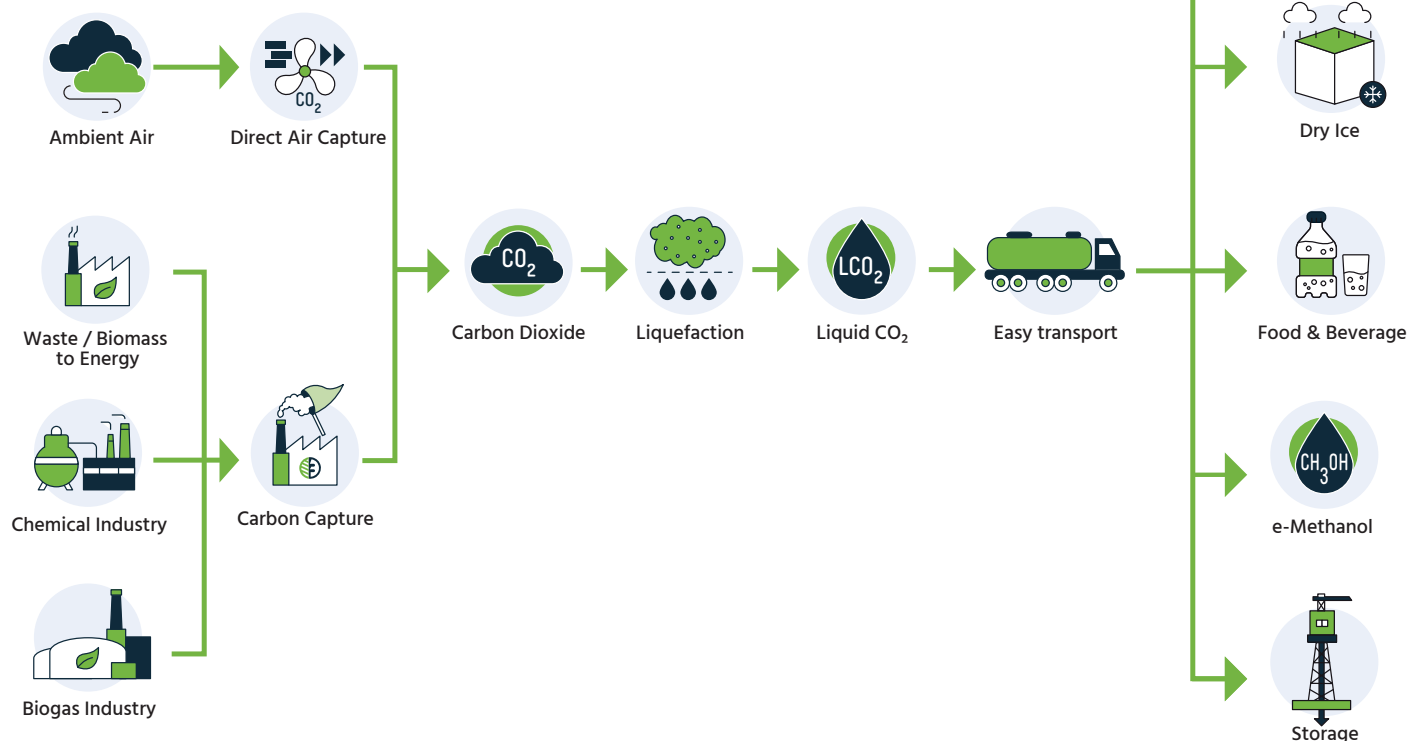


HIGH-EFFICIENCY TURN-KEY SOLUTIONS FOR CCU(S)

CO₂ LIQUEFACTION

CO₂ liquefaction is an essential part of carbon capture, utilization and storage (CCUS) solutions. It involves condensing gaseous CO₂ into a dense liquid by compressing the gas and subsequently cooling it to a low temperature. This step enables efficient storage, transportation and utilization of CO₂ in various industrial and chemical applications, in the food industry and as a fertilizer in greenhouse horticulture.



Brusche's advanced liquefaction technology efficiently transforms gaseous CO₂ into a liquid. This treatment is essential when

- high purity (food grade) CO₂ is required;
- pipeline transportation is not an option;
- buffering or temporary storage of CO₂ is necessary for supply-demand balancing.

