# BIOGAS EXPOS

# **MAKING BIOGAS HAPPEN**



THE WORLD SUMMITS AD AND BIOGAS AWARDS SINDUSTRY AWARDS SI

# **WITH THANKS TO OUR SPONSORS**















Biomethane from agriculture offers the lowest carbon footprint of any energy source available today, but often lacks pipeline access.

Mobile Pipeline® by Hexagon Agility is a flexible method for transporting gaseous energy, including biomethane and helium from sites not serviced by pipeline. Promoting energy security, environmental security and driving economic vitality in rural communities.



#### 2000+

Mobile Pipeline® modules deployed to 22 countries.



Mobile Pipeline® provides cost effective access to biomethane from agricultural sites, which often lack pipeline.



#### X-STORE

3x the capacity of steel tube trailers at the same vehicle weight.



Ultra-lightweight composite cylinders and state-of-the-art control systems enable the safe transport of compressed gases.

With the nearest grid injection hundreds of kilometers from our biomethane plant, Mobile Pipeline has been a key enabler. It's been an excellent partnership!

Karol McElhinney, CEO of Connective Energy



# WELCOME TO THE WORLD BIOGAS SUMMIT AND EXPO 2024





A very warm welcome to the **World Biogas Summit and Expo 2024**.

At COP26, the Global Methane Pledge was signed, committing signatory countries to cutting global methane emissions by 30% against 2020 levels **by**2030. 2030 is now less than 5.5 years away and methane emissions are still rising globally. However, there is still hope: recycling the 105bn tonnes of organic wastes humans produce every year can achieve half of the Pledge reducing global temperatures by a vital 0.1 degrees and delivering home grown biogas to substitute a third of today's current natural gas consumption, creating huge economic opportunities and millions of new green jobs globally.

To reach our huge potential this decade, here at the NEC in Birmingham (UK) we bring you the latest biogas technologies from around the world, two conference theatres, and the opportunity to meet the global biogas community to continue #MakingBiogasHappen.

The World Biogas Expo is the largest annual tradeshow dedicated solely to anaerobic digestion (AD) and biogas, with thousands of delegates and delegations coming from almost 100 countries and representation from every continent.

Co-located alongside the Expo is the World Biogas Summit 2024, 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 Rana Adib, Executive Secretary, REN21, Thomas de Boer, CEO,

Nature Energy and Nicholas Jenks, Climate Solutions Director, PepsiCo as well as the Global Methane Hub, TotalEnergies and GHD, funders of the WBA's Global Biogas Regulatory Framework and International AD Certification Scheme

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

- The opportunity to get involved with the WBA's radical, world first #MakingBiogasHappen Programme aimed at facilitating the rapid scale up of a safe, professional and high performing biogas industry by linking to carbon markets.
- Insights from a range of expert speakers with both high-level and technical sessions dedicated to the key themes for our sector.
- Huge opportunities to network, forge new relationships and discover 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.
- Biogas plant site visits to see in "live action" the roles of feedstock, capacity, energy generation, digestate, and more, in the anaerobic digestion process.

Have a great show!

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



# Welcome 3 Our Sponsors 7 Visitor Information 8 Global Market Overview 9-11 UK Market Overview 12-13 World Biogas Summit 2024 Theatre Programme 14-17 World Biogas Expo 2024 Engine Room Programme 18-21 Expo Floorplan 22-23 A-Z Exhibitor List 24-25 Exhibitor Profiles 26-50 About the Organisers 51

**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 medium, of any port of this directory is permitsed without the express permission and consent of ADBA and WBA. All intellectual property rights reserved.





**Activated Carbons** 

# **Total Purification Service**

A complete purification solutions provider for the biogas and biomethane industry

FiltraCarb® - Activated Carbons

VOCSorber® - Mobile Carbon Filters

**REACT-Sys® -** Spent Carbon Reactivation Including our unique 'CR3' high-sulfur recycling service

**Engineering & Site Services Support** 

**UK-based R&D/QA Labs** 

activated-carbon.com

01942 824 240

info@activated-carbon.com

For more information:





Come and visit us

Stand J61







# POWERFUL PUMPING TECHNOLOGY FOR YOUR A.D. PLANT



Part of the Atlas Copco Group

Visit us at the -

THE WORLD EXPOSE
BIOGAS EXPOSE
PADRA 0 == 10-11 JULY, NEC, BIRMINGHAM, UK

Stand H68

WARGE

BIO-ROXX

THE NEW SOLUTION

Substrate mixing and debris removal module.

**BIO-MIX** 

THE ORIGINAL

Substrate dosing hopper feed pump.

agrico

Agrico Engineering Sales Ltd. Phone: +44 178 5851-240 office@agricopumps.co.uk

England, Scotland, Wales



DPS - Drilling and Pumping Supplies Ltd. Phone: +44 28 9181 8347 sales@dpswater.com www.dpswater.com

North Ireland, Ireland

WANGEN
KL-S

THE ALLROUNDER

For low and extrem

Powerful conveying solutions for fermentation substrates!

Our pumps run in biogas plants worldwide. Reliable and robust. We are proud of that.



Find here all information about our products for biogas plants.

WWW.WANGEN.COM

7



#### HEXAGON AGILITY



Hexagon Agility, a business of Hexagon Composites, is a leading global provider of clean fuel solutions for commercial vehicles and gas transportation solutions. Our Mobile Pipeline products enable cost effective and safe delivery of biomethane from facilities that lack pipeline infrastructure to the natural gas network. No pipeline, no problem.

https://hexagonagility.com/

## **NALÓN MINERALS**



Nalon Minerals supplies N-bio B10, the most efficient and profitable solution for H<sub>2</sub>S abatement in biogas plants.

https://nalonminerals.com/

#### **SAVECO ENVIRONMENTAL LTD**



SAVECO Environmental Ltd is well known for providing state-of-the-art solutions through a comprehensive product range of machines and equipment designed for bulk materials handling, effluent pre-treatment and slurry treatment within livestock farming, biogas plants and wastewater treatment plants. Delivering innovative, marketoriented, and cost effective products, SAVECO has a proven track record of success - working on major projects with Tier 1 & 2 Contractors as well as leading water utilities. With a firm dealer base in England, Wales, Scotland and Ireland, SAVECO is determined to supply the most comprehensive range of equipment available to deliver a one-stop solution to its customers.

https://saveco-water.co.uk

#### MEDIA PARTNERS

































**NetZero**Week™





#### **VISITOR INFORMATION**

#### **HALL 3 OPENING TIMES**

Wednesday 10 July 09:00-18:00 Thursday 11 July 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 3 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 right of the Hall 3 main entrance. A £2 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 dialling 6666 on the nearest security telephone. Alternatively, please inform the nearest member of NFC 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 to the far left hand side of Hall 3. There are also facilities outside the hall

# PHOTOGRAPHY AND VIDEOGRPAHY

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 and Biogas Industry Awards, unless instructed not to do so. Should you have any concerns then please contact a member of staff in the organisers office.



#### GLOBAL BIOGAS MARKET OVERVIEW

The global biogas market has experienced significant growth and transformation over the past year with substantial investments from both public and private sectors. The WBA Policy Team reports.

In the aftermath of the Ukraine war, which disrupted supply chains for both gas and mineral fertiliser, governments across the globe have been increasingly focused on climate, energy and food security. This has spurred policy development in support of renewable energies and particularly biogas for its ability to address all aspects of this triple challenge.

Human activity generates 105 billion tonnes of organic wastes annually; food waste, sewage, agricultural residues, manures and slurries and other biodegradable wastes. Only about 2% is currently treated and recycled through anaerobic digestion (AD). Recycling these organic wastes through AD and complementary technologies produces clean energy, heat or transport fuel, biofertilisers, bioCO<sub>2</sub> and other valuable bioproducts. The impacts are substantial

In preventing methane emissions, AD is recognised as one of the fastest, most low-cost ways to keep a 1.5C world within reach. At its full potential, AD could deliver 50% of the Global Methane Pledge, to which 155 countries are signatories. Fast and ambitious methane mitigation is one of the best strategies available today to deliver immediate and long-lasting multiple benefits for climate, agriculture, human and ecosystem health<sup>1</sup>.

The positive and wide-reaching impacts of AD are starting to prove irresistible to governments and investors alike.

- https://t.ly/RFul6
- <sup>2</sup> http://tiny.cc/iiksyz
- 3 http://tiny.cc/qiksyz
- 4 http://tiny.cc/4jksyz

# ENABLING POLICY AND INSTITUTIONAL ENVIRONMENTS

Around the world flagship policies signal a commitment to develop the biogas industry. The European Union has allocated significant funds towards biogas projects as part of its Green Deal initiative. The EU's biomethane production needs to reach 35 billion cubic metres (bcm) per year by 2030 and the estimated investment need for the period amounts to €37 billion².

The USA's \$369 billion Inflation Reduction Act expanded and extended numerous tax credits and incentive programs for the development of clean energy projects, to reduce carbon emissions by 40% by 2030<sup>3</sup>. This has led to a surge of investments in biogas.

India, through its Sustainable Alternative Towards Affordable Transport (SATAT)
Programme, is to invest around Rs. 2 lakh crores (\$25 billion) in its drive to develop 5,000 large-scale compressed biogas (biomethane/RNG) plants by 2030. China, too, has ramped up investments to promote biogas as means to enhance energy security and reduce greenhouse gas emissions, on a pathway to invest over CNY 27 billion (around \$4 billion) by 2030. Greater ambition to deliver net zero would see this rise by a magnitude of approximately 1004.

At the Paris Summit on Clean Cooking in Africa in May 2024, over 1,000 delegates from 55 countries gathered to prioritise universal access to clean cooking in sub-Saharan Africa. A key highlight was the announcement of \$2.2 billion in funding for clean and modern cooking solutions, which can deliver benefits in terms of health, productivity, gender equality, forest preservation, biodiversity, and emissions reductions. Small-scale household biogas units are one solution to address these challenges.

#### PRIVATE SECTOR INVESTMENTS

Private sector investments have also surged, with numerous companies recognising the economic potential of biogas. Major energy corporations



and venture capitalists have poured funds into biogas technology development, production facilities, feedstock aggregation, and infrastructure. Oil majors Shell, TotalEnergies and BP have invested heavily in biogas projects, partnering with local firms to expand biogas production and distribution networks.

Investment pots are now frequently calculated in billions of dollars. Amongst those to have pledged such investment are Goldman Sachs (€1 billion in European biogas), Adani Group and Reliance Industries (\$1 billion each in the Indian biogas sector). In America, Enbridge – a Canadian gas pipeline and energy company - delivered \$1 bn to food waste software and infrastructure company Divert for the development of AD facilities. High energy-using industries such as cryptocurrency mining facilities and data centres have been creating microgrids powered by biogas⁵.

Meanwhile, in Europe, Copenhagen
Infrastructure Partners closed its Advanced
Bioenergy Fund late last year, with commitments
of €750m<sup>6</sup>. Swen Capital Partners' second
biomethane-focused investment fund closed at
€580m. Its first fund invested in over 200 plants<sup>7</sup>.

#### GLOBAL GOVERNANCE

Aside from national policies, the impact of 'global governance' on Net Zero is influencing investment decisions. Key drivers include Environmental, Social and Governance reporting to Stock Exchanges, and the GHG Protocol, which sets corporate accounting standards for GHG emissions, both direct and across supply chains. The EU's recent introduction of the Corporate Social Due Diligence Directive requires companies of a certain size within the bloc to operate in a manner to keep global warming to 1.5°C, under threat of fines of up to 5% of global

net turnover. Again, this covers both direct and supply chain emissions.

Increasingly companies, particularly those in the food chain, such as Unilever, PepsiCo, Arla and Danone, are turning to biogas to green their production lines. The integration of biogas production with agricultural activities is becoming more prevalent globally to deliver rural resilience, reduced input costs and food security. In rice cultivation, which accounts for 8% of global methane emissions<sup>8</sup>, biogas offers a sustainable alternative to burning rice straw, significantly enhancing air quality and reducing the crop's carbon footprint.

The potential for a methane market is also emerging. The US IRA has accepted the principle, levying a cost against methane emissions from specified types of oil and gas production°. A methane fee of \$900 per tonne was levied this year and will rise to \$1,200 in 2025 and \$1,500 in 2026. When converted to CO<sub>2</sub>-equivalent terms, the tax rate will be \$36 per tonne in 2024, \$48 in 2025, and \$60 in 2026 and after. While limited in scope it is a notable step toward emissions pricing that is being explored by other global institutions and national governments.

# MARKET SIZE AND FORECAST GROWTH

The global shift towards renewable energy sources will drive demand for biogas exponentially. Governments and industries are likely to invest more in biogas as part of their efforts to reduce carbon footprints and improve energy and food security. The IEA has forecast growth at a significant rate, conservatively valuing the biogas market at over \$1 trillion by 2050. The organisation anticipates growth at 32% this decade, compared with 19% between 2017-22 when investments were ~\$4 billion a year. However, an even higher pace is required to meet the Net Zero objective for 2030<sup>10</sup>.

WBA analysis of global forecasts in the context of readily available organic wastes indicates the vast untapped potential of biogas. Treating

<sup>&</sup>lt;sup>5</sup> https://t.ly/ZC38C

<sup>&</sup>lt;sup>6</sup> http://tiny.cc/pjksyz

<sup>&</sup>lt;sup>7</sup> https://t.ly/WpNy4

<sup>8</sup> https://t.ly/Ngfn8

<sup>&</sup>lt;sup>9</sup> http://tiny.cc/9zksyz

<sup>10</sup> http://tiny.cc/ezksyz



available resources through AD, a mature and cost-competitive technology, could produce enough green gas to replace 1/3 of today's fossil gas consumption and deliver 50% of the Global Methane Pledge. Indeed, in its report tracking country commitments to meeting the Tripling Renewable Capacity Pledge made at Cop 28, the IEA urges countries to review their 'overlooked' bioenergy capacity.

