

## **NEW solution created by DMT**

## BIO-CO<sub>2</sub> RECOVERY SYSTEMS FROM DMT



## Standardized Capacities for CO<sub>2</sub> Liquefaction Systems

### **Smart Engineered Solutions**

Resulting ~100% methane recovery

~0% methane slippage

No water, chemicals or heat required

Availability up to 98%

Oil free piston compressor(s)

Only Quality components used

**Highest Cyber Security Standards** 

Only natural refrigerants used

# A Bolt-On CO<sub>2</sub> Liquefaction Plant connected to your Biogas Upgrading Plant

DMT has launched its new turnkey, plug and play solution to your biogas upgrading process: a bolt-on  $\mathrm{CO}_2$  liquefaction system. You can create additional revenue from your process off-gas by producing food-grade quality of  $\mathrm{CO}_2$ .

Over the past 35 years, DMT has delivered numerous successful projects across the globe, aiming to exceed our customer's expectations by providing equipment designed with experience and know-how. DMT strives to deliver not only state of art equipment, but also making sure the system excels in performance and profitable payback time.

We expanded our portfolio to meet the market's demand for stringent limitations on greenhouse gas emissions. With DMT, you can take a step forward and towards a complete Carbon Capture solution.



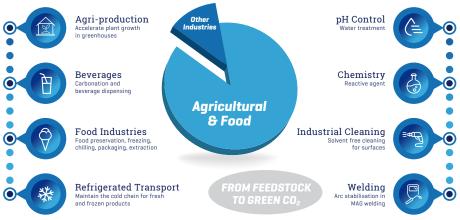
## CarboCap®

#### **PORTFOLIO**

Solutions*	Standard Capacities	Typical Design Characteristics	Product Outlet Quality	Power Consumption [± 5%]
CarboCap® 500	500 kg/h	~ 0% Methane Slippage	EIGA/ISBT standards	<200kWh/ton CO <sub>2</sub>
CarboCap® 750	750 kg/h			
CarboCap® 1000	1000 kg/h			
CarboCap® 1500	1500 kg/h			
CarboCap® 2500	2500 kg/h			

<sup>\*</sup> Other Solutions available on request

### CO2 routes to Market



Many other applications:
e.g. in fire extinguishers, as natural refrigerant, ...

#### How does it work?

The  $\mathrm{CO}_2$ -rich stream from the upgrader is supplied to the  $\mathrm{CO}_2$  Liquefaction Plant, where the pressure is elevated via a double stage oil-free compressor. The  $\mathrm{CO}_2$  is then dried and cleaned from any remaining impurities (e.g  $\mathrm{H}_2\mathrm{S}$ , VOCs). After this, the gas is fed to the liquefaction unit, where the  $\mathrm{CO}_2$  condenses via a refrigeration system and the uncondensed gases (e.g  $\mathrm{CH}_{4^\prime}$   $\mathrm{N}_2$  and  $\mathrm{O}_2$ ) are stripped and removed. The liquid product is then discharged via a pump to a dedicated storage tank or vaporized for pipeline injection. The operation is fully automatically controlled and monitored to ensure optimal operation and high uptimes.







## **Global & Local Service Support**

Experienced or new to Biogas Upgrading Solutions DMT offers a flexible service package suitable for your individual needs on operations and maintenance service support. From operator phone support to 24/7 on-call technical site support, we offer service solutions designed to maximise your plant's uptime, performance and safety.