Sustainable and cost-effective

Our CO₂ liquefiers stand out for their use of sustainable refrigerants, ensuring maximum efficiency with minimal environmental impact. Compared to conventional refrigerants, the use of natural refrigerants offers several key advantages:

- reduced environmental impact;
- lower energy consumption;
- reduced operating costs.

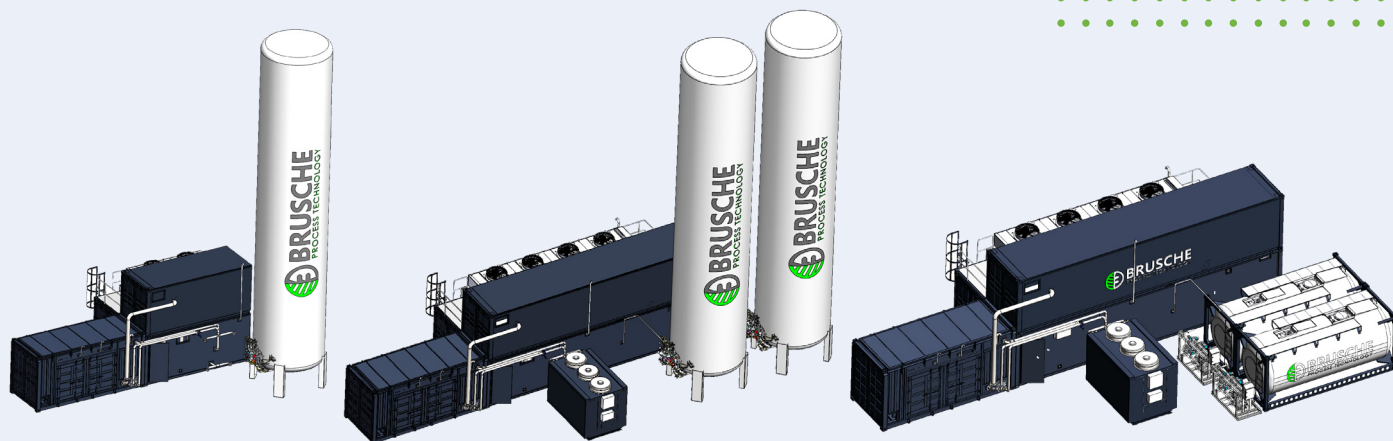
Key advantages of the Brusche liquefier:

- Turnkey, plug and play installation for rapid deployment;
- High yield, producing near 100 percent pure liquid CO₂ (LCO₂);
- Energy-optimized operation for maximum cost efficiency;
- Modular design;
- Robust and durable, engineered and constructed for high availability;
- Skid based and containerized for easy transportation and on-site integration;
- Seamless retrofit into existing process infrastructure;
- Easy maintenance and long-term reliability;
- Sustainable technology.

From design to realisation

HIGH-EFFICIENCY TURN-KEY SOLUTIONS FOR CCU(S) CO₂ LIQUEFACTION

Standardized liquefaction solutions



Standard sizes available from 500-2500 kg/hr. Specials offered for small scale solutions and dedicated design for large scale solutions.

Industries we serve

Our liquefaction solutions are optimized for placement downstream of CO₂ capture processes, like post-combustion capture, biogas upgrading or direct air capture across sectors such as:

- Chemical production & processing;
- (Waste-to-) Energy & power generation;
- Oil and gas refining ;
- Biogas & biomethane production;
- Maritime & offshore applications.

Why choose Brusche?

Brusche Process Technology is your technology partner for the entire CCU(S) process – from CO₂ capture from flue gases from waste-to-energy or biomass, through liquefaction and methanol synthesis, to cutting edge pilot and demonstration plants for the production of green platform chemicals and e-fuels.

Our systems are designed to maximize resource efficiency, reduce emissions and support a circular carbon economy.

Looking to optimize your CO₂ capture and utilization strategy? Contact us to discover how we can enhance your industry or process!



Brusche Process Technology

Twentepoort West 29
7609 RD Almelo
The Netherlands

+31 546 86 32 27
info@brusche.nl
www.brusche-pt.nl