#### **CHALLENGES AHEAD**

While the biogas market holds great promise, it also faces several challenges. Chief amongst these are inconsistent regulatory frameworks and a lack of standardised policies, regulations and standards across regions, which hinder market growth. For example, São Paulo State, in Brazil, has recently simplified the permitting process, which reduces delays and fosters a more favourable investment environment, while in the EU, obtaining permits can still take several years. In India and the US, the regulatory landscapes are similarly fragmented, posing challenges for global market players. The need for an exemplar site, currently geographically diversified, highlights the necessity for a cohesive framework.

In addition, uncertainty over the eligibility of biomethane certificates in carbon markets has significantly impacted prices. The threat from the Greenhouse Gas Protocol (GHGP) to only allow certificates if biomethane is transported via private pipelines directly to the point of use has reduced corporate confidence, leading to decreased demand and lower prices.

A lot of these challenges arise out of the lack of globally accepted standards for biogas production, which makes the manifest benefits of AD difficult to quantify from plant to plant, country to country. To remove this barrier to growth, the WBA has long championed the need for a standardised Global Biogas Regulatory Framework – to ensure a supportive regulatory regime is in place in every country to facilitate the rapid development of projects to deliver the Global Methane Pledge - and an International AD Certification Scheme –

to measure, report and verify outputs and emissions from biogas production.

#### A GLOBAL HUB FOR SCALING UP

This year we received funding to deliver both from the Global Methane Hub, keen to enable the rapid scale up of the biogas sector operating to a set of minimum professional standards. Development of the framework and associated certification scheme, including environmental and health and safety protections, is now entering its next phase, involving detailed consultation with national and international biogas stakeholders and WBA members.

These are key components of WBA's #MakingBiogasHappen programme which will also establish a global hub for capacity building across the biogas sector and complementary technologies that are emerging through R&I. Commercial-scale trials are currently underway utilising biogas as a key component in the production of advanced biofuels, such as green ethanol, green hydrogen, green shipping fuel, rDME (renewable dimethyl ether) and sustainable aviation fuel.

This is a pivotal moment for the global biogas industry. The political headwinds have never been so much in our favour. Bioenergy is key to bridging the renewable energy gap. Global campaigns from the UN, EU, and WWF are underway, calling on the world to capitalise on the AD industry's capacity to deliver longlasting multiple benefits for climate, agriculture, human and ecosystem health. Bio-markets are booming. Yet barriers remain that are stalling momentum. The industry has it within its power to leap this hurdle – through rallying round the Global Biogas Regulatory Framework and international AD certification scheme. Join us in #makingbiogashappen

If you would like to participate in the review process, for the Global Biogas Regulatory Framework, please contact Sarika Jain siain@worldbiogasassociation.org and for the International ADCS, Flavio Ascenco fascenco@worldbiogasassociation.org



#### THE UK MARKET AND POLICY OVERVIEW JUNE 2024

The anaerobic digestion (AD) industry in the UK has experienced significant growth over the past year, despite facing challenges such as the approaching end of support schemes like the Renewables Obligation (RO) and Feedin-Tariff (FiT). There is a sense of uncertainty in the market as some installations reach the end of the RoC and FiT schemes with a sense that the "bankable" schemes have no planned replacement. As of June 2024, there are 740 operational AD plants in the UK, comprising 593 generating electricity, 6 producing heat, and 139 upgrading biogas to biomethane. The total combined installed biogas capacity has reached 3,294 MW, with biomethane plants alone contributing 109,708 m<sup>3</sup>/hr of capacity

The Green Gas Support Scheme (GGSS) plays and increasingly important role in the development of the UK's biomethane sector. The GGSS Mid-Scheme Review, published on 25th January 2024, extended the application deadline for new plants to 31 March 2028 and maintained current tariff guarantee levels and commissioning deadlines. This extension is expected to provide a significant boost to the biomethane industry, as evidenced by the 30 new plants that have applied for connection, adding a capacity of 33,200 m<sup>3</sup>/h. At the time of writing there is one fully set up GGSS plant and more in process. The agricultural sector remains the most common type of AD plant, with 409 plants accepting feedstocks such as manures, crop residues, and bioenergy crops, highlighting the importance of AD in managing agricultural waste and producing renewable energy. Figure 1. (top right) demonstrates the growth of the biomethane sector, the increasing role of the GGSS, and the dominance of the agricultural sector in AD plants.

UK gas prices have been volatile, with prices currently around 76 p/therm. The market has been influenced by supply risks in Europe and increasing LNG imports from the Americas and Asia. RTFC prices have also fluctuated, dropping to a 4-year low of 15p in 2023 and currently hovering around this price. This volatility and

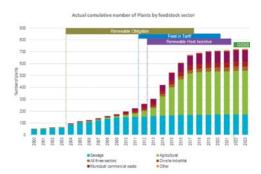


Figure 1

low price adds to the sense of uncertainty in the market. Despite these challenges, the AD industry has shown remarkable resilience, with the total number of operational AD plants relatively stable with the closure of some plants approaching the end of their term in the RO and some others opening. However, the total combined installed biogas capacity has increased by an impressive 17% to 3,294 MW, compared to 2,814 MW in the previous year, showcasing the biomethane industry's potential for expansion.

The Consistency in Household and Business Recycling Consultation, published on 21st October 2023, proposed to require local authorities to perform weekly food waste collections from businesses, households and micro-firms. AD is the government's preferred method for treating food waste, which is positive news for the biogas sector, given the extended GGSS application deadline to March 2028. This initiative is expected to significantly increase the amount of food waste available for AD plants, supporting further growth. ADBA submitted an official response suggesting considering the wider environmental services provided by sending food waste to AD.

The Scottish Government published two consultations Circular Economy and Waste Route Map to 2030 and its Draft Bioenergy Policy Statement. The "Circular Economy"



consultation set out the strategic direction for implementing a comprehensive vision of Scotland's circular economy. The Route Map grouped measures under four strategic objectives: Reduce and Reuse Waste, Modernise Recycling, Decarbonise Disposal, and Strengthen the Circular Economy, reflecting the DEFRA waste hierarchy. The proposed bioenergy policies proposed options for utilising bioenergy resources like AD and biomethane to achieve net zero targets through 2045.

In the responses ADBA argued that the AD sector should be given greater prominence and support as a key circular economy solution for Scotland, highlighting AD's role in recycling organic wastes into renewable energy, biofertilisers, and captured carbon dioxide. ADBA emphasised the need for a nuanced approach when setting carbon capture thresholds for AD plants, considering factors such as plant size, feedstock availability, and economic feasibility. We conveyed the importance of decarbonisation options beyond carbon capture and storage, such as waste heat utilisation and alternative pathways like biomethane for dispatchable power, transport, and hydrogen production. Our objective is to rectify the oversight of AD's importance across the key areas of the economy and recommend policy support measures to help Scotland achieve its net-zero and circular economy ambitions.

The Environment Agency's Methane Action Plan 2024 to 2026, published on 10th April 2024, outlines steps to reduce methane emissions across regulated sectors in England. The plan is important for meeting the UK's climate goals and Global Methane Pledge. Key objectives include improving data measurement and monitoring, maximising regulatory effectiveness, and collaborating with external partners like ADBA, innovative companies, and universities. By addressing methane emissions, the AD industry can maximise its climate benefits and maximise the contribution to the UK's net-zero targets. The Department for Energy Security and Net Zero (DESNZ) launched a Call for Evidence (CfE) on the Future Policy Framework for

Biomethane Production on 29th February 2024. The CfE aims to establish a new policy framework to support biomethane production post-scheme, focussing on facilitating sufficient biomethane volumes to meet carbon budgets, enabling optimal pathways to net zero, and supporting energy supply security. The official response highlighted the key role of biomethane in energy security, climate mitigation, levelling up rural economy, strengthening circular economy, and waste management The target for biogas production can be more ambitious and a goal of establishing 1,000 new AD plants by 2030 was recommended to accelerate climate change mitigation. It was also proposed that the government adopt a consistent policy support mechanism of long-term, enduring schemes. To support the diverse range of industries involved in AD, including agriculture, sewage, municipal solid waste, and commercial/industrial sectors, ADBA recommended the implementation of multiple support mechanisms focussed on key outcomes using demonstrated effective policy mechanisms. To create a fair environment supporting decarbonisation through the growth of biomethane use, the unjust taxation of biogas must be rectified and biomethane producers be provided with allowances to counterbalance the penalty of being subjected to the same ETS cost as fossil gas.

The UK AD industry has demonstrated remarkable resilience and growth over the past year, with a significant increase in installed biogas capacity despite the closure of some plants. To maximise the potential of anaerobic digestion in addressing climate change and meeting emissions reduction targets, ADBA will continue to push governments and policymakers to recognise the multiple benefits and implement supportive policies. These include streamlining planning and permitting processes, financial incentives, ambitious targets for biomethane production and use, and fostering research, innovation and collaboration among industry stakeholders. Working together, stakeholders can optimise the industry and technology, making it more attractive to investors, thereby contributing to a sustainable, low-carbon future for the UK and the world.



#### **WORLD BIOGAS SUMMIT PROGRAMME DAY 1 10 JULY**

All timings BST Doors open - 09:00

#### **() 09:30 - 09:45**

#### **Welcome and Introduction**

• Charlotte Morton OBE, Chief Executive, World Biogas Association (WBA)

#### **() 09:45 - 10:30**

#### **Inaugural Session**

- Pankaj Jain, Secretary, Ministry of Petroleum & Natural Gas, Government of India
- Jo Tyndall, Director, Environment Directorate, Organisation for Economic Co-operation and Development (OECD)
- Further speaker (TBC)

Watch speeches by senior international, national, sub-national and regional government ministers and officials.

#### **10:30 - 12:00**

#### Global Context: Biogas - It's Happening

- Moderator: David Newman, Former President, WBA
- Denise Mulholland, Director, Global Methane Initiative
- Donovan Storey, Global Waste Hub Lead, Climate & Clean Air Coalition (CCAC)
- Rana Adib, Executive Secretary, REN21 (Virtual)

The International Energy Agency has forecast bioenergy (including biogas) to be second only to solar as the fastest-growing renewable source of energy between now and 2050 – displacing hydrogen.

In the last 10 years, in both developed and developing countries, biogas has grown exponentially. And with big investments from Goldman Sachs, TotalEnergies and Shell amongst others over the last few years, the landscape has changed significantly. We are now at inflection point in the growth of the biogas sector.

In this session, we will provide a global policy and market overview for biogas, an aggregate outlook as to its continued growth based on the work of many reputable forecasters and outline the social, economic and environmental co-benefits of supporting the increased development of biogas and how it can help to deliver the Sustainable Development Goals, interim net zero targets, and the Global Methane Pledge by 2030 on an international level.

#### **12:00 - 13:30**

#### Making Biogas Happen (#MBH) Programme

- Moderator: Charlotte Morton OBE, Chief Executive, WBA
- Sarika Jain, Policy Lead, WBA
- Henrique Bezerrab, Regional Lead Latin America, Global Methane Hub
- Olivier Guerrini, Vice-President, TotalEnergies
- Pier Paolo Cella Mazzariol, Chairman, Entsorga Italia S.p.A
- Tej Gidda, Vice-President and Global Leader Future Energy, GHD

WBA's driving mission is to develop the circular economy of organic wastes, a system where materials never become waste, pollution is prevented, nature is regenerated and carbon footprints are reduced. We will do this by taking a strategic approach to the promotion, and ultimately the growth, of biogas as a renewable alternative to fossil fuels as well as a decarbonisation solution for transport, industry and agriculture, some of the hardest-o-decarbonise sectors – in other words, we are focused on "Making Biogas Happen".

We have less than six years until 2030 by which point the world must have delivered half of the Global Methane Pledge to have any chance of being net zero by 2050. For the biogas sector to fulfil its full contribution to this effort, that means we have just six years to build hundreds of thousands of biogas plants all over the world. Yet in some parts of the world, it can take even longer than that just to secure a permit.

WBA's Making Biogas Happen Programme is unprecedented in terms of its scale and ambition. To assist governments and regulators in every country across the world, we are compiling a comprehensive and ready-to-implement programme which can be delivered in any jurisdiction with minimal delay to enable the industry to grow and scale-up at the pace it needs to across the world. In this session, we will provide an overview of the programme and provide a rationale for how we propose to contribute to support and actualise the ambition and growth of the industry by 2030 that we heard about in the previous session.



#### ① 13:30 - 14:30 Lunch + Media Briefing

#### **14:30 - 15:30**

#### **#MBH - Scaling Investments and Financing**

- Moderator: Chris Huhne, Chair, Anaerobic Digestion and Bioresources Association (ADBA)
- K.S Popli, Country Manager, WBA India & Former CMD, Indian Renewable Energy Development Agency (IREDA)
- Michael Ware, Project Supervisor, Green Giraffe

Finance is mobilising behind biogas. Good projects get good finance. Come to this session to find out what investors are looking for to provide backing to your biogas project.

#### **() 15:45 - 17:15**

#### **#MBH** in Europe and North America

- Moderator: Giulia Ceccarelli, Head of External Affairs, WBA
- Thomas de Boer, CEO, Nature Energy
- Victor Bernabeu, Director, Eurogas
- Filippo Munna, Sales Director Mobile Pipeline, EMEA + Asia, Hexagon Agility GmbH
- Andy Cooper, Head of Energy Efficiency, Clarke Energy
- Richard Kennedy, CEO, Carbon AMS

Biogas markets are most developed and most mature in Europe and North America, particularly the US having experienced exponential growth in recent years.

