlagenbau.de

HUNING Anlagenbau GmbH & Co. KG, based in Melle (Germany), is an internationally active company of the HUNING Group. In the field of environmental technology and biogas, HUNING offers individual concept solutions and designs with a focus on feeding, crushing and conveying of biomass, treatment and intermediate storage of sludge and heavy-flowing bulk materials.



Landia

D103

www.landia.co.uk

Landia is a worldwide supplier of Chopper Pumps and Mixer Solutions with its main businesses being wastewater, anaerobic digestion/biogas, agriculture and recycling of waste products.



Inspectahire

A602

www.inspectahire.com

Provider of Methane emission surveys throughout the UK as well as providing a range of inspection services utilising ATEX instruments, ROV's and laser scanners. Our expertise is used by many in the Renewables industry as the technology has diverse applications.



LAT Water

D205

www.latwater.com

LAT Water is a multi-award-winning British company, established to tackle two of the world's most critical needs: CLEAN WATER and ENERGY. With the rising environmental impact of wastewater, our primary objective is to deliver energy use reduction, lower our clients' costs and decrease pollution through our innovative treatment technologies.



KIS GROUP

F201

www.kisgroup.net

KIS Group is Asia's leading & most awarded company founded in 2006. With 17 years of proven track record of providing sustainable clean technologies for Biogas, BioCNG®, wastewater & water treatment. We also provide consultation on Biofuels, carbon footprint reduction & achieving Zero Carbon Footprint.



LITTLE OAK ENERGY

B101

www.littleoakenergy.co.uk

LITTLE OAK ENERGY helps you make the most from biomethane. We help producers and investors understand the green gas market and tailor bespoke strategies to fit each client's individual mix of needs and opportunities. We support gas consumers as they incorporate biomethane into their journey towards Net Zero.



EXHIBITORS • ADBA member • WBA member**Livelab Ltd****C604**www.livelab.co.uk

Leading independent laboratory providing analysis to agriculture and renewable energy sectors

**Luxembourg Institute of Science and Technology (LIST)****D401**www.list.lu

The Luxembourg Institute of Science and Technology (LIST) is a mission-driven Research and Technology Organization (RTO) that develops competitive and market-oriented product/service prototypes for public and private stakeholders. With its 650 employees, 75% of whom are researchers or innovation experts from all around the world, LIST is active in the fields of informatics, materials, space and environment and works across the entire innovation chain: fundamental/applied research, incubation and transfer of technologies.

**Marsh Commercial****C115**

www.marshcommercial.co.uk/for-business/renewable-energy-insurance

We're a specialist renewable energy insurance broker. We know anaerobic digestion and biogas is a complex and specialist market and we understand the challenges and risks your business faces, so we're able to offer expert advice and arrange the right renewable energy insurance to protect your business.

**Mavitec Green Energy****B109**www.mavitecgreenenergy.com

Mavitec Green Energy is specialized in food waste and depackaging solutions that provide the highest separation results in the market. The Paddle Depacker separates the organic material from the packaging and complies to latest European legislation. The Paddle Depacker produces the cleanest organic output (>99,5% clean!) which is extremely suitable for biogas installations.

**MBC Chemical Industries SA / FerroBio Group****A303**www.ferrobiogroup.com

FerroBio Group is a mining technology startup set by MBC Chemical Industries SA Group. We are a Spanish company (funded by national investors) that extracts, converts, develops and supplies iron hydroxides to provide solutions for the industries of biogas and water treatment and to work out the foul odour related issues. The mineral is extracted in the mine from high-quality veins. Its subsequent thermal treatment and micronisation are carried out at our facilities.

**New Holland Agriculture****D303**www.newholland.com/uk

New Holland is a global full-line agricultural manufacturer. For more than 125 years, New Holland has been developing machinery for farmers to do more with less. The company's approach to sustainability is focused on products, technologies, services and clean energy innovations. All ensure the sustainability and resilience of farmers' businesses.

**NFU Energy****E105**www.nfuenergy.co.uk

As part of the NFU, we offer advice and assistance with pretty much any energy related task specialising in Agriculture and Horticulture but there are three core elements: 1. Contract finder which ensures you get the best energy deals, fixed or flexible, whatever your energy use. 2. Renewables Energy Solutions ensuring to get you the best return on renewables project, including feasibility, installation and troubleshooting plus successful scheme accreditation and fuel sustainability reporting. 3. Energy efficiency guidance to help reduce the amount of energy you use and therefore save you money.



