A single
partner.
A **modular**
solution.

All the advantages of

biomethane.

ONE-STOP SHOP

ABetter
Way

Choosing AB means not only being able to use a wide **range of technologies** (biogas upgrading, liquefaction of CO_2, liquefaction of biomethane and cogeneration), but above counting on a series of services that cover the entire life of the plant, **from the feasibility study to maintenance**, to get the best possible benefit from your investment.

Biomethane **is** the **fuel** obtained from the purification of biogas produced **thanks to the enhancement of organic waste and sustainable biomass**. After appropriate chemical and physical treatments are carried out (upgrading and eventually liquefaction), it becomes **suitable for the injection of natural gas** into the grid or for transport using cryogenic tankers.

As it is produced from zootechnical waste, agro-industrial waste, organic waste and agricultural biomass, biomethane is in all respects a source of renewable and sustainable energy: in addition to reducing emissions into the atmosphere, it is carbon neutral, in other words it fully compensates for the emissions produced to generate it, returning organic substances to the soil. This is therefore a solution that can significantly contribute to the energy and ecological transition, with important implications both in terms of the circular economy and independence from foreign energy supplies.

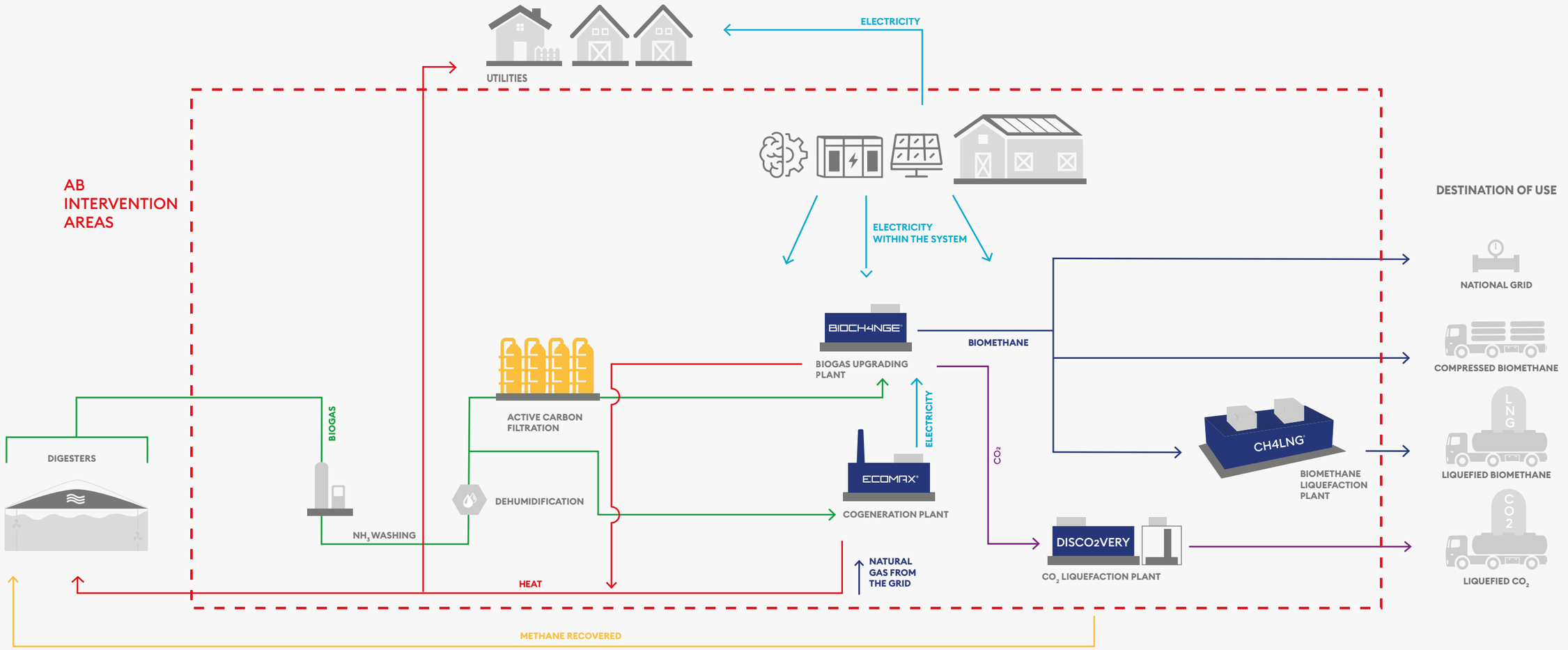
It is also an excellent investment opportunity for many companies in the agricultural and industrial sectors which, in addition to committing to increasing the sustainability of their production companies, have the opportunity to generate profits and increase the level of competitiveness. A new era opens up and the time to decide whether to take part in it with an active role is now. We are at your disposal to accompany you along this path, building on the experience gained over decades in the biogas sector and, in recent years, in the biomethane sector, in Italy and internationally.

Rely on AB's ONE-STOP SHOP to have biomethane in a single solution – the best solution!

ONE-STOP SHOP

All AB solutions for biomethane

AB is the only provider to guarantee your company all the benefits of biomethane. With AB, in fact, you can create a complete and sustainable energy system, combining cogeneration, biogas upgrading technologies, biomethane and CO_2 liquefaction, supported by a complete range of services: from the feasibility study to maintenance.



Biogas upgrading is the treatment aimed at removing CO_2 from raw biogas.

BIOCH4