With the industry now being supported and underpinned by the EU Green Deal and the Inflation Reduction Act, respectively, in this session we will hear about the latest industry trends and developments, challenges and opportunities that the industry are currently faced with and the lessons that can be imparted to emerging markets for biogas and other renewable sources of energy based on our sector's experience.

#### **17:15 - 17:30**

#### **Day 1 Closing Remarks**

Pradeep Monga, Senior Advisor & Director of Policy, WBA

Scan the QR code to view speaker profiles:







#### **WORLD BIOGAS SUMMIT PROGRAMME DAY 2 11 JULY**

All timings BST Doors open - 09:00

#### **() 09:30 - 09:35**

#### Welcome and Overview of Programme Day 2

Charlotte Morton OBE, Chief Executive, WBA

#### **909:35 - 10:15**

#### **Keynote Addresses**

- Professor Rachel Kyte, Former Special Representative of the Secretary-General of the United Nations for Sustainable Energy; Former CEO, SE4ALL, & Former Vice President, World Bank Group (Virtual)
- Further speakers TBC

Watch speeches by senior government ministers and officials and academics.

#### **(10:15 - 11:00)**

#### **#MBH: Fireside Chart**

Nicholas Jenks, Climate Solutions Director, PepsiCo

Come to this session to learn from climate pioneers working at some of the world's multi-national market leaders in sustainability-atscale!

#### **(3)** 11:00 - 12:00

#### **#MBH: Women in Biogas**

- Moderator: Kathy Puffer, Mighty Network Host, biogaseducation.com
- Angela Bywater, Environmental Biotechnology Network Manager, University of Southampton
- Judith Marera, Founder & CEO, Lanforce Energy

As with the energy sector more widely, women in the biogas industry are under-represented. A WBA survey conducted in 2022 revealed that women make up less than 30% of the workforce in half of the companies that responded, 55% of companies have less than a quarter in senior leadership roles and 21% had no women at all in senior positions.

According to IRENA, 60% of men that responded to a survey conducted in 2019 do not perceive the existence of gender-related barriers to entry and advancement in the industry. But the data does not bear this out. Whilst there have been improvements in the energy sector more broadly, the biogas industry remains male-dominated, particularly in leadership roles, with a lack of role models for women and a correlated lack of conscious effort to hire and support women to enter and advance within the industry.

This is not just of importance from a diversity and inclusion perspective. Increasing the number of women able to access the biogas sector is of crucial to the future success of the industry. Companies with higher gender diversity are 39% more likely to financially-outperform ones with less diversity globally, as data shows diversity manifests innovation.

In this session, the WBA's Women in Biogas Working Group will launch its report as well as its corresponding Mentorship Programme, which aims to uplift women into leadership roles, promote biogas as a career path globally, and tackle genderspecific challenges. We will spotlight some inspirational women within our industry to outline the positive difference that women can and do make to the industry. Finally, we will host the official signing of our Women in Biogas Charter – all of which we intend to enhance the diversity, resilience and profitability of the industry in #MakingBiogasHappen.

#### **12:00 - 12:45**

#### **#MBH: What Really Drives Market Demand for Biomethane**

- Moderator: Chris Huhne, Chair, ADBA
- Wouter Kuipers, Managing Director, ACT Commodities
- Fernando Giachini Lopes, Director, Instituto Totum
- Senior speaker, UNIDO TBC
- Senior speaker, Global Biofuels Alliance TBC

As the sector transitions from government-subsidy support to more market-based support, how the industry operates and the value of what it produces is driven by and determined by the market.

In this session, we will assess what and where the demands for biogas and biomethane are, what the most viable uses for it are and how to access it for any of these purposes when you are looking to secure an off-take agreement.



#### ① 12:45 - 13:15 Lunch

#### **13:15 - 14:00**

#### Sustainable & Smart Cities - The Engine Behind #WasteToValue and #MBH

- Moderator: Pradeep Monga, Senior Advisor & Director of Policy, WBA
- Gisela Provasi, LOW-Methane Project Director, C40 Cities Alliance
- N.P. Singh, Senior Technical Advisor, Sustainability Cities Programme, UNIDO India
- Carlos RV Silva Filho, President, ISWA

Sustainable cities are vital for ensuring high quality of life for urban residents. Central to the concept of sustainable cities is effective waste management. Incorporating biogas production through anaerobic digestion into waste management systems is crucial to building sustainable cities.

By harnessing the potential of organic waste as a resource, cities can simultaneously address environmental challenges, enhance energy security, and promote economic prosperity.

Adopting holistic approaches to waste management that prioritize resource recovery and renewable energy (biogas) generation is essential for creating resilient and livable urban environments for future generations.

In this session, we will showcase the potential circular cities – incorporating biogas – can offer their residents.

#### (§ 14:00 - 15:15)

#### **#MBH Global & National Trends: Emerging Markets**

- Moderator: Pradeep Monga, Senior Advisor & Director of Policy, WBA
- Felipe S Marques, Technology Development Director, CIBiogas
- Gordon Ayres, Secretary-General, Southern African Biogas Industry Association (SABIA) (Virtual)

Unlike any other source of renewable energy, biogas is able to deliver home grown, distributed, baseload, storable and dispatchable green energy. A biogas plant can be as small and micro as a homemade one to power one home to an enormous site which has the capacity to generate heat, power, fuel or energy to benefit millions of people. It is also relatively fast to build a biogas plant compared to other sources of renewable energy, which must be a large consideration for both governments and the private sector in the drive towards net zero.

It is little wonder that all reputable forecasters predict colossal and transformative growth in the sector between now and 2050, with most of that growth coming from emerging markets – all of whom also have increasing populations, with increasing propensity for economic growth and energy demands.

In this session, we will hear from some of the markets where there is the greatest potential for the growth of the industry worldwide and illuminate some of the challenges and opportunities they have and discuss how these can be negotiated and maximised respectively.

#### **15:15 - 15:45**

#### **Day 2 Closing Remarks**

- Charlotte Morton OBE, Chief Executive, WBA
- Dr Pradeep Monaa, Senior Advisor & Director of Policy, WBA

Hear a communiqué and get a glimpse of the World Biogas Summit's 'Outcome Document.'

Scan the QR code to view speaker profiles:



Schedule subject to change, for latest Summit programme: https://world-biogas-summit.com/programme-2



#### **ENGINE ROOM PROGRAMME DAY 1 10 JULY**

#### All timings BST

#### **9:45 - 10:00**

#### **Opening Remarks**

• Chris Huhne, Chair, Anaerobic Digestion & Bioresources Association (ADBA)

#### **() 10:00 - 10:30**

#### Value4Farm: Farming for Sustainability

- Moderator: Chris Huhne, Chair, ADBA
- Jocelyne Bia, Head of Corporate Communications, PR and Brand Management, World Biogas Association (WBA)
- Professor Julian Park, Professor of Agricultural Systems, University of Reading

WBA is a key partner in Value4Farm (V4F), a collaboration funded by the EU Horizon programme. The mission is to increase on-farm renewable energy production while preserving food production, soil health, biodiversity, and reducing water and fertiliser usage. Come to this session to learn how agriculture in Europe and the world is decarbonising operations.

#### **10:30 - 11:15**

#### The Importance of Small-Scale AD in Emerging Markets

- Moderator: Richard Gueterbock, Director, Food Chains
- Dr Jonathan Scurlock, Chief Adviser, Renewable Energy and Climate Change, National Farmer's Union (NFU)
- Katrin Puetz, Managing Director, (B)Energy
- Joseph Fayolle, UK Operations Manager, Biolectric

Small-scale biogas plants help provide home-grown, clean energy. This is important in emerging markets where consumers need renewable energy generation for heating and clean cooking as an alternative to fossil fuels. Come to this session to learn about techniques and technology to improve the performance of small-scale plants.

#### **11:15 - 12:00**

#### **Getting the Best out of Your Feedstocks**

- Moderator: Chris Huhne, Chair, ADBA
- Laura Stone, Business Development Manager, Econward
- Chris Hoare, National Sales Manager, Amur
- Melanie Hecht, Key Account Manager, FM BioEnergy & Schaumann-Bioenergy
- Mike Platt, Managing Director, Alps Ecoscience

It's vital when identifying suitability of feedstocks — in the form of waste or product — you assess their quality. Potential investors could consider low supply or quality as a financial risk. Meanwhile, plant owners with a plentiful supply of higher quality feedstock can better secure finance and lower their OPEX costs. Come to this session to review the value of feedstock types, learn how to assess and monitor consistency of input and discover the path to better yields.

#### **() 12:00 - 13:00**

#### **Best Practice in Digestate Management**

- Moderator: David Newman, Former President, WBA
- Dr Gary Lyons, Senior Scientific Officer, Agri-Food & Bioresources Institute (AFBI)
- Javier Contamina, R&D and product development, Nalon Minerals
- Professor Peter Hammond, Co-Founder & Chief Technology Officer, CCm Technologies
- Senior speaker from Future Biogas (TBC)

Digestate management is important for soil stability, food quality, food security and biodiversity. Come to this session to find out about soil types, climate conditions, nitrate vulnerable zones, worms and more. You will learn how quality management systems and monitoring support fertiliser production and sustainable growth of rotational crops. Become a champion of the circular economy!



#### ① 13:00 - 14:00 Lunch

#### **14:00 - 15:30**

#### **Innovative and New Technologies**

- Moderator: Flávio Ascenco, Technical Support Manager, ADBA
- Iain Ward, Director, Amorin Ward Associates Ltd
- Dr Masoud Babaei, Senior Lecturer in Petroleum Engineering, University of Manchester
- Tony Hood, Sales Manager, Desotec
- Peter Crowe, European Sales Manager, ANGI Energy Systems
- Keith Simons, Chief Technology Officer, SHV Energy/Futuria Fuels
- Michael Koettner, CEO, IBBK Fachgruppe Biogas GmbH

The development of the biogas industry relies tremendously on the strength of technological innovation. Attend this session to discover emerging and alternative technologies. Learn how to increase efficiency and resilience of your operations while minimising adverse effects on the environment.

#### **15:30 - 15:45**

#### Job Recruitment and the Growth of the Bioenergy Sector

- Moderator: Gareth Mottram, Policy Lead, ADBA
- Jean-Philippe Burtin, CEO, Borea and President, Biogaz Vallée

The bioenergy sector is forecast to grow exponentially from now to 2050 as part of the global 'just transition.' So the bioenergy sector needs well-trained and educated people to work in it. Come to this session to find out about transferable skills from other industries, employment opportunities and biogas plant operator perspectives.

#### **15:45 - 16:00**

# Green Gas Support Scheme: A Case Study in Strategies for Success in Subsidy Support Scheme Applications

- Moderator: Gareth Mottram, Policy Lead, ADBA
- James Wayman, Senior Project Engineer, NFU Energy

#### **()** 16:00 - 16:30

#### The Role of Artificial Intelligence in the Biogas Industry

- Moderator: Gareth Mottram, Policy Lead, ADBA
- Dr Michael Short, Senior Lecturer, Institute of Sustainability, University of Surrey

Artificial Intelligence (AI) will equip the biogas industry with new tools to optimise productivity and efficiency and thus profitability of operations. All offers approaches to process control mechanisms, enabling operators to make real-time decisions to increase financial and environmental performance. Attend this session to learn about Life Cycle Assessments, feedstock potential, Net Zero goals and other operational opportunities.

#### **16:30 - 16:40**

#### **Making Biogas Happen: Ambitions and Programme**

- Dr Sarika Jain, Policy Lead, WBA
- Flávio Ascenco, Technical Support Manager, WBA

WBA's mission is to grow the biogas sector as a renewable energy alternative to fossil fuels — while decarbonising hard-to-decarbonise sectors such as transport and heat. In line with this, WBA launched "Making Biogas Happen," a programme for governments and industry to rapidly scale-up of biogas. Come to this session to hear first hand how the association envisions the world building hundreds of thousands of biogas plants, cutting emissions and delivering on the Global Methane Pledge.

#### **() 16:40 - 16:45**

#### **Day 1 Closing Remarks**

Chris Huhne, Chair, ADBA

Scan the QR code to view speaker profiles:



Schedule subject to change, for latest Engine Room programme: https://www.biogastradeshow.com/engine-room



#### **ENGINE ROOM PROGRAMME DAY 2 11 JULY**

#### All timings BST

#### **909:30 - 10:15**

#### **Maximising Food Waste Segregation & Collection**

- Moderator: Chris Huhne, Chair, ADBA
- James Hay, Head of Procurement and Due Diligence, WRM
- Nicola Kemp, Specialist Waste and Recycling, WRAP International
- Pier Paolo Cella Mazzariol, Chairman, Entsorga Italia S.p.A

One challenge in the scaling-up of anaerobic digestion (AD) and biogas is maintaining feedstock to supply the continual output of the AD process. Attend this session to understand challenges and opportunities of segregating food waste.

#### **10:15 - 11:45**

#### **Fugitive Emissions: Prevention and Monetisation**

- Moderator: Chris Huhne, Chair, ADBA
- KEYNOTE ADDRESS: George Eustice MP, Former Secretary of State, Environment, Food and Rural Affairs / Chair, International Fugitive Emissions Abatement Association (IFEAA)
- Spence Seaman, Energy & Resources Lead for Adaptation, EPR & Methane Action Plan, Environment Agency
- Zitely Tzompa Sosa, Research Manager, Methane Pollution Prevention, CCAC
- Andrew Iwanoczko, Founder & Director, Callala
- Robert Griffiths, Director, OSS Enviro
- Dr. Yadira Bajón Fernández, Senior Lecturer at Cranfield University and Policy Fellow, DESNZ

Minimising uncontrolled emissions from biogas plants delivers clear benefits for health & safety, environmental protection and even financial dividends. In this session, you will hear from experts on mitigation control technologies (including satellites) and mitigation procedures (such as Leak Detection and Repair — LDAR). You'll also find out more details on defining and controlling methane slippage.

