

Advancing the production and use of

Renewable and recycled
carbon dimethyl ether (rDME),
to accelerate decarbonisation
of the off-grid energy sector

What is rDME?

Renewable and recycled carbon DME (rDME) is a safe, clean-burning, sustainable fuel that can support decarbonisation of the off-grid energy sector including domestic and commercial heating and cooking, industry and transport.



Why rDME?



CHEMICALLY SIMILAR
to propane and butane



EASILY TRANSPORTED
as a liquid in pressurised
cylinders and tanks



CAN BE BLENDED WITH LPG
and used in existing
applications



**CAN REDUCE GHG
EMISSIONS BY UP TO 85%**
compared to heating oil



EASILY DISTRIBUTED
using existing LPG
infrastructure at the same
pressure



CAN BE PRODUCED TODAY
from wide range of
sustainable, locally sourced,
feedstocks



**DME HAS BEEN
USED SAFELY**
in industrial applications
for decades



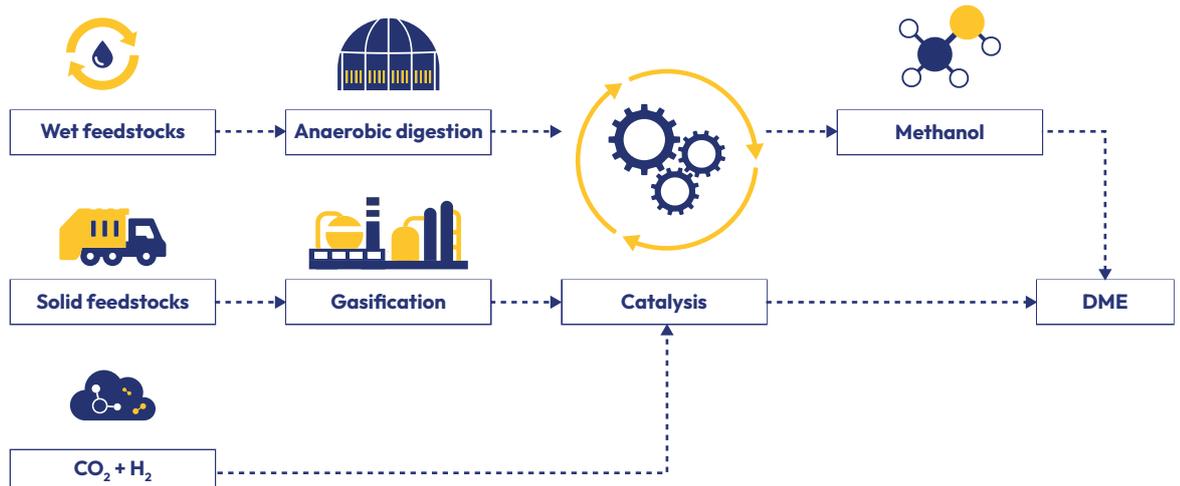
**SIMILAR TO LPG,
SUBSTANTIALLY REDUCES
POLLUTANTS SUCH AS NOx,
SOx AND PM** compared to
solid and liquid fuels

How can rDME be produced?

rDME can be produced from a wide range of sustainable feedstocks including

- ✓ Biogenic material such as manure, organic fraction of waste streams, and other biomass
- ✓ Non-organic fraction of municipal waste such as non-recyclable plastics and tyres
- ✓ Captured CO₂ and other waste gases from the industrial sector such as steel, aluminium, and cement manufacturing

rDME can be produced using a range of technologies including gasification or electrolysis



Where can rDME be used?

rDME blended with (bio)LPG

A blend of 20% rDME in (bio)LPG can be used in existing applications enabling a further reduction in GHG emissions.



100% rDME

100% rDME requires a dedicated appliance but enables customers to switch to 100% renewable fuel.



How we support the growth of rDME

- ✓ Identify partners and establish the right collaboration framework for developing production plants (PDA, Joint Venture, Consortium etc.)
- ✓ Support partners from pre-feasibility to project development activities
- ✓ Provide a long-term stable offtake contract for the total production, backed by international LPG distribution companies
- ✓ Partner in investments



Dimeta works across the whole value chain



We are actively looking for collaborations on:

R&D and innovative technologies for rDME production