EXHIBITORS • ADBA member • WBA member

Nijhuis Saur Industries

B504

www.nijhuisindustries.com

Nijhuis Saur Industries provide solutions for sustainable and resilient water use, energy and resource recovery. Specialists in wastewater and biogas treatment, a leading contractor in biological wastewater treatment and biogas conditioning and offer solutions to recover nutrients from waste material; agricultural residues, green waste, sewage sludge, municipal & Industrial waste/water.



Online Lubricants

F109

www.online-lubricants.co.uk

Online Lubricants is the UK distributor of Petro-Canada lubricants. Petro-Canada provide industry leading lubricants for the power generation industry and specialise in boosting productivity and reducing downtime..



NNFCC - The Bioeconomy Consultants

A302

www.nnfcc.co.uk

NNFCC is a strategic business consultancy covering all bioeconomy sectors. The company mission is simple - to provide clients with a strategic view of feedstock, technology, policy and market development across the bioeconomy, enabling them to make informed business decisions and develop sustainable business strategies.



ORANGE COUNTY

ORANGECOUNTY
co.uk

A301

www.orangecounty.co.uk

Operating since 1994, ORANGE COUNTY support our clients nationally from our office and distribution premises in the North-East of England. OC are the sole UK distributor for Brugg flexible metallic pipe systems for industry. Brugg Pipe systems are market leaders for internal digester heating systems in Germany & supply approx. 250 systems per year & have over 2,500 successful system installations in biogas plants throughout Europe. Orange County supply and install the internal heating coils & bracketry for optimum heat transfer, up to 400% more efficient than plastic pipe systems.

nZero Group

A203

www.nzerogroup.com

nZero Group combines Thyson Technology and Orbital Gas Systems, two of the UK's most respected measurement and control partners across the natural gas, petrochemical, biomethane and decarbonisation sectors. We have delivered over half of the UK's biomethane gas to grid injection packages and delivered the first in-hydrogen blending for gas networks.



Orbis Environmental and Safety

F504

www.orbisenvironmental.com

We specialise in high-risk sectors to identify and implement safety arrangements around dangerous substances, explosive atmospheres, and exposure to toxic gases (H₂S). ORBIS are a Specialist Consultancy working with our clients to do as much of the work as we can, not just sending a list of things to do themselves.



OMEX Environmental Ltd

F403

www.omexenvironmental.com

OMEX Environmental Ltd work closely with Industry to reduce environmental impact, treat waste and help optimise operational performance.



EXHIBITORS • ADBA member • WBA member

P&M Pumps Limited  **D107**

www.pumpmix.co.uk

P&M Pumps are the sole UK distributor of Vaughan Co products including Chopper Pumps, and the Rotamix Tank Mixing system. Celebrating a relationship of thirty years P&M and Vaughan Co products are widely used in the UK AD and municipal waste water sectors providing pumps and sludge tank mixing systems that are proven to increase active working volume in digesters and elevated levels of gas production.

PENTAIR  **D105**

www.pentair.com

PENTAIR has more than 35 years of experience in project based modular systems engineering in Venlo, the Netherlands and Fredericia, Denmark, making us your leading partner of choice for advanced biogas upgrading systems.

Perissinotto S.p.A. - Perissinollo s.p.a.  **PEMO PUMPS** **D405**

www.pemopumps.com

PEMO PUMPS, headquartered in a 12.000 m2 factory complex in Italy, is world renown for designing and manufacturing customized centrifugal pumps for the most difficult abrasive and/or acid applications. Since its foundation in 1947, we have built and shipped over 41.000 pumps. We have representatives and agents around the world and two subsidiaries in USA and Brazil.

Peters Mixer  **C505**

www.peters-mixer.com

Manufacturer for agitator technology in the sector of agriculture and biogas.

Privilege Finance and Eco Verde Energy (EVE)  **B201**

www.privilege.finance
www.ecoverde.energy

Privilege: Privilege Finance is a climate change reduction finance provider with over 20 years of experience in the renewable energy sector. The company specialises in financial and technical Anaerobic Digestion and Energy from Waste expertise and the promotion of sustainability across sectors. Privilege has invested over £600 million in renewable energy.

EVE: Eco Verde Energy (EVE) supplies operations and management services for AD plants in the UK. EVE is a cost-effective and tailored option for AD plant owners looking to outsource operations to an experienced team of specialists. EVE also offers consultancy and advisory services to AD plants looking to improve internal processes or expand.

PRM Waste Systems  **B309**

www.prmwastesystems.com

AT PRM Waste Systems we harness the benefits of the very best material processing, volume reduction and recycling equipment to enable you to optimise your waste segregation and handling. Our industry-leading expertise has been built over 25 years through our provision of quality equipment, our innovative approach to challenges and a commitment to maintaining outstanding levels of customer service.