#### **11:45 - 12:15**

#### **Maximising Subsidy from Greenhouse Gas Calculations**

- Moderator: Chris Huhne, Chair, ADBA
- Lucy Montgomery, Senior Consultant, NNFCC
- Shane Doherty, Biomethane Development, Refuels

Increasingly, governments are designing subsidy regimes to incentivise the sustainability of biogas plant operations and minimise harmful effects on the environment. GHG calculations are vital to accurate monitoring and reporting of emissions. Join this session to learn about the impact of Leak Detection and Repair Systems (LDAR) to effectively report GHG calculations and assure the credibility of achieving the sustainability criteria of your biogas plant.

#### **12:15 - 12:45**

#### **Managing Environmental Impacts of Biogas Plants**

- Moderator: Karina Navarro, Policy Analyst, WBA
- Iria Nicolás, Principal Process Engineer, SLR Consulting
- Jack Rooney, Process Engineer, SLR Consulting
- David Reay, Head of Strategic Partnerships, CPL/Puragen Activated Carbon

Environmental Management Systems (EMS) are essential to ensure the mitigation of possible effects of biogas plants on the environment. In order to do this, plant operators need to know and understand the receptors, pathway, origin, and sources that could be impacted by their operations. Come to this session for a detailed look at suitable environmental control systems to ensure the net-positive impact of your biogas plant on the environment.



#### **12:45 - 13:15**

#### **Ensuring Health and Safety On-site**

- Moderator: Flávio Ascenco, Technical Support Manager, ADBA
- Alan Beswick, Principal Scientist (Microbiology), HSE Science and Research Centre
- David Woolgar, Consultant Engineer, David Woolgar Consulting

Ensuring the most robust health and safety on-site is imperative to the reputation and continued growth of the biogas industry. Join this session for presentations on COMAH, explosive atmospheres and other examples of regulations. Get expert advice health and safety and the environment.

#### ① 13:15 - 13:45 Lunch

#### **() 13:45 - 14:30**

#### **Optimising Your Biogas Plant**

- Moderator: Flávio Ascenco, Technical Support Manager, ADBA
- Angela Cronjé, Technical Consultant, Organic Roots
- Gavin Ramsey, Sector Director, Synergie Environ

Optimising processes on-site can help your plant operate reliably at its full potential. By coming to this session, you'll gain knowledge of the mechanical and biological processes of your operations. Get top tips on ensuring a stable, efficient and — importantly — profitable plant.

#### **14:30 - 14:45**

#### Plant Monitoring, Maintenance and Resilience

- Moderator: Flávio Ascenco, Technical Support Manager, ADBA
- Will Ocean, Managing Director, Maintain Reliability

Attend this session to get guidance on 'monitoring, recording, maintenance and review' to support your operations' profitability. Find out about maintenance standards and solutions, for example tank surveying, to ensure the the longevity of your plant.

#### **14:45 - 15:00**

#### **Day 2 Closing Remarks**

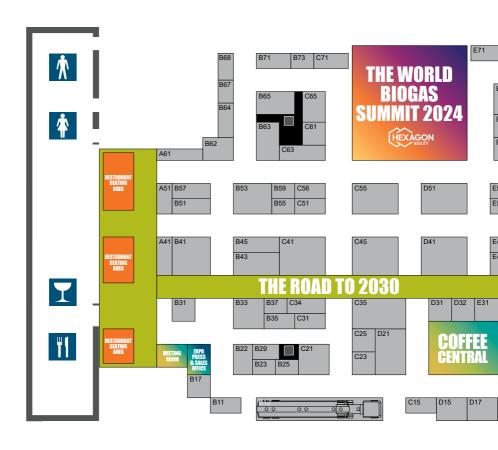
Chris Huhne, Chair, ADBA

Scan the QR code to view speaker profiles:



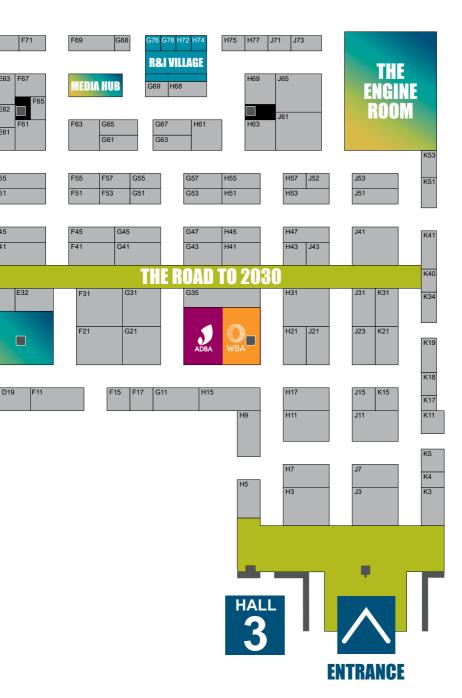












#### **A-Z EXHIBITOR LIST**

Company	Stand	Company	Stand
2G ENERGY	G53	BTS BIOGAS	D19
AB ENERGY UK LTD.	G41	CAPSTONE POWER SOLUTIONS	G51
ABS	H74	CBS BETON	E51
A-CONSULT	H03	CELTIC CHEMICALS LTD.	B43
AD FUELS	B12	CERES ENERGY/BARROW SHIPPING	F61
AGRICO WANGEN EISELE PUMP AND	•	CHEMVIRON CARBON	G21
MIXING SOLUTIONS	H68	CJC LABS	K18
AGRIKOMP	B22	CLARKE ENERGY	E55
AGRIVERT	F45	COLLOIDE	C56
AIR PRODUCTS	H41	COMAP	J07
ALLISON ENGINEERING	G67	CPL/PURAGEN ACTIVATED CARBONS	J61
ALLTECH	H51	CSO GROUP	E32
ALLVALVES	H47	C-ZERO MARKETS	C34
AMC	B53	DANAGRI-3S LTD.	B11
AMMONGAS A/S	G11	DESOTEC	J43
AMUR	K51	DMT ENVIRONMENTAL TECHNOLOGY	D51
ANDIDRAIN LTD.	F55	EASY COMPUTE	B31
ANGI ENERGY SYSTEMS	B33	EASY PACK AUTOMATION	H77
APROVIS	H05	ECO VERDE ENERGY (EVE)	H07
ARB PROCESS ENGINEERING	D41	ECOMONDO	B64
ARNOLD PLANT HIRE	G69	ECONWARD	E61
AROL ENERGY & AXENS	H17	ECOVAPOR - A DNOW COMPANY	B51
ATLANTIC PUMPS	J51	EDAC	B65
BIOCLEAR EARTH	G78	EDINA	B45
BIOCONSTRUCT GMBH	J53	ELI BIOSCIENCES	K34
BIO-DYNAMICS TANKS LTD.	H43	EMS INDUSTRIES LTD.	K21
BIOG GMBH	H45	ENERGY, FUELS & DECARBONISATION EXPO	B17
BIOGAS JG	G47	ENVITEC BIOGAS UK	B63
BIOGAS SERVICE TARMSTEDT GMBH	B73	ESMIL PROCESS SYSTEMS LTD.	B41
BIOGEST	J15	etw energietechnik gmbh	F69
BIOKONA	K15	EUROTRON INSTRUMENTS (UK) LTD.	G55
BIRCH SOLUTIONS UK LTD.	J11	EXEON	G65
BISVIRDI & ALFA LAVAL	K53	FERROBIO	C23
BLENDED PRODUCTS LTD.	C55	FM BIOENERGY	H09
BMP GREENGAS	B55	GAS DATA	F65
BOHR GREEN ENERGY LTD	J52	GASWORLD	B71
BŐRGER UK LTD	D21	GEN-C LTD.	G35
BPC INSTRUMENTS	K04	GENESIS AGRI LTD.	K31
BRIGHT RENEWABLES & HOST GROUP	F11	GENTEC	J41



#### **A-Z EXHIBITOR LIST**

Company	Stand	Comp
GREEN-EN	J71	PENTAIR
HAARSLEV LTD.	F57	PERISSIN
HAHN PLASTICS	H61	PETERS
HA7CHEM SAFETY	C61	PRO GA
HEAT AND POWER LTD./ ADICOMP	F21	PROTEC
HOWDEN SCREW COMPRESSORS	E45	PSV TRA
HRS HEAT EXCHANGERS	H11	PTM
HUNING ANLAGENBAU GMBH & CO.KG	G45	QED EN
INSPECTAHIRE	F67	REALIST
JONES MCGIRR	A41	REFUELS
KEMIRA	G68	ROTO P
KINETIC BIOFUELS	B37	ROTO S
KIOWA	J31	SAVECO
KIS GROUP – SUSTAINABILITY <sup>2</sup>	K03	SEEPEX
KLUBER LUBRICATION	C15	SGN C
KONRAD PUMPE GMBH & TIETJEN	•••••••••••••••••••••••••••••••••••••••	SGS
VERFAHRENSTECHNIK GMBH	H15	SILOSTO
KRONOA ENGINEERED SOLUTIONS	J65	STEVERI
LANDIA UK LTD.	J03	SUMA F
LEHMANN	K05	SUNDC
LITTLE OAK ENERGY	D15	TAN DE
LIVELAB	E63	TANK C
LOW CARBON SOLUTIONS	G76	TECNO
LP ENERGY GMBH BIOGAS AND BIOMETH.	ANE B29	TECTO
MALMBERG	B62	TEDOM
MARSH COMMERCIAL	F51	TEMA P
MAVITEC	E41	THÖNI
MODELA	B67	TRISLOT
NALON MINERALS SL	B57	ULSTER
NFU ENERGY	C31	UNISEN
NUHUIS SAUR INDUSTRIES UK & IRELAND	C45	UTILE EI
NNFCC	K40	UZ KIM
OMEX ENVIRONMENTAL LTD.	F41	VALUE4
ONLINE LUBRICANTS	B59	VOGELS
OPTICAL GAS IMAGING LTD. (OGI)	G57	WOLF S
ORBINOX UK LTD.	E31	ZEBRA I
ORBIS - DSEAR SPECIALISTS	D31	
OSS	E71	
PALMIERI GROUP	G63	

Company	Stand
PENTAIR	G31
PERISSINOTTO S.P.A PEMO PUMPS	H53
PETERS MIXER	H63
PRO GASES UK	F53
PROTEGO	C21
PSV TRANSPORT/ FOGMAKER UK & IRELANI	O K11
PTM	B23
QED ENVIRONMENTAL SYSTEMS LTD.	D32
REALISTIC AGRI	C51
REFUELS	K41
ROTO PUMPS	C41
ROTO SPIRAL LTD.	C63
SAVECO	C35
SEEPEX UK LTD.	B25
SGN COMMERCIAL SERVICES	G43
SGS	F31
SILOSTOP AGRI LTD.	G61
STEVERDING AGITATOR TECHNOLOGY	H55
SUMA RUHRTECHNIK	J21
SUNDOWN PRODUCTS	H57
TAN DELTA SYSTEMS PLC	J73
TANK CONSULT LTD.	F15
TECNO PROJECT INDUSTRIALE S.R.L.	C25
TECTO HIRE LTD.	H75
TEDOM	C65
TEMA PROCESS DIGESTATE DRYING	F63
THÖNI INDUSTRIEBETRIEBE GMBH	B35
TRISLOT NV	F1 <i>7</i>
ULSTER SHREDDERS	D17
UNISENSOR	H21
UTILE ENGINEERING	K19
UZ KIMYA	H69
VALUE4FARM	K17
VOGELSANG	H31
WOLF SYSTEMS CONSTRUCTION LTD.	J23
ZEBRA B LTD.	F71



#### **EXHIBITORS**

#### 2G Energy Ltd **G53**



**Technology Supplier** 

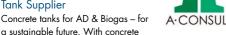
2G Energy Ltd is an internationally leading manufacturer of combined and heat and power plants (CHP) for the decentralised provision of power and heat based on gas motors driven by natural gas, biomethane, biogas, sewage gas, landfill gas, or hydrogen. A variety of power plants, driven by natural gas, biomethane, biogas, sewage gas, landfill gas, or hydrogen. The portfolio includes plants with an electrical output of 20 to 2,500 kW.

n company/5341201/admin/feed/posts www.2-g.com

#### **A-CONSULT**

#### **H03**

Tank Supplier



tanks for various applications, we are ready to contribute with transformation from fossil fuels to renewable energy. 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.

in company/a-consult-agro-a-s www.aconsult.co.uk

#### AB ENERGY UK Ltd **G41**



**Technology Supplier** Since 1981, AB has tackled

the challenges posed by energy sustainability, working alongside our customers to improve their competitiveness while saving energy and reducing emissions. From our earliest days, we have focused on innovation to develop world-class technologies and processes dedicated to transforming the world of energy.

(in) company/gruppo-ab

**■ GruppoAB** 

www.gruppoab.com

#### **AD Fuels B12**

#### Adicomp K Ltd J41 & J43



Gas Treatment

Adicomp is an Italian company also based in the United States, specialized in the compression and treatment of different types of gas. With more than 25 years of experience and more than 9500 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 and carbon dioxide. For biogas upgrading, Adicomp provides oil injected, rotary screw compressors suitable for wet biogas, feeding membrane, PSA, amine and pressure water scrubbing purification.

(in) company/adicomp-srl

adicompsrl

www.adicomp.com

#### **Advanced Bacterial** Sciences (ABS) H74



#### Consultancy/Environmental Consultancy

ABS is a fast-growing, science-led biotech organisation creating innovative microbial solutions for human and planetary benefit. We use nature's solution to consume waste, blockages, spills or pollutants. With a strong commitment to safety, efficiency, and environmental stewardship, ABS continually develop innovative sustainable solutions and services tailored to the unique challenges encountered by AD operators and waste treatment plants.

in company/advanced-bacterial-sciences https://abs.eco/



#### Agrico Pumps H68



Technology Supplier A proud family business

since 1977, we provide high-quality pumps, mixers and agitators to the anaerobic digestion/biogas and agricultural industries. As the sole UK agent for leading German pump manufacturers Wangen and Eisele, we take a personal, hands-on approach to every project, whether helping a new client find the right pump for their substrate, resolving a technical query or supplying OEM wear parts to a long-standing customer. Agrico customers instantly gain more than just technology thanks to our 40+ years' wisdom and application knowledge, honed over decades of working with the finest German engineers, UK developers and AD operators. We offer more than 40 individual models across our portfolio and take pride in specifying the right equipment for each customer's pumping, mixing or agitating need. Our pump range includes progressive cavity, lobe, submersible, self-priming and centrifugal options, covering the entire needs of the AD, agricultural and wastewater sectors. Reduce the risk of unplanned downtime with Agrico's reliable pumping and mixing solutions.

in in/john-tame-8bb66b78/ www.agricopumps.co.uk

#### AgriKomp B22

**AD Contractor** 



our UK and Ireland division. We develop and manufacture all the major components of our biogas plants and offer reliable and proven technology, with over 50 biomethane plants amongst our 1,000+ installations.

n company/agrikomp-ltd/ www.agrikomp.com

# **Agrivert** F45



AD Contractor & AD Operator & Solar

Agrivert is a specialist in renewable energy. Founded 30 years ago, Agrivert has continuously provided engineering and operational excellence to its customers. The Agrivert group designs, builds and operates anaerobic digestion facilities to generate biogas and specifies, installs and maintains solar PV for commercial, agricultural and domestic clients. We are technology agnostic and specify solution-specific products for each and every project we undertake. Agrivert specialises in delivering biogas anaerobic digestion facilities and infrastructure in the UK and internationally with a pedigree hallmarked by a demonstrated ability to significantly outperform the industry norms for energy generation, uptime and profitability, maximising efficiency and minimising downtime.

n company/agrivert

 **■ AgrivertLtd** 

www.agrivert.co.uk

#### Air Products H41



Membrane Solutions

#### Technology Supplier

Air Products designs, manufactures, and sells membrane separators for biogas upgrading and biogas dehydration. As the membrane supplier, we work with system builders and assist them with sizing, design recommendations, and technical support, all to deliver reliable performance for a safer, cleaner, more productive world.

n company/air-products

**⋒** AirProducts

https://membranesolutions.com

# Allison Engineering Ltd G67



**Technology Supplier** 

Established specialist for biogas

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

www.allison.co.uk



#### Alltech UK H51



Technology supplier, biogas productivity solutions

Alltech delivers smarter, more sustainable solutions for agriculture. Our diverse portfolio of products and services improves the health and performance of plants and animals, resulting in better nutrition for all and a decreased environmental impact.

n company/alltech

AlltechUK

www.alltech.com/uk

#### ALLVALVES H47



#### **Technology Supplier**

Allvalves offer a complete range of actuated valves, manual valves, pipe fittings, pumps, and controls and can confidently supply products that meet all your requirements and conform to even the most stringent specifications.

#### AMADEO MARTI CARBONELL SA B53



#### **Engine Parts Manufacturer**

Cylinder heads manufacturer for diesel, petrol, gas and biogas engines. Cylinder heads and engine parts. Biogas cylinder heads perform.

www.amc.es

# Ammongas A/S



#### **Technology Supplier**

Ammongas A/S, a turnkey supplier, excels in environmental plant solutions for gas and air purification. Specializing in CO<sub>2</sub>-separation systems, our engineers provide efficient solutions for biogas upgrading and carbon capture.

Operating mainly in Europe and America, our scalable plants range from 300 to 10,000 Nm³/h biogas capacities.

www.ammongas.com

#### Amur K51

#### Feedstock Producer

Amur is at the forefront of the Anaerobic Digestion marketplace,

dedicated to driving innovation and unlocking potential in AD. We help customers improve the performance of their facilities, by optimising gas yields and providing consistent, unsurpassed feedstock supply that drives industry standards.

company/amurenergy https://amurenergy.co.uk

# Andidrain Ltd



#### Waste Management

We specialize in tank cleaning and have undertaken tank cleaning projects throughout the UK at various farm and food waste biogas plants particularly since 2016. Our plant includes DISAB high performance vacuum trucks and CDE DMAX mobile screens for screening and dewatering.

#### ANGI Energy Systems B33



#### **Technology Supplier**

With over four decades of expertise in compressed gases, ANGI Energy Systems designs and manufactures comprehensive site solutions for CNG, RNG, and hydrogen fueling. ANGI specializes in compression for feed biogas applications, RNG pipeline boosting, compression solutions for tube-trailer loading and depressurization (decanting) for trailer unloading & industrial regulation.

company/angi-energy-systems www.angienergy.com

#### **APROVIS**



#### **H05**

#### Technology Supplier

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.

www.aprovis.com/en/home-en



#### ARB Process **Engineering Ltd** & Membrane Systems Europe BV



**D41** 

AD Developer

ARB specialises in the design, manufacture, and installation of bespoke AD Plants. Based in Northern Ireland, ARB provides services throughout the UK and Ireland. We also offer repowering, retrofitting, and refurbishment solutions for existing Plants. With 30years of experience, ARB is a trusted brand for quality and innovative engineering solutions.

https://arbprocessengineering.co.uk

#### **Arnold Plant Hire Limited**

#### **G69**

Hire of Materials Handling Equipment

Nationwide hire of materials handling equipment into the AD & Biogas industry, specialising in waste specification tele-handlers, loading shovels, teleskids and teletruks.

in/philip-oldham-75a1a8209

LoadingShovels

https://arnold-plant.co.uk

# **AROL ENERGY**

H17 Technology Supplier We stand at the forefront of

sustainable energy with our expertise in biogas upgrading for biomethane production. Our turnkey solutions cover every aspect from initial design to installation and ongoing maintenance of equipment. We can set up tailor made products for your project either with membrane or amine scubbing.

(in company/arol-energy/ www.arol-energy.com

#### **Atlantic Pumps**

Consultancy/Environmental Consultancy

Atlantic Pumps - Keeping abrasive

fluids moving in the water industry. From initial dewatering through to every step of processing to discharge, we understand the movement of abrasive fluids and how critical effective solutions are tailored to enhance site performance

(m) company/3549803

atlanticpumps

https://atlanticpumps.co.uk

#### Axens H17



Technology Supplier

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.

(in company/axens www.axens.net

#### **Bioclear earth G78 Biological Solutions**



Bioclear earth is expert in biological solutions. The company's mission is to 'Create with the power of nature' to make the world a cleaner and more sustainable place. We are innovators and consultants with decades of experience in molecular analysis and bioprocess development focussing on bio-energy, soil-health and water quality.

https://bioclearearth.com



#### Bioconstruct J53



EPC Contractor,

# Operator and Service and Maintenance provider

Bioconstruct Group are specialists in the EPC construction, operation and service and maintenance of AD plants all over Europe. We are an owner- and family-held business that stands for stability and reliability. This is a principle that we apply in all areas consistently, be it our accounting policies or our stainless-steel screws. In all cases, we work for the benefit of our customers, employees and business partners.

company/bioconstruct-gmbh www.bioconstruct.com

#### BIO-DYNAMICS TANKS LTD H43



Concrete Tanks

Bio-Dynamics is specialized in building monolithic tanks in reinfroced concrete for wastewater treatment plants, biogas plants and for industrial and agricultural applications. Bio-Dynamics is a family-owned company and has over 30 years of experience in the treatment of industrial wastewater and environmental engineering. Maximum diameter of 50 m and up to 30 m in height, with or without roof, underground or aboveground.

nttps://bio-dynamics.be/en

#### BioG GmbH H45



#### Waste Management

BioG, headquartered in Utzenaich in Austria, develops, plans, manufactures and operates technical plants to generate energy from residual materials. We design and build independent processing systems that are already in use in many countries around the globe. BioG offers all the necessary technical components without interfaces, from harvesting technic to dosing, defibration, liquefaction and input into the biogas plant.

n company/biog-gmbh https://biog-biogas.com

#### Biogas Service Tarmstedt GmbH B73



AD Developer

Welcome to BST. As a reliable partner for the planning, construction, expansion and flexibilization as well as the maintenance of biogas plants, we are always there for you - regionally rooted and internationally experienced. Also in our portfolio advanced know-how in the areas of separation technology, liquid manure and digestate processing, and approval planning and fuel from biomethane through our sister company BST Innova.

www.bs-tarmstedt.de

#### BiogasJG B.V. G47



Additive supplier

BiogasJG supports biogas producers in managing their desulphurisation process and improving their methane production. BiogasJG supplies additives that can be supplied directly into the digester as well as products and equipment that can desulphurise the biogas as an end-of-pipe solution. With the support of their partner laboratories, biological analysis can be done, and advice can be provided to improve the biological process in order to increase the methane production.

in company/biogasig www.biogasig.com

# BIOGEST UK Ltd



**AD Contractor** 

BIOGEST® is an international biomethane and biogas plant manufacturer headquartered in Austria with subsidiaries in France, Italy, Romania, Serbia, Czech Republic, UK and US. With a team of more than 80 highly qualified employees, we have already completed over 190 biogas plant projects, generating electricity and biomethane worldwide.

company/axens www.biogest.at



#### Biokona **K15**

### BIOKONA

#### **Technology Supplier**

BIOKONA is a leading builder of biogas and biomethane power plants in Lithuania and foreign markets. The technologies and products offered have made a breakthrough in the green gas production industry and have redefined the use of sustainable energy sources.

(m) company/biokona https://biokona.eu

#### **Birch Solutions Ltd** J11



AD Operator

We have over £500k of stock in our UK store which is currently being doubled in size to carry even more - our mission is to become the UK's largest distributor of parts to support the AD and Agri sector. We are now the UK preferred supplier for Steverding, Paul Michl and PTM and have secured preferential rates for Suma, Voaelsana. Borger, Wangen, Vega and more. Our recent partnership with 2G also enables us to support their full portfolio with parts supply. We have an excellent supply chain and storage facilities. We are also able to supply 2G approved oils Mobil Pegasus and Shell Mysella and also Petro-Canada and Chevron-please get in touch for a quote! I am confident that we can support your site. We are also forging ahead with chemical supply and stock excellent levels of Ferric for example and can offer regular testing to tailor a bespoke trace element package for your site.

(in) company/18993703

**■ BirchSolution** 

https://birchsolutions.co.uk

#### Bisviridi & Alfa Laval K53



#### **Environmental Services**

Bisviridi is a renewable energy company focused on technological advances within the anaerobic digestion industry. We have partnered with Alfa Laval to combine their equipment and our process to create a novel method of oil extraction that occurs within the Anaerobic Digestion process. Our technology expands the sustainability prospects of AD and provides site operators with a fresh revenue stream.

(in) company/bisviridi/ https://bisviridi.com

#### **Blended Products** C55



**AD Developer** 

by blended ADCO<sub>2</sub>, by blended, is an initiative where we've putin place trade mechanisms to help AD sites maintain their returns through Carbon Capture in this unpredictable economic climate. We believe, by making the investment into Carbon Capture financially safer, AD sites will be given the opportunity and incentive to capture the CO<sub>2</sub> they generate, helping them reduce their carbon footprint and bring us one step closer to Net Zero.

in company/blended-products-limited

**■ BlendedProducts** 

www.blendedproducts.com

#### bmp greengas GmbH pmpgreengas **B55**



#### Utilities - Gas/Electricity Supplier

bmp greengas is one of the leading marketers of biomethane in Europe and an expert in green gases. bmp has been developing efficient solutions for tomorrow's energy supply since 2007. At the same time, they make the energy transition economical and plannable for their partners. As part of the EnBW Group, energy expertise is firmly anchored in their DNA.

n company/bmp-greengas-gmbh

www.bmp-greengas.com

#### Bohr J52



#### Technology Supplier

Bohr is on a mission to accelerate the decarbonisation of the gas industry. Through constant innovation and disruptive thinking we look to overcome global net zero challenges by providing critical data and insight from our expertise in sampling, analysis and detection of biomethane, hydrogen and carbon dioxide.

(in company/79967043 www.bohreng.com



#### Borger UK Ltd D21



Rotary lobe pumps and agricultural equipment

Borger UK a market leader for elastomer-coated rotary lobe pumps. Our products for agriculture and biogas are designed for trouble free, continuous operation and are customised to the specific demand of each customer. Our Bioselect is available in four sizes with maximum capacities of between 25 and 150m/3h.

www.boerger.com

# **BPC Instruments**



Technology Supplier

BPC Instruments is a global Swedish-based technology company developing and offering analytical instruments enabling more efficient, reliable, and higher quality research and analysis for industries in renewable energy and environmental biotechnology. The BPC Instruments offer high quality hardware and software based on deep knowledge and experience of target applications.

n company/bioprocess-control-sweden-ab https://bpcinstruments.com

# Bright Renewables F11



**Technology Supplier** 

Bright Renewables is a family company and the only fully integrated global provider of renewable gas technologies and carbon capture, from manufacturing to maintenance. We excel in biogas upgrading, CO<sub>2</sub> purification & liquefaction, biomethane liquefaction, bio-CNG, and carbon capture, with the industry's largest in-house production facility and comprehensive in-house capabilities, and 24/7 local maintenance service.

company/brightrenewables
www.bright-renewables.com

#### **BTS Biogas**

D19

AD Contractor

BTS Biogas designs, builds, and manages Biogas and Biomethane Plants in Europe, North America, and East Asia. With over



25 years of experience in the AD sector, BTS has built more than 250 plants that produce clean energy using organic materials and waste from local authorities, food, agricultural companies, and fertilizers, modeling an efficient circular economy.

https://bts-biogas.com

# Capstone Power Solutions G51



Power Generation

Capstone Power Solutions provides excellent customer advice, support, and guidance ensuring all projects are designed to meet requirements. When implementing these solutions we take ownership from conception to completion, offering turnkey projects, and allowing customers to rely on only one supplier to deliver projects. We serve many different markets; industries, hospitality, renewables landfill and digester gas to power projects, helping customer to reduce their carbon emissions footprint to have a cleaner planet.

