

# LQF-CO<sub>2</sub>: Liquefaction Solutions



Biogasclean A/S delivers advanced, sustainable CO<sub>2</sub> capture and liquefaction technologies that enable industrial and commercial customers to reduce emissions while improving operational efficiency. Our solutions combine deep process expertise with long-term lifecycle support, positioning Biogasclean as a trusted partner in industrial decarbonization.

## Technology Overview

We design and supply cost-efficient CO<sub>2</sub> liquefaction systems for carbon capture and utilization (CCU), carbon capture and storage (CCS), and Power-to-X applications. Our systems are engineered to:

- Handle variable gas compositions
- Remove critical impurities
- Deliver a stable, high-purity liquid CO<sub>2</sub> product suitable for a wide range of downstream applications

Each liquefaction unit integrates proven gas treatment and purification technologies, ensuring:

- Effective removal of VOCs and sulphur compounds
- Controlled separation and venting of inert gases
- Consistent CO<sub>2</sub> purity aligned with CCU, CCS, and Power-to-X specifications
- Optional compliance with food-grade CO<sub>2</sub> standards (EIGA)

## Standard Design Parameters

- Plant capacity: from 1,000 kg/h CO<sub>2</sub>
- Feed gas composition (dry): from 95% CO<sub>2</sub>
- Product quality: CCS, CCU, Power-to-X, and food-grade (EIGA compliant)

## Applications

- Green fuels (e.g., e-methanol, e-fuels)
- Food and beverage industry
- Horticulture
- Carbon mineralization
- Synthetic chemistry

## Key Highlights

- Scalable solutions, including high-capacity configurations for large-scale CO<sub>2</sub> capture
- Customizable upstream and downstream process integration
- Fully automated operation
- Energy-optimized design with competitive OPEX
- Engineered for long-term reliability and continuous operation