Pro Gases UK  **B203**

www.progasesuk.com

Pro Gases UK (PGUK) is one of the largest independent and family run, beverage and industrial gas suppliers in the UK. We work with biogas plants nationwide using our in-house team and transport, to off-take Carbon Dioxide and deliver it to customers.

EXHIBITORS • ADBA member • WBA member

QED Environmental Systems Ltd



B305 •
www.qedenv.com

QED Environmental Systems are a global, market leading company involved in the design, manufacturing, servicing and support of gas analysis and detection instrumentation, alongside precision engineered pumping solutions, with experience spanning over 40 years. With a huge passion for innovation, accompanied by a strong desire for A+ Customer Service, our Geotech branded Gas Analysers (both portable and fixed) have been used on BIOGAS and BIOMETHANE plants for over 15 years, built on the principles of our Landfill Gas Analysers. Instrumentation numbers span thousand's for portable equipment and high hundred's for our Fixed Position Systems.

Roto Pumps Ltd



C501
www.rotopumps.co.uk

Roto Pumps UK, with its huge warehouse and assembly infrastructure in Manchester, caters to the growing markets of the UK and Scandinavian countries and has supplied more than 20,000 pumps to 25+ industries. The company manufactures Positive Displacement Pumps such as Progressive Cavity Pumps, Twin Screw Pumps & AODD Pumps.

Roto Spiral Ltd



A503
www.rotospiral.co.uk

We supply into pharmaceutical, construction, energy, biomass, food production, animal feed, animal nutrition, animal bi-products, water and waste water treatment, waste industry, agricultural machinery production.

RWM & Letsrecycle Live



A801
www.letsrecycle.com

RWM & Letsrecycle Live returns to the NEC, Birmingham, UK for 2023 – delivering the UK's largest event for the recycling, resource, waste, and wider environmental services sector.

SAVECO Environmental Ltd



B401 •
www.saveco-water.co.uk

SAVECO Environmental is a member of the globally operating WAMGROUP, a market leader in bulk materials handling since 1968. SAVECO supplies state-of-the-art sludge, slurry and effluent pre-treatment solutions to customers across the United Kingdom and the Republic of Ireland for use in biogas plants, livestock farming, municipal and industrial wastewater sectors.

SGN Commercial Services



F105
www.sgncommercialservices.co.uk

SGN Commercial Services - part of the SGN Group, who own and operate the gas distribution networks in the south of England, Scotland and west of Northern Ireland - offers a wide-range of specialist and gas-related professional services countrywide.

SGTECH



A111 • •
www.sgtech.co.il

SGTech provides a breakthrough end to end solution for biogas production and livestock waste treatment. The main goal of the company is to enable economically feasible, carbon-neutral circular economy solutions. The technology is based on a data-driven Integrated Ecosystem Solution (IES) that manages the microbiological anaerobic digestion process. An intelligent algorithm controls the process to ensure high output while reducing time-consuming manpower.

Silostop Agri Ltd



D503
www.silostop.com

Silostop Agri is the global leader in all things silage, from silage clamps to high oxygen barrier (HOB) silage films and covers, employing an expert team worldwide to help our customers produce high-quality silage year after year.

EXHIBITORS • ADBA member • WBA member

**Steverding
Rührwerkstechnik
GmbH**

C403

www.ruhrwerkstechnik-steverding.de

Steverding Agitator Technology is an expert in agitators. High technology is expected today at all levels of power generation. Steverding Agitator Technology can boast more than 20 years of experience in the manufacture of agitators. The continuous optimization and analysis of our products together with constant technical innovation show best results. Today, we are partners and system component suppliers of leading biomass facility manufactures in Germany, France, United Kingdom, Lithuania and many other countries.



**TEDOM
D507**

www.tedom.com

TEDOM is a Czech engineering company. The company's activities include the development and production of cogeneration units with gas combustion engines. The company's portfolio also includes comprehensive services for modern decentralised energy. TEDOM has four production and development plants in the Czech Republic and several international sales offices. We operate in Germany, Poland, the USA and Slovakia. The entire TEDOM Group has over 800 employees.



**SUMA Rührtechnik
GmbH**

C101

www.suma.de

SUMA is a German manufacturer for agitators and pumps for biogas, industrial applications and agriculture. We've been delivering agitation and pumping solutions for over 65 years.



**TEMA Process BV
C701**

www.temaprocess.com

TEMA Process BV is a specialized company with management and employees that have many years of experience in the design and manufacturing of thermal and physical process equipment, mainly fluid bed dryers/coolers with associated equipment & plants.