(in company/capstone-power-solution-ltd https://capstonepowersolutions.co.uk

#### **CBS** Beton





CBS Beton, based in Wielsbeke,

Belgium, is known as a leading player in the concrete industry. With a rich history dating back several decades, CBS Beton has continuously adapted to meet the changing needs of its customers. The company has a strong presence, both nationally and internationally, and excels in precast concrete elements, for both the agricultural and infrastructure sectors.

m company/1278518 www.cbs-beton.com



#### Ceres Energy/ Barrow Shipping F61



Technology Supplier BAR

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

www.ceresenergy.co.uk www.barrowgreengas.co.uk

#### Celtic Chemicals Ltd B43



**Technology Supplier** 

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

# Chemviron Carbon G21



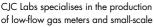
#### **Environmental Services**

Chemviron has pioneered the development of high-quality activated carbons for over 80 years. Chemviron has developed expertise in providing solutions by leveraging its longstanding engineering expertise and industry experience. This means that for biogas and biomethane upgrading, Chemviron's technical services team can provide tailored solutions for customers' problems.

in company/chemviron
www.chemviron.eu

#### CJC Labs K18





laboratory bioreactors. These can be configured to meet a range of experimental research and commercial testing applications. It was founded by Prof Charles Banks (University of Southampton), a leading researcher in anaerobic digestion and biogas technology.

www.cjc-labs.com

# Clarke Energy



Power generation and biomethane injection

Clarke Energy is a multinational sustainable solutions business with near 800MW of UK biogas installations. We can provide both biogas upgrading and biogas engine technologies, backed by market leading aftersales support. https://clarke-energy.com

#### Colloide Engineering Systems C56



Utilities - Water/Wastewater

Colloide is a highly skilled process engineering company, with specialist skills in water treatment, energy, environmental and facilities engineering solutions. Our services range from design through to construction, installation, commissioning, maintenance and overall project management. We have the skills to take on the role of either principal contractor, specialist sub-contractor or equipment supplier, and are equally comfortable and experienced in all roles. With over 20 years of success and experience in providing renewable energy solutions to the agricultural, industrial and municipal sectors, suppling innovative solutions and upgrading existing systems.

in company/colloide

Colloide

https://colloide.com

#### ComAp J7



#### Technology Supplier

ComAp provides smart energy control solutions leading the way to energy sustainability. Innovative control solutions and services for smart and sustainable power generation and energy management for any application and industry, empowering your transition to clean energy sources.

m company/comap-group www.comap-control.com



#### CPL/Puragen Activated Carbons

# CPL > Puragen

J61

#### Technology Supplier

CPL/Puragen Activated Carbons is a leading international manufacturer and supplier of activated carbon based filtration solutions, with a particular focus on the biogas/biomethane sector. In addition to a wide selection of FiltraCarb® media, we can also supply VOCSorber® mobile carbon filters on a convenient 'plug & play' rental basis.

(in company/1009749

CPLCarbonLink

https://activated-carbon.com

# CSO Group Ltd



#### **Technology Supplier**

CSO Group is a privately owned limited company providing pollution solutions in the fields of: Energy from Waste, Waste Water Treatment, Municipal Solids Waste and General Industrial applications.

n company/csogroup

**⊗** csogroupltd

www.csogroup.co.uk

#### C-Zero Markets C34



Consultancy/Environmental Consultancy

C-Zero Markets was established in 2021 to provide a complete sustainability solution for a range of partners. Experts in the decarbonisation space, we work end-to-end, from helping generators gain the most from their renewable energy assets to assisting corporations in meeting their sustainability goals. With established access to renewable commodity markets in the UK and Europe, we are excellently positioned to deal with a range of environmental commodities, doing our part to help funds flow into technologies that will be key to a zero carbon future.

(in company/74553250

https://c-zeromarkets.com

# Danagri-35 Ltd



#### **Technology Supplier**

Danagri-3S Ltd specialise in straw processing machinery, grain mills and grain storage & handling equipment. Our straw machinery is used for preparing and cutting straw to set lengths for use in biogas, biomass, bedding, fuel, compost, horse feeds industries etc.

https://danagri-3s.com

#### DESOTEC 143

# **DESOTEC\***

#### Environmental services

DESOTEC is the leading provider of mobile filtration solutions in Europe and is establishing this leading market position in the USA.

company/desotec-activated-carbonb www.desotec.com/en

# DMT Environmental Technology



D51

#### Technology Supplier

BDMT Environmental Technology works with its customers and partners to develop successful business cases for capturing greenhouse gas emissions and converting them into sustainable sources of renewable green energy. To this end, we provide innovative technologies, knowledge, and outstanding customer service. Equipped with over 35 years of experience, DMT Environmental Technology is your partner for biogas upgrading and LCO<sub>2</sub> liquefaction. We are active in the waste management, industrial and agricultural sectors, where the treatment of organic waste streams produces raw biogas and converts it into biomethane and CO<sub>2</sub> gasses to reduce greenhouse gas emissions.

n company/brightrenewables https://dmt-international.com/

#### Easy Compute B31



#### EasyPack Automation Ltd H77



#### **Technology Supplier**

EasyPack Automation has over 15 years experience in the animal feed and bedding sector. Based outside Horsham in West Sussex, EasyPack Automation specialise in providing machinery for straw and digestate based pellet production and more. We are able to provide machinery right from shredding the raw material all the way to robotically palletising the end product and every step in between.

#### www.easypackautomation.com

#### EcoVapor B51



#### Technology Supplier

EcoVapor offers biogas upgrading technology to help you commercialize your agricultural and landfill biogas operation. Our technology removes contaminants from biogas stock feeds, including oxygen and hydrogen sulfide, enabling your gas to meet stringent pipeline specifications in order to capitalize on the RNG market. https://ecovaporrs.com

# Eco Verde Energy (EVE)



AD Operator

EVE offers O&M and Asset

Management services for AD plants. Specialising in optimising outputs and maximising return on investment, EVE caters to owners with single plants or extensive portfolios. With vast AD industry experience, EVE provides top-tier support, including consultancy for internal process enhancement and expansion.

company/eco-verde-energy-eve https://ecoverde.energy/

#### Ecomondo B64



#### Media

Ecomondo is a world-leading Green Technology Exhibition. A meeting place for the whole supply chain from across the world where one of the most progressive sectors is the Bio-energies zone.

https://ecomondo.com

#### **Econward Tech**



#### **Technology Supplier**

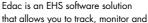
ECONWARD is a Spanish based company specialised in the development of innovative, efficient, and sustainable solutions for organic waste treatment. ECONWARD has capitalised on over 14 years of Research and Development and shaped a way to tackle municipal organic waste challenges through innovative pre-treatment technology in waste treatment sites such as Anaerobic Digestion plants to maximise organic recovery and energy production. ECONWARD's goal is to build a solid, profitable bridge between both waste and energy sectors.

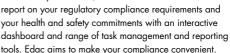
# in company/econward https://econward.com

#### **EDAC**



#### **Technology Supplier**





company/edac-compliance https://edacenviro.com/

#### Edina B45



#### Technology Supplier

Edina is an authorised distributor for MWM hydrogenready gas engines and a tier 1 integrator for battery energy storage. Our Combined Heat and Power, and Battery Storage solutions can further your net zero journey by reducing energy costs, carbon emissions, enhancing resilience, and efficiency whilst unlocking new opportunities and flexibility.

in company/edina-group

**a** edinauk

www.eding.eu



#### ELI BioSciences. **ELI Biosciences K34**

#### Biotechnology - Microbial Solutions

Welcome to ELI Biosciences – your partner in evolving environmental sustainability through scientific excellence. At ELI Biosciences, we lead the way in renewable energy innovation, drawing on over 47 years of expertise in microbial technologies. With a foundation rooted in cutting-edge scientific research, we specialize in developing microbial technologies that not only restore but also maintain ecological balance.

https://elibiosciences.com

#### **EMS Industries**

**K21** 

#### Technology Supplier

EMS Industries are a world leading UK manufacturer of ram pumps used in a wide-ranging variety of applications including Anaerobic Digestion & Food waste. Our EMS Ram pumps are renowned for being a robust solution for handling the most arduous of applications whilst maintaining reliability and low maintenance costs.

in/ems-industries-ltd-281598147

mems industries

www.emsindustriesltd.com

#### Energy, Fuels & Decarbonisation Expo (EFD) **B17**





#### **Energy Exhibition Trade Show**

The leading event for decarbonisation, alternative fuels, energy from waste, and sustainable energy management. From local authorities and energy suppliers, to energy from waste, to brokers and consultants, EFD welcomes professionals from across the entire supply chain.

in company/the-energy-fuels-anddecarbonisation-expo-efd

EFDExpo

www.ess-expo.co.uk/five-shows/efd

#### **EnviTec Biogas**

**B63** 



#### **Technology Supplier**

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 whether creating biomethane from biogas or capturing carbon dioxide.

in company/envitec-biogas-aq

envitecbiogas

www.envitec-biogas.co.uk

#### **Esmil Process Systems**



#### **B41**

#### Technology Supplier

Esmil Process Systems, a division of Esmil Group, is your go-to solution provider for cutting-edge membrane and sludge dewatering systems tailored specifically for the biogas industry. With our advanced technologies, we ensure efficient and sustainable solutions for biogas plants, maximizing resource recovery and environmental sustainability.

(in) company/9108970 https://esmil.co.uk

# **ETW Energietechnik**



#### Technology Supplier

We are a technology provider with a strong focus on efficiency, reliability and plant performance. Our team of 150 enginieers and technicians is able to provide biogas upgrading solutions worldwide.

https://etw-energie.de



### **Eurotron Instruments** (UK) Ltd



**G55** 

#### Biogas Instrumentation

Eurotron Instruments UK Ltd, specialise in manufacturing and servicing fixed and portable biogas analysers. We are the market leaders and operate a BMS which is certified to ISO 9001:2015, ISO 14001: 2015 and ISO 45001: 2018 standards. Additional certifications includes MCERTS product type approvals. Our products help our customers to optimise the process operations, understanding and reducing the emissions and work in a safer environment. We are setting the path for a better world.

www.ei-uk.com

### Exeon G65



### Odour Management

Emission And Odour Control For The Industry. Exeon have provided odour control solutions to the waste industry for a number of years and are familiar with the requirements of the AD industry, which typically are because of: Reception and depackaging of waste, and Storage and transfer of food waste to and from buffer tanks, pasteurisation tanks, post-digestate and slurry tanks.

m company/18432952 https://exeon.co.uk

### FerroBio - MBC Chemical Industries C23



### **Technology Supplier**

We are a Spanish company that extracts, transforms, develops and supplies iron hydroxides to provide solutions in the world of biogas, water treatment and odor control.

nttps://ferrobiogroup.com/en

### FM BioEnergy H09



### Consultancy/Environmental Consultancy

FM BioEnergy supports AD operators to gain more control of their process and increase methane yields to improve return on investment. Partnering with Schaumann BioEnergy, German market leaders in biogas optimisation, we work across both waste and agri plants. Our client base generates 35%+ of the UK's biogas output.

in/timelsome

www.fmbioenergy.co.uk

### Fogmaker UK & Ireland K11



### Fire Suppression

Fogmaker Fire Suppression Systems have over 300,000 applications Worldwide including Agricultural, Automotive, Passenger Transport, Waste Management, Construction, Mining, Forestry, Marine, Generators and Rail. A system designed and proven to perform in many tough environments including the Biogas Industry.

https://fogmaker.uk

### Gas Data F65



### Gas Analysis Instrument Manufacturer

Gas Data was formed in 1991 from a passion to improve the instruments that analyse gases for industrial applications. By listening to our customers and focusing on specific applications, we have developed a range of fixed and portable, handheld analysers that are recognised performance leaders in their fields.

n company/2890241 www.gasdata.co.uk



### gasworld **B71**



#### Gas News

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.

www.gasworld.com

### **Gen-C Ltd G35**



### **Technology Supplier**

Gen-C is an independent CHP parts and controls specialist based near Sheffield. Our focus is centered on giving CHP owners more control of their assets and supply chain by providing quality engine parts, engine controls, and system upgrades. Contact us now to take the power back!

in/james-thompson-04475213/ www.gen-c.co.uk

### **Genesis Agri Ltd** K31



Technology Supplier

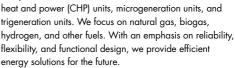
Genesis Agri Ltd supply and distribute the Industry leading nutrient management technologies including Livestock Water Recycling, BAUER-FAN Group and Mastek Slurry Solutions. Genesis Agri Ltd cover the UK & Ireland.

www.genesisagri.co.uk

### **GENTEC CHP s.r.o.**

### **Technology Supplier**

GENTEC CHP is a prominent central European manufacturer of combined



in company/gentec-chp https://gentec.cz/en/

### Green-en sp. z o.o. J71



### Technology Supplier

Biomethane, biogas, hydrogen, energy storage and other energy transformation projects in Poland. The best locations that meet the given criteria, thanks to the use of intelligent GIS solutions combined with experience in acquiring investment areas. Professional investment preparation from idea to construction permit, thanks to an experienced team and cooperation with leading technological, legal partners and experts. Project service tailored to the investor's needs, from a basic offer including obtaining permits and substrates to a comprehensive one extended with contracting and supervision of execution, providing a team to handle the installation, contracting local suppliers and partners.

in company/green-en-sp-z-o-o www.green-en.com

### **Haarsley UK Ltd F57**



### Machinery Supplier

Haarslev are the largest supplier of Processing and Rendering Solutions globally. For over a century, Haarslev has been helping the world turn organic waste into valuable proteins and other products we all depend on. Offering unmatched line and system engineering capabilities, along with the most reliable and efficient machinery available.

(in) company/haarslev https://haarslev.com



### Hahn Plastics



Manufacturer

HAHN Plastics are leaders in the manufacture of 100% recycled plastic products for outdoor use. HAHN has been producing premium sustainable products from recycled plastic for 30 years, and as part of our signature hanit® range, we have a variety of 100% recycled products.

n company/hahn-plastics-ltd www.hahnplastics.com

### Hazchem Safety



PPE & Technical Workwear

Supplier of Technical workwear, ATEX safety equipment and PPE for hazardous environments.

n company/hazchemsafetyltd www.hazchemsafety.com

### Heat & Power Services Ltd J41 + J43



AD Contractor

Heat and Power Services Ltd is a leading provider of engineering services for the natural gas and and renewable gas sectors.

n company/heat-and-power-ltd www.heatandpowerltd.co.uk

### HoSt Group F11



### Technology Supplier

HoSt Group, a global family company since 1991, turnkey realizes bioenergy systems, and biogas plants suitable for the anaerobic digestion of all organic residues, to empower sustainability ambitions. We offer a full-technology and maintenance service suite built around renewable energy: anaerobic digestion, biogas upgrading, CO<sub>2</sub> capture and liquefaction, and bio-ING.

m company/host-bioenergy www.host-bioenergy.com

### Howden, a Chart Industries Company E45



Engineering & manufacturing

Howden, a Chart Industries Company, is a global manufacturing company that specialises in the production of air and gas handling solutions. Howden was originally founded by James Howden in Scotland in 1854 and since then has expanded into a global leader in its field.

n company/howden www.howden.com/en-g

### HRS Heat Exchangers



Technology Supplier

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 CO<sub>2</sub>, whilst lowering fuel bills and improving final product quality without harming the environment.

n company/hrs-heat-exchangers

**№ HRSHeatEx** 

www.hrs-heatexchangers.com

### HUNING Anlagenbau GmbH HU & Co. KG



G45

### Machine and plant construction

With approximately 400 employees, HUNING is strongly rooted in agriculture. Seated in Melle/Germany, we have modern production facilities on a manufactoring area of 12,000m<sup>2</sup>. A wide range of different systems for processing an feeding solids into biogas plants at a high level of quality for 20 years.

www.huning-anlagenbau.de



### Inspectahire Instrument Company Ltd



#### F67

### NDT Inspection service

Inspectahire are the UK's leading Remote Visual Inspection specialists providing industrial inspection services and technology. We support civil engineering, oil & gas, shipping, and energy companies with trained technicians, equipment hire & sales, and maintenance. Established in 1981, we have the knowledge and experience needed to explore hard-to-reach and harsh environments quickly, safely, and cost-effectively.

www.inspectahire.com

### Jones McGirr & Co A41



### Technology Supplier

Jones McGirr provides a dedicated and professional service specialising in the supply and installation and retrofit of geomembrane and geotextile linings for the agricultural sector – largely slurry and waste storage.

### www.jonesmcgirr.com

### Kemira G68



#### Chemical Manufacturer

We are the chosen partners for water-intensive industries worldwide, helping our customers design for efficiency, reuse resources, and revitalize natural systems. With over 100 years of experience, we partner with municipal water utilities, pulp, paper, board and tissue producers to deliver visible improvements with our invisible enabler – the chemistry expertise of our 5,000 people.

in company/kemira

KemiraGroup

www.kemira.com

### **Kinetic BioFuel**



### Briquetting Presses and Straw Handling Equipment

Kinetic Biofuel offers a complete concept for handling of straw from bales to briquettes for industrial scale biogas production based on straw and slurry. Kinetic Biofuel is a partnership between C.F. Nielsen A/S and BioFuel Technology Aps combining biomass briquetting experience with Biofuel experience. The co-operation was initiated through a development program together with the University of Aarhus in Foulum.

m company/5334272 https://kineticbiofuel.com

### Kiowa Ltd / FAN



### **J31** Technology Supplier

FAN Separator are the pioneers of Press Screw Separation, and in conjunction with Bauer pumps and mixers provide a one stop shop for pumping and separation solutions for the biogas industry. With a wide portfolio of separators, both static and mobile, FAN can provide the optimized solution.

in company/kiowa-ltd

### KIS Group K03



### Technology Supplier

KIS Group is Asia's leading & most awarded company founded in 2006. With 18 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.

www.kisgroup.net



### Klüber Lubrication C15 Specialty Lubricants

Manufacturer



Klüber is the world's leading manufacturer of specialty lubricants, offering tribological solutions to virtually all industries worldwide. Operations must run economically and efficiently despite aggressive properties, which is why Klüber high-quality lubricants are made to specific industry requirements through consultation and understanding of the application and media involved.

in/bilal-chemeng www.klueber.com/uk/en

### **Konrad Pumpe GmbH**



#### H15

### Waste Management

Founded in 1830 as a blacksmith's shop, we at Konrad Pumpe GmbH are now an innovative specialist company for mechanical and plant engineering with approx. 80 employees. We have made it our business to make a valuable contribution to the sustainable handling of waste materials. To this end, we produce customised machine components for a wide range of applications such as dosing and conveying systems, including switch cabinet and control system construction for biogas and recycling plants.

(in) company/12429195 https://pumpegmbh.de

### Kronoa Engineered ⊀KRONGA **Solutions** J71

### **Technology Supplier**

The foundation and development of Kronoa® S.L. is based on more than 25 years of experience in the market of progressive cavity pumps for the biogas and wastewater treatment sectors. Kronoa® aims to be a leader in the field of high-quality progressive cavity pumps, differentiating itself from the other pumps on the market thanks to its ease of maintenance, its customized modular solutions, and its continuous and innovative development.

in company/kronoa-engineered-solutions www.kronog.eu

### Landia UK Ltd J3



**Equipment Supplier** 

Manufacturer of high quality biogas mixing and pumping equipment, which includes chopper pumps, gas mixing propeller mixers, ejector mixing, aeration and pasteurisation units. Complete mechanical supply and installation backed by a large UK-based spares stock and serviced with our own directly employed service personnel. We offer full service support along with service contracts tailored to meet the client's requirements. With over 30 years' experience in the AD market, we are leaders within our field of expertise.

in company/landia-uk-ltd

**■ UKLandia** 

www.landia.co.uk

### Lehmann-UMT **GmbH**



### **K5**

### Technology Supplier

We move. Lehmann-UMT is breaking new ground in filter, conveyor and environmental technology, always focussing on sustainable and high-performance systems. We develop innovative technologies and supply products that make the world a better place. From design, in-house production and assembly to comprehensive service - everything from a single source.

n company/lehmann-umt-gmbh http://lehmann-umt.de

### **Little Oak Energy D15**



Consultancy/ **Environmental Consultancy** 

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.

in company/littleoakenergy

 **■ littleoakenergy** 

www.littleoakenergy.co.uk



### **Low Carbon Solutions G76**

### LP Energy GmbH **B29**





Service: Expert and manufacturerindependent. LP Energy provides maintenance and repair services for all technological components of the biogas plant, regardless of the manufacturer.

www.lp-energy.de

### Malmbera Energy **B62**



At Malmberg Energy, we specialize in converting biogas to sustainable bio-methane using our prefabricated, scalable Malmberg COMPACT container facility. Our technology incorporates a water-scrubber technique, with seamless integration options for CO<sub>2</sub> capture and methane leaks. As your dedicated turnkey partner, we support you from energy calculations to commissioning and maintenance services.

in company/malmberg-group-ab www.malmberg.se/en

### **Marsh Commercial**

### Marsh Commercial

#### Insurance and risk management specialists

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 and manage risks.

in company/marsh-commercial

marshcommuk

www.marshcommercial.co.uk

### **Mavitec Green Energy** E41



#### Waste Management

Maximize the value of your food waste! 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 with the latest European legislation. This innovative depackaging machine produces the cleanest organic output (>99,7% clean!) which is extremely suitable for biogas installations.

in company/mavitec-b.v https://mavitecgreenenergy.com

### Modela **A55**



### Software as a service (SaaS) and Consulting

Modela provides services and solutions based on mathematical modeling and computational tools. We gim to solve sustainability challenges in the industry by using virtual prototyping and piloting, also known as digital twins.

n company/modela-uk www.modela.co.uk

### **B57**



#### Additive supplier

Nalón Minerals researches, produces, develops and supplies high quality iron oxides and hydroxides for sustainable and specialized applications, giving priority to the requirements of all our stakeholders.

in company/n-bio-solutions-by-nalón-minerals http://nalonminerals.com

### **NFU Energy**



Consultancy/Environmental Consultancy

NFU Energy is one of the UK's leading and trusted providers of sustainable energy solutions, offering a diverse array of services designed to meet the evolving needs of agricultural and horticultural enterprises, as well as public and private sector organisations.

(in) company/nfuenergy www.nfuenergy.co.uk



### Nijhuis Saur Industries C45



#### Water and Wastewater management

Nijhuis Saur Industries, leading the charge in sustainable water across UK & Ireland, unlocking the potential of biogas & Anaerobic Digestion (AD). Our expertise lies in: Recovering valuable nutrients: Transforming wastewater & organic waste into fertilizers, closing the nutrient loop. Optimizing AD processes: Maximizing biogas production through innovative technologies and expert consultancy. Minimizing environmental impact: Reducing greenhouse gas emissions and promoting resource efficiency. Partner with us to turn waste into valuable resources and create a more sustainable future.

n company/nijhuis-industries-uk-and-ireland www.nijhuisindustries.com/uk

# NNFCC - The Bioeconomy Consultants K40



### Consultancy/Environmental Consultancy

NNFCC is a specialist strategic business consultancy based in York (UK), providing 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. Within the AD sector, NNFCC engages directly with investors, developers and plant operators, to develop and execute new business opportunities, in new regions, countries or technology areas. NNFCC also provides market entry support, policy insight and due diligence, as well as supporting policy makers and regulators to develop and deliver a robust framework in waste and energy. Given the breadth and depth of bioeconomy knowledge within the business, NNFCC is instrumental in advising developers and operators on issues, concerns and innovations in relation to feedstock availability, markets, regulation, management and use.

in company/nnfcc www.nnfcc.co.uk

### nZero Group



### Technology Supplier

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.

www.nzerogroup.com

### OMEX Environmental Ltd K5



### Technology Supplier

OMEX Environmental Ltd supply non-hazardous and environmentally friendly liquid and solid treatment solutions for the food and drink, energy, water, construction and transport sectors, working closely with Industry to reduce environmental impact, treat waste and help optimise operational performance.

(in) company/1272910

**OMEXCompanies** 

www.omexenvironmental.com

### Online Lubricants Ltd B59



### Oil supplier

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.

n company/online-lubricants-ltd

onlinelubricants

www.online-lubricants.co.uk



### **Optical Gas Imaging**

**G57** 

#### Leak Detection

With over 30 years of experience, our LDAR programme is specifically tailored to the Biogas

Industry. We utilise cutting-edge technology and provide full comprehensive reports enabling speedy repairs and eliminating the need for costly shutdowns. Our innovative solutions help improve safety, reduce emissions, and prevent environmental hazards.

www.opticalgasimaging.co.uk

### **Orbinox UK** E31



Optical Gas Imaging

#### Industrial Valves & actuated valves

At Orbinox UK we have extensive experience in supplying valves, automation and engineering solutions to the Anaerobic Digestion and Biogas markets and have a large installed base in plants across the UK and worldwide with solid references from most of the major technology

in company/malmberg-group-ab www.orbinox.co.uk

### Orbis Environmental ORBIS



#### Consultancy/Environmental Consultancy

Established in 2016, Orbis provides specialist Safety and Compliance services, predominantly from DSEAR Risk assessment, ATEX and COMPEX Inspections, leading to further related services including training. Working closely with clients, we follow up each report, providing specific advice and options, not just giving you lists of things to do yourself.

(m) company/35596197 www.orbisenvironmental.com

### **OSS Enviro** (Global) Ltd É71



#### Technology Supplier

Specialists in the sale of Optical Gas Imaging cameras and LDAR services. With over 13 years experience, we are proven experts in our field, working with regulatory bodies, and well known end users, across the emissions monitoring arena.

in/rob-griffiths-741b1116 www.ossenviro.com

### **Palmieri Group G63**



### Technology Supplier

The Palmieri Group presents PASS® Palmieri Advanced Splitting System. Entirely designed and produced by Palmieri, it is a pre-treatment solution for the Organic Fraction of Municipal Solid Waste (FORSU) designed to be used in Biogas plants, Equipped with the most advanced technologies, it allows for greater productivity, efficiency and versatility.

n company/palmieri-group www.palmierigroup.com

### **Pentair** G31



### Technology Supplier

Pentair specializes in biogas-to-biomethane upgrading and CO2 recovery solutions for the agricultural and food processing sectors. We also provide the means to further refine this biomethane into a non-fossil-based biofuel used to decarbonize freight transportation. Alongside biogas upgrading, we convert the CO<sub>2</sub> by-product into a commercial product with CO<sub>2</sub>-Recovery Technology.

m showcase/72411126 https://biogas.pentair.com



### Perissinotto S.p.A. - PEMO PUMPS



**H53** 

### **Technology Supplier**

Supporting the circular economy, one pump at a time. PEMO abrasion-resistant centrifugal pumps are used to convey biomass material such as OFMSW or liquid manure to the storage and decantation tanks, for loading the separators and for feeding the mesophilic or thermophilic digesters or recirculating the digestate thanks to PEMO no clogging technology.

company/perissinotto-s-p-awww.pemopumps.com

### **Peters Mixer**

**H63** 

### Pro Gases UK F53

PRO GASES

Liquid CO, Off-taker

Pro Gases UK is 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 liquid Carbon Dioxide and distribute it to customers.

n company/progases-uk-limited https://progasesuk.com

### Protego UK Ltd C21



Since 1954, PROTEGO® has built and provided flame arresters, valves and tank equipment, now with the help of more than 650 employees worldwide. We are the technology leader within our area of expertise.

in company/365717 www.protego.com

### PTM GmbH

**B23** 

Technology Supplier

Being a highly-specialised manufacturer, we combine many years of experience with high technology. The result is a submersible mixer for the toughest applications - The PHANTOM.

n company/propeller-technik-maier www.propeller-technik-maier.de

### QED Environmental Systems Inc



D32

#### Environmental Instruments manufacturer

QED are a global environmental systems and gas instrumentation company. As industry leaders, QED are the premier manufacturers of monitoring and remediation equipment, precision engineered pumping solutions and gas instrumentation. Serving a wide range of environmental markets worldwide.

in company/qedenvint www.qedenv.com

### Realistic Agri



#### **AD Plan Performance Optimisers**

With over two decades of experience, Realistic Agri has been a trusted partner in the agricultural sector, offering solutions to enhance silage production efficiency, promote livestock health with superior feed additives, and optimising biogas production. Our commitment is to maximise your biogas plant's efficiency, ensuring optimal performance and sustainable energy production.

in company/realistic-agri

AgriRealistic

www.realisticagri.com/biogas

### Refuels

K41



### Roto Spiral Ltd

### W ROTOSPIRAL

### Manufacturing Engineering

Roto Spiral Ltd are specialists in Augers, Conveyors & a wide range of industrial machinery. We offer a wide range of customised solutions. We are specialists in bespoke design and manufacture to suit any requirements. We supply into the following sectors Pharmaceutical, Construction, Energy, Biomass, Food Production, Animal Feed, Animal Nutrition, Animal Bi- Products, Water and Waste Water Treatment, Waste industry and agricultural machinery production.

n company/71502267 www.rotospiral.co.uk

### Roto UK Ltd



### **Technology Supplier**

We provide comprehensive range of Progressive Cavity Pumps & Twin-Screw Pumps, catering to 5000+ applications across 25 industries including Wastewater, Biogas, Paper, Chemical, Food & Beverages, Sugar, Paint, Oil & Gas, and more. Recognising the fluid engineering challenges faced by our customers, we've engineered pumps tailored to meet the demands of various plant processes, earning their trust through reliability and unmatched performance.

in company/13595954 www.rotopumps.co.uk

### Saveco Environmental Ltd C35



### Waste Management

SAVECO, a member of the globally operating WAMGROUP, provides state-of-the-art solutions through a comprehensive product range of machines and equipment for effluent pre-treatment and sludge treatment in Biogas, Municipal and Industrial waste water treatment plants.

nttps://saveco-water.co.uk

### **SEEPEX**

#### **B25**

### SEEPEX.

#### Technology Supplier

An Ingersoll Rand Busines

SEEPEX, a global leader in progressive cavity pumps, provides low-energy, comprehensive solutions for the biogas industry. Our advanced pumping technology optimises operations, maximises gas yield, enables high solids pumping, and ensures smooth feedstock handling and accurate dosing. We are committed to green energy production and efficient biogas plant operations.

in company/seepex www.seepex.com

### SGN Commercial Services



### E71

### Biomethane Gas to Grid Developer & Operator

Since 2010, the SGN Commercial Services 'Green Gas Solutions' team has delivered and operated biogas/biomethane to grid projects all over the UK. Working in an advisory, D&B, O&M & 'Design/Build/Finance/Operate/Maintain' capacity, we ensure our AD clients maximise their flows to grid.

www.sgncommercialservices.co.uk

### SGS F31



#### Certification

SGS is the world's leading testing, inspection and certification company, recognised as the global benchmark for quality and integrity.

www.sgs.com

### Silostop Agri Ltd G61



### Technology Supplier

Global leaders of High Oxygen Barrier (HOB) Silage Films, Silage Covers, and Silage Clamps for Forage Fed Anaerobic Digestion Plants. Our aim is to improve silage quality and minimise losses while using less plastic.

Silostop
www.silostop.com

TANDELTA



### **Steverding Agitator Technology**



#### Technology Supplier

Steverding Agitator Technology, with over 25 years of experience in manufacturing agitators, offers cutting-edge solutions for biogas facilities. Continuous optimization and technical innovation ensure our components achieve top performance. We are partners and system suppliers to leading biomass facility manufacturers worldwide.

(in) company/steverding-rührwerkstechnik-gmbh www.ruehrwerkstechnik-steverding.de

### **SUMA Rührtechnik GmbH**



STEVERDING

AGITATOR TECHNOLOGY

#### J21

### Technology Supplier

SUMA is your provider for agitators, mixers and pumps designed for biogas plants, liquid manure tanks, lagoons or the waste water industry. We've been delivering our solutions for over 65 years. Our knowledge and technology combined with our field-related expertise makes SUMA able to deliver custom solutions for your business.

n company/suma-rührtechnik www.suma.de

### **Sundown Products Ltd** H57



#### Feedstock Producer

Straw pellets manufacturer in East

Midlands UK. 6mm Alkali treated straw pellets. 90% dry matter. More methane in dry matter than maize silage. Good ingredient to increase dry matter content and gas yield in 'wet' AD plants.

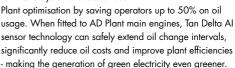
https://sundownproducts.co.uk

### **Tan Delta Systems PLC**

J73

### Technology Supplier

Tan Delta Systems revolutionises AD



(in) company/6200156

www.tandeltasystems.com

### Tank Consult LTD F15



**AD Contractor** 

we have over 35 years expertise in the design and construction of reinforced concrete, in-situ poured circular and square tanks. Along with the design, manufacture, installation of Glass Coated, Fusion Bonded Epoxy Coated, Stainless Steel and Galvanised Bolted steel tanks. We also offer the design, manufacture and installation of roofing solutions that include Double membrane, Single membrane, and aluminium options. Tank Consult are approved for both ISO 9001 and 45001. "Choose Tank

Consult, and you choose expertise to support and deliver for you, safely, on time and within budget to the highest

quality standards." Tank Consult, we lead, others follow. https://tankconsult.com

### **Tecno Project** Industriale S.r.l. C25



#### Waste Management

With over 800 supplies already operational worldwide, Tecno Project Industriale (TPI) is an Italian company, specialized in the design, construction and installation of plants for: production, capture and liquefaction of CO<sub>2</sub>, biogas upgrading and liquefaction of biomethane.

www.tecnoproject.com



### Tecto Hire Ltd H75

tectoHire
Solutions for Industry

Hire Services

Hire supplier to the confined space and hazardous area industries. Gas Monitors, Confined Space Entry equipment, Training, Site Safety (Barriers/Fencing), Airline Trollies/Trailers, Drainage Equipment (Cameras.

in company/tectohire https://tectohire.co.uk

### TEDOM UK Ltd TEDOM C65

**Technology Supplier** 

For more than 30 years, we have been involved in the development, production, and operation of CHP units, highly efficient sources for the joint production of electricity and heat. We are one of the top businesses in the cogeneration sector. Our products sell in a number of countries around the world, from Japan to Europe to the United States. We also cooperate with a wide group of foreign partners in more than 50 countries

www.tedom.co.uk

### TEMA Process BV TEMA PROCESS FLINDBED DRYERS WWW.TEMAPROCESS.COM

### **Technology Supplier**

The need for organic fertilizers plus the carbon intensity and high prices of chemical fertilizers, require innovative solutions to upgrade waste-streams from Anaerobic Digestion plants in to valuable products. TEMA Process has developed a unique solution to turn various waste streams from AD-plants in to a granulated Fertilizer, using Fluidized bed technology. This product has a high organic fraction and a high concentration of Nitrogen, Potassium and Phosphor, making it an excellent fertilizer, produced from waste streams with a small carbon footprint and very economical

n company/71502267 https://temaprocess.com

# Thöni Environmental Energy Engineering

Waste Management

Since 1991, Thöni Environmental Energy Engineering has been developing systems designed to generate bioenergy from organic waste. Thöni puts together the best individual solutions for their customers, from planning and construction to service.

in showcase/thoeni

### Tietjen Vertahrenstechnik GmbH



H15

Technology Supplier

Tietjen Verfahrenstechnik GmbH is a North German company, founded in 1959, in the field of mechanical and plant engineering. We have been developing, designing and producing hammer mills, depackaging machine and biomass shredders for biogas and heat production. Complex disintegration systems are our speciality. From raw material like food waste, manure or wood, we offer you complete solution adapted to your application and your needs.

n company/5224114 www.tietjen-original.com/en

### Trislot nv F17



**Technology Supplier** 

Trislot designs and manufactures wedge wire filter elements and separation screens. With over 30 years of experience, we understand this technology inside out. Our reputation is built on great customer service and being at the forefront of technology.

n company/trislot https://trislot.be



### Ulster Shredders D17

### Ulster Shredders

Manufacturing Equipment 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's 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.

in company/ulster-shredders

**■ UlsterShredders** 

https://ulstershredders.com/

### Unisensor Sensorsysteme GmbH



#### H21

#### **Technology Supplier**

With CARBOSCAN 150/300, UNISENSOR provides solutions for precise and fully automatic online process monitoring of  $CO_2$ . The systems safeguard continuous quality throughout the production process using the method of optical absorption spectroscopy to identify contaminants: it can identify even the slightest traces of contaminants using the light attenuation that these cause in the  $CO_2$ .

www.unisensor.de

### **Utile Engineering** B15



Technology Supplier Established over 100 year

Established over 100 years ago, UTILE is a traditional British manufacturing company with a reputation for producing quality Gas & Air Compressors, Digester Mixing Systems, Double Membrane Gas Holders, Pipework Systems and Turnkey Packages.

https://utileengineering.com

### UZ KİMYA A.Ş.



Iron Hydroxide Producer Producing various types of Iron

Hydroxides to protect Biogas Plant from H2S

company/uzkimya https://uzkimya.com

### Value4Farm project K17



Horizon Europe project

Funded by the European Union's Horizon Europe Research and Innovation programme, the Value4Farm project brings together research and academic bodies, technical providers and trade associations from 14 European countries with the specific objective of demonstrating the effectiveness, sustainability and replicability of integrating solar, anaerobic digestion and biomethane technology with the sustainable production of food and renewable energy on farms – with the ultimate aim of contributing to the decarbonisation of agriculture in Europe.

n company/value4farm

**№ Value4Farm** 

https://value4farm.eu/

### Vogelsang H31





### Technology Supplier

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.

www.vogelsang.info



### Wolf Systems Construction Ltd J23



**AD Contractor** 

With over 50 years of

experience we are building 2000 concrete tanks yearly all over Europe. In UK we already built over 300 tanks on 100 different AD projects. Our tanks can be used as digesters or storage tanks and go up to 50m in diameter and over 10.000m³ capacity.

company/wolfsystembau https://www.wolfsystem.at

### Zebra EM F71



**Technology Supplier** 

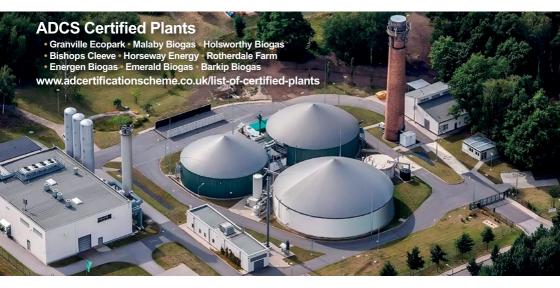
Zebra EM is a data management solution provider for the Renewables and Waste Management Industry. Specialising in multiple areas from cloud-based software, CMMS, Weighbridge and SCADA data capture, database management and Meter Imaging and Meter data capture.

m company/zebra-em
www.zebra-em.com

## ADCS Certification is the mark of efficiency, best practice and professionalism in AD operation



- ✓ Benefit from guidance and support to achieve best performance.
- Independent auditing by external consultant with guidance on next steps to success.
- ✓ Operate your plant considering Best practice/guidance available.
- ✓ Guarantee a culture of safety, compliance and best practice.
- ADCS / Assurance of a resilient plant with Life cycle assessment considerations.
  - ✓ Security and resiliency compliance in multiple sectors such as H&S, Env and others.



Contact enquiries@adbioresources.org and +44 (0) 20 3176 0503



**ONE PLACE. TWO DAYS. THREE EVENTS.** 

THE WORLD SUMMED BIOGAS SUMMED 
AD AND BIOGAS INDUSTRY AND AND SINDUSTRY

9-10 July 2025, NEC Birmingham, UK



Events organised by



## **SEE YOU NEXT YEAR!**

www.biogastradeshow.com www.world-biogas-summit.com

### PROUD TO BE SPONSORING THE WORLD BIOGAS EXPO 2024





SUBMERSIBLE MIXERS

EXTERNAL CHOPPER PUMPS

SCREW PRESS SEPARATORS

MICRO FILTRATION UNITS

BULK HANDLING EQUIPMENT

GRIT TREATMENT

**DEPACKAGING FOOD WASTE** 

Looking to replace existing equipment, or looking to streamline processes into a more efficient and cost-effective solution?

Give us a call, or come along and see us at the World Biogas Expo to find out more.

TEL: 01684 299104 EMAIL: SALES@SAVECO-WATER.CO.UK



CONTACT US TODAY TO BE PUT IN CONTACT WITH YOUR LOCAL DEALER FOR A FREE SITE CONSULTATION