# Biomethane engineering expertise

With more than 10 years in the energy sector, and as part of the Cycle group, we have the engineering expertise to build leading solutions for the entire biogas production chain.

We design, build, test, and install skid-mounted biomethane upgrading and liquefaction technology. Our modular units are simple to install in remote sites, allowing us to access distributed feedstock sources.

Because each biomethane project is unique, our processes and technology can adapt to the client's needs to achieve best-in-class efficiency.

**WHO WE ARE** 



# What is biomethane?

Also known as green gas or renewable natural gas (RNG), biomethane is mainly composed of methane, making it a great alternative to fossil natural gas. Methane, when released into the air, becomes a potent

greenhouse gas, with up to 80 times the warming effect of CO<sub>2</sub>. We produce biomethane by capturing methane emissions from organic sources (such as waste from food and agriculture) to generate biogas, a gas that contains mostly methane and CO<sub>2</sub>. Biogas is then purified through a process known as **upgrading**.

Greater energy efficiency than biogas

Decarbonising the gas grid

**Carbon-neutral transport** 

# Bespoke solutions for the entire biomethane value chain

At our manufacturing facilities located in the Spanish Basque country, we design, manufacture and test our market-leading modular, skid-mounted biogas upgrading and biomethane liquefaction units.

# Proprietary biogas upgrading technology

Our modular, membrane-based upgrading technology employs a three-stage process that separates CO<sub>2</sub> from methane to produce biomethane with more than 99% methane purity. We provide flexible upgrading solutions that achieve maximum efficiencies.

DISCOVER OUR UPGRADING TECH

# Plug-and-play biomethane liquefaction

Our modular, small to medium-scale liquefaction units can be easily transported and installed in remote

locations. Our technology employs a closed loop refrigeration system that self-generates nitrogen, which means no external fluids are required for liquefaction, simplifying the plant's operation.

DISCOVER OUR LIQUEFACTION TECH

# Experts in integrated biogas management

Innovation is in our DNA. At FNX, we have developed leading upgrading and liquefaction technology from scratch. We continue to improve on our technology and create new processes to deliver market-leading solutions, all at a competitive cost. Beyond manufacturing, we have the know-how to provide integrated management for biomethane projects.

Proprietary upgrading and liquefaction technology

In-house manufacturing and testing

Flexible, scalable designs cover a range of applications

Skid-mounted, plug-and-play units for easy transport and installation

Dedicated 7,000+ squaremeter manufacturing facility

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#### Get in touch to learn more

# **Agri-food producers**

Biomethane is a sustainable waste management solution that reduces costs and brings benefits to farmers and rural communities. Contact us to see how we can work together.

**CONTACT US** 

#### **Technical Partners**

Whether you want to know more about our technology, be supplied with green gas or benefit from green certificates, we have a solution for you.

**CONTACT US** 

# CycleØ Projects

We're part of the CycleØ Group, a leading biomethane platform that develops, builds, owns and operates green gas projects that deliver biomethane for vehicular (Bio-G2V) and grid injection (Bio-G2G) applications. We provide the engineering expertise and the upgrading and liquefaction technology to bring these projects to life.

#### Farm La Carbona, Spain

The first biomethane plant to integrate ammonia stripping in Spain has a bioCNG maximum production capacity of 15,000 MWh per year, using primarily cow manure as feedstock.

#### Lleida, Spain

Located at less than 5 kilometres from Farm La Carbona, where another CycleØ project is located, this farm will produce 10 GWh of biomethane per year, using primarily cow manure as feedstock.

#### Vilanant, Spain

The Vilanant plant is the first Bio-G2V-CNG project in Spain. Currently operational, this 0.5 Mwh plant uses cow manure as feedstock to produce biomethane for vehicular applications.

#### Faenza, Italy

One of the largest 100% vehicular biomethane plants in Europe, the Faenza plant will produce an estimated 9 million kilograms of Bio-CNG (equivalent to 140 Gwh) for vehicle fuel.

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# Get your guide to biomethane technology

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Latest news **VIEW ALL** 

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11 Jul, 2023 NEWS

# Ara Partners Invests in CycleØ

21 Mar, 2022 NEWS

#### DFB - PLAN 2I - PROYECTO BIOMETAN

23 Dec, 2021 NEWS

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