

- NEWS ANNOUNCEMENT -

New joint venture to fast-track innovative advanced thermal conversion technology for renewable DME production

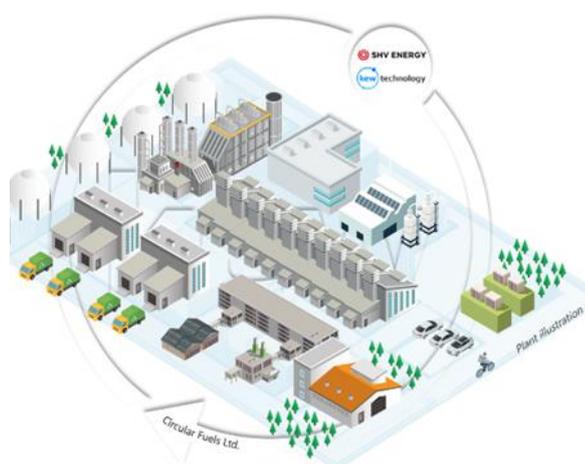
Hoofddorp, the Netherlands / Wednesbury, UK – 3rd June 2021 : SHV Energy, a leading global distributor of LPG, and KEW Technology, a pioneering UK sustainable energy solutions company, will form a joint venture called Circular Fuels Ltd. It will develop renewable dimethyl ether (rDME) production plants. This strategic collaboration will demonstrate the viability of converting renewable and recycled carbon feedstock into renewable liquid gas.

The partnership includes a multimillion GBP investment to set up the new joint venture, which will leverage KEW's proprietary advanced gasification technology to develop renewable dimethyl ether (rDME) production plants worldwide.

This announcement follows the press release issued May 18th in which SHV Energy and UGI International, leading distributors of off-grid energy, [announced their intention to launch a joint venture to advance the production, commercialization and use of rDME](#) to accelerate renewable solutions for the LPG industry. Circular Fuels Ltd will be set up by SHV Energy and KEW Technology with the intention of being transferred to SHV Energy & UGI's industry JV as soon as that is established.

First-of-a-kind rDME plant

The renewable DME will be produced using KEW's proprietary advanced thermal conversion technology, which can process a wide range of waste, bio-based and residue feedstock into renewable DME with high efficiency. The two parties and SHV Energy subsidiary Calor Gas have been working closely together for over a year on a FEED (Front-End Engineering Design) study for the first of a kind plant which will be located in the UK.



The plant will have a production capacity of 50 kilotonnes of rDME per year from municipal solid waste. Subsequent plants will be located across Europe and North America, where the rDME produced will offer customers an immediate route to reduce their carbon intensity without requiring major investment in new energy systems.



Advancing Energy Together

Renewable DME is a key part of SHV Energy's mission of Advancing Energy Together, to meet our ambition of supplying 100% renewably-sourced energy by 2040. SHV Energy began a comprehensive review of the potential of rDME in 2018 and are already involved in many projects and collaborations around the world.

"We believe rDME has significant potential to help us achieve our ambitions to be a leader in sustainable energy, and KEW's proprietary technology is an important new and efficient route to valorise waste," said Bram Gräber, Chief Executive Officer at SHV Energy. "This announcement builds on our intention to set up a JV with UGI to accelerate renewable solutions for the LPG industry. This new JV together with KEW Technology will give us a solid platform to successfully develop the first of a kind rDME production plant in the UK and then replicate it all over the world."

Renewable fuel from waste

KEW Technology have developed an innovative advanced gasification and reformation technology for producing renewable fuel from a wide range of waste, biomass and residue feedstocks. KEW's flagship demonstration plant at Wednesbury in the UK, called the Sustainable Energy Centre (SEC), can process a wide range of feedstock including municipal waste into clean syngas. The joint venture will build additional operations for the production of rDME on an adjacent site to the SEC so that the full end-to-end waste to rDME process will be operational from early 2022.

"SHV Energy has an impressive global network and strong drive to pioneer novel solutions for their businesses and their customers," said Kamal Kalsi, CEO at KEW Technology. "By coming together in this joint venture we can leverage scale and speed to start producing significant volumes of renewable fuel via our unique technology – helping us achieve our vision to maximise the potential of solid waste feedstocks."

rDME

Renewable DME is a simple molecule, similar in properties to LPG. DME is chemically similar to LPG (propane & butane) and is a gas at room temperature and pressure. Like LPG it is easily transported as a liquid in pressurised cylinders and tanks. It burns cleanly with no soot emissions and can be produced from a wide range of renewable feedstocks using existing technology, allowing sustainable production of rDME to be rapidly scaled up.



About SHV Energy

SHV Energy is a leading global distributor of off-grid energy such as LPG and LNG and is active in the area of sustainable fuels and renewable energy solutions. SHV Energy enables its 30 million customers to switch from heating oil and solid fuels to cleaner fuels resulting in a lower carbon impact and improved air quality. SHV Energy, a wholly owned subsidiary of family-owned multinational SHV, consists of a group of specialised energy companies. Our brands include Calor Gas, Ipragaz, Liquigas, Pinnacle Propane, Primagaz, SUPERGAS and Supergasbras. SHV Energy has 16,700 employees and operates in 25 countries on four continents.

More information about SHV Energy is available at www.shvenergy.com.

About KEW Technology

KEW Technology is a UK based sustainable energy solutions company. The company has developed a unique technology that tackles climate change by efficiently converting all types of non-recyclable resources and low-grade biomass into a wide-range of sustainable energy vectors, such as hydrogen, power, heat and advanced fuels for a zero carbon future. KEW is at the heart of two parallel market evolutions: the drive towards a zero carbon and the shift to zero waste as part of a circular economy. KEW deploys its technology into developed projects, helping industrial corporates to achieve their net-zero ambitions in harder to decarbonise areas such as industrial gases and fuels.

More information about KEW Technology is available at www.kew-tech.com.