**Tank Consult LTD
A404**

www.tankconsult.com

Tank Consult have over 35 years of expertise in the design and construction of reinforced concrete insitu poured circular tanks, along with the design, manufacture, installation of Glass Coated, Fusion Bonded Epoxy Coated and Stainless Steel tanks, all used for biogas plants, municipal and industrial waste water treatment applications.



**Thoeni
Industriebetriebe
GmbH in association with
Target Renewables Ltd
F604**

www.thoeni.com/en/energy-engineering/

Thoeni supplies bespoke large-scale AD facilities. We specialise in high-solids AD to minimise water and liquid problems while maximising digestate quality and useability. Thoeni works worldwide with exemplar reference projects in the UK and elsewhere.



EXHIBITORS • ADBA member • WBA member

**Tietjen
Verfahrenstechnik
GmbH**



E205

www.tietjen-original.com/en/

Tietjen Verfahrenstechnik GmbH is a North German company in the field of mechanical and plant engineering. We have been developing, designing and producing hammer mills and individual particle size reduction technology since 1959. Complex disintegration systems are our speciality. Our machines convert biowaste like food waste or agricultural waste right up to biomass for the fermenter of the biogas plant. We develop your solution and take care of the implementation – worldwide.

**Transairvac
International
Limited**



F203

www.transairvac.com

Transairvac have been supplying biogas compressors and boosters to the biogas and waste water industry since 1996. We have compressors and side channel boosters, all ATEX 2G or 3G. These can be supplied as bare shaft machines or complete packages. We recently introduced the BELLIN range of progressive cavity pumps for Biogas applications.

**Ulster Shredders
A103**



www.ulstershredders.com

Ulster Shredders have over fifty years experience in this field, they currently manufacture a range of industrial shredders & ancillary items tailored to meet the needs of their customer requirements. So, whether it, is for a SME or a nationwide recycling organisation, we can design and deliver a shredder that, is perfectly adapted to your working environment and capable of handling whatever you need to shred.

**Umwelt- und
Ingenieurtechnik
GmbH Dresden**



A601

www.uit-gmbh.de

Umwelt- und Ingenieurtechnik GmbH Dresden (UIT) is an internationally active, innovative company. We offer customised solutions in the fields of plant engineering, water technology and mineral raw materials. UIT (www.uit-gmbh.de) is a subsidiary of the General Atomics Europe Group and thus part of the globally active General Atomics group. (www.ga-europe.com)

**Unisensor
Sensorsysteme
GmbH**



D203

www.unisensor.de

UNISENSOR Sensorsysteme GmbH is a manufacturer of innovative technologies for process analytics and the quality control of gases, liquids and solids. We provide cutting-edge products that set new standards in high speed and precise automated process inspection and quality control. Our product portfolio includes internationally patented systems for the industrial gases, beverage bottling, brewing and recycling industries.

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Vogelsang offers a comprehensive portfolio of biogas technology for the entire range of fermentation - from pump technology to maceration, disintegration technology and solid matter feeding systems. Together with our customers, we continuously develop our biogas technology, adapting it to deliver solutions for the efficient production of biogas.

EXHIBITORS • ADBA member • WBA member

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With over 50 years of experience, we are specialized in the construction of round reinforced concrete tanks for liquids storage. We can build digesters, storage tanks or slurry tanks up to 50 m diameter. We have a vast portfolio of completed projects in both UK and on the European continent.

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We specialise in high-risk sectors to identify and implement safety arrangements around dangerous substances, explosive atmospheres, and exposure to toxic gasses (H2S).

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FOUNDED

September 2009

VISION

To see the full potential of the UK AD industry realised so it can help the UK to achieve its emissions targets and other policy goals, creating a truly circular economy.

MISSION

To act as the voice for the UK AD industry and companies and organisations working on novel technologies and processes that complement the AD process and products. With our members we promote the economic and environmental benefits of AD in the UK.

MEMBERSHIP BENEFITS

- Access regulatory and policy advice
- Network and do business
- Keep up to date with industry news
- Contribute to shaping UK AD policy
- Share ideas
- Learn best practice
- Find out about technical developments and innovation

Join the AD community – we are the energy behind the AD revolution. For more information, visit the ADBA stand.



FOUNDED

November 2016

VISION

A world in which biogas is recognised as a key industry in addressing the global environmental and social challenges of our times, and in providing a sustainable, green future for all.

MISSION

To act as the voice for the biogas industry worldwide: raising awareness and providing evidence of its potential; facilitating business growth; supporting high standards of operation.

MEMBERSHIP BENEFITS

- Global advocacy
- Global market intelligence and knowledge-sharing
- International business opportunities
- Best practice and policy guidance
- Events and site visits
- International networking
- Global marketing opportunities

Join us in realising the potential of the global biogas industry. For more information, visit the WBA stand.



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Access to our experienced team



Tailored service



In-depth knowledge sharing



Adaptation to market changes



Innovative solutions

Facilitating a green future



100%

of the gas in our portfolio is produced by GB-based AD plants

2 TWh

of biogas managed under the Barrow and Ceres portfolios in 2022

5 TWh

total Green Gas certificates traded by Barrow

~350 GWh

delivered to road transport in 2022

Who we are

Established in 2012, we became the **first shipper** to deliver **commercial biomethane** to the GB grid.

We were the **first organisation in GB** to sell Green Gas certificates.

Our offer



Subsidy scheme support



Certificate management



Flexible gas marketing



On-demand reporting

Let's talk about biomethane!

Long-term
bankable
contracts

We buy biomethane:

- ✓ regardless of regulatory conditions in your country
- ✓ of any feedstock types

Certification
process
support

Short-term
trade
possible

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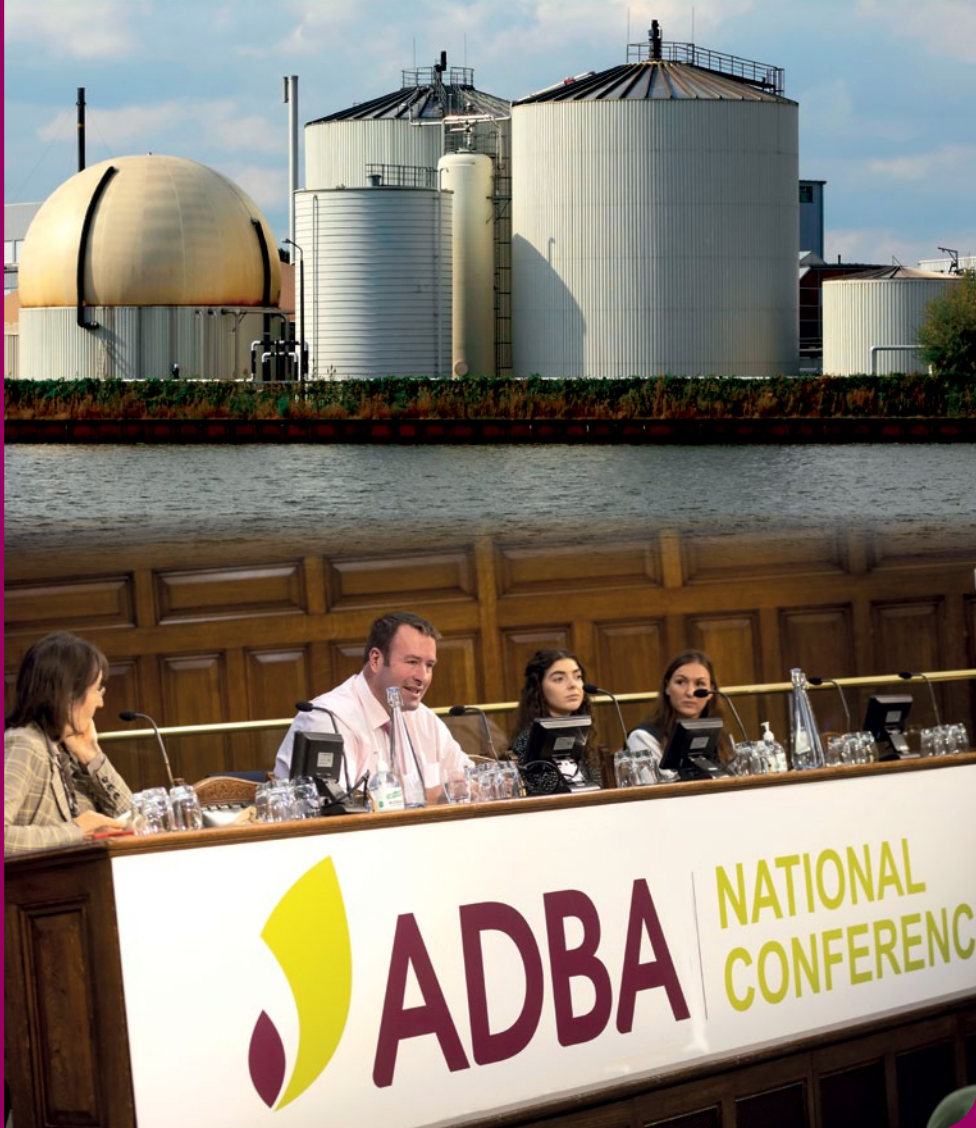
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