

Achieving Net Zero With Renewable & Recycled Carbon DME From Non-Recyclable Waste

Submitted by: Acumen Media

Monday, 11 December 2023

11 December 2023

Leiden, the Netherlands - Over 200m tonnes of LPG are used for energy purposes each year, mainly in rural and remote areas. In a bid to tackle the decarbonisation of this critical energy, Dimeta a global joint venture committed to accelerating the production and use of renewable and recycled carbon Dimethyl Ether (DME), has teamed up with KEW Technology, a sustainable energy solutions company, to create a first of a kind waste-to-DME plant, through their Circular Fuels Ltd partnership.

Renewable & Recycled Carbon DME is a sustainable liquid gas produced through feedstocks such as non-recyclable wastes and is chemically similar to LPG. When blended with LPG, low-carbon DME can reduce greenhouse gas emissions by up to 85%, improve air quality and decarbonise the off-grid sector. It can also achieve over 100% emissions savings when carbon capture is used.

Dimeta is collaborating with KEW Technology to build the first waste-to-DME production plant through its joint venture, Circular Fuels Ltd. The plant will produce over 50,000 tonnes of DME from non-recyclable waste – the equivalent of 25% of LPG domestic heating in the UK. The total project investment of more than £150m will create jobs in the local area, with 250 roles available during construction and more than 50 skilled permanent positions when production is underway, as well as supporting dozens more indirect jobs in the feedstock and fuels supply chain.

The two companies also participated in COP28, where they drove constructive discourses about the critical role of renewable liquid gases in the energy transition and showcased their commitment to sustainable development and innovative solutions for mitigating climate change.

Frankie Ugboma, Chief Executive at Dimeta, commented: “There is an urgent need to mitigate the climate crisis and provide cost-effective energy to the hardest-to-abate sectors, such as off-grid homes and businesses that need it most. By harnessing the potential of Renewable and Recycled Carbon DME we can decarbonise the LPG sector and reduce carbon emissions ensuring a fair energy transition for all”.

Hans Mansson, Chief Technology Officer at KEW Technology, added: “Sustainable waste management and energy provision are paramount challenges in the global fight against climate change. We’re leading the way in scaling up waste-to-energy solutions, addressing both of these critical issues simultaneously as one of the few technology pathways able to deliver negative carbon.

Our solution is a vital enabler for communities to manage their waste responsibly, and renewable and recycled carbon DME is proving to be a real game changer as it provides a sustainable and seamless replacement for existing LPG infrastructure in off-grid homes.

By deploying our technology in local communities we’re helping to reduce emissions from waste collection and disposal and redirecting local waste away from harmful practices like burning or landfill and instead creating a local-based, low carbon alternative to fossil fuels targeting hard-to-abate

off-grid, industrial, cooking fuels and transport sectors.”

For more information contact Anna Pantazi at media@dimeta.nl

Watch the Kew Technology & Dimeta COP28 interview here
(<https://www.reuters.com/plus/acumen-stories/cop-28/kew-technology-and-dimeta>)

About Dimeta

Established in February 2022, Dimeta is a joint venture between SHV Energy and UGI International – the leading global distributors of off-grid energy – developed to further the production and use of dimethyl ether (DME) a low-carbon sustainable liquid gas.

Dimeta is committed to pioneering the advancement of renewable and recycled carbon DME technologies that accelerate the off-grid power market’s transition from LPG to sustainable, low carbon energy and contribute to the establishment of a net-zero carbon economy.

By leveraging the expertise, financial assurance, innovation capabilities and distribution power of SHV Energy and UGI International, Dimeta aims to accelerate DME as a versatile and sustainable fuel solution.

Learn more: www.dimeta.nl (<https://dimeta.nl/>)

About KEW Technology

KEW Technology is a sustainable energy solutions company. KEW’s advanced gasification solution, a form of Advanced Conversion Technology, provides an innovative approach to tackling climate change by efficiently converting various types of non-recyclable wastes and low-grade biomass into sustainable energy products, such as DME, hydrogen, heat, sustainable chemicals and advanced molecules such as rMethanol, rMethane and SAF. KEW sits at the heart of two parallel market (r)evolutions: the drive to zero carbon emissions and the shift to a zero-waste circular economy.

KEW’s technology enables industrial, commercial, and residential energy consumers to achieve net zero energy ambitions and beyond, particularly in harder to abate areas of energy use such as industrial gases, fuels and chemicals for off-grid, industrial, cooking fuels and transport sectors.

The challenge to produce sustainable energy and reduce waste is a global issue and one that is likely to have a defining impact on our society for future generations. KEW’s technology can provide a viable and cost-effective solution to this challenge, and we are already working with leading corporates on numerous projects globally. KEW Technology · A world beyond fossil fuels (kew-tech.com) (<https://kew-tech.com/>)

Media Contact:

Anna Pantazi

Media@dimeta.nl

+31657978438

Acumen Media Contact:
Saffron Dale
Distribution Coordinator
s.dale@acumenmedia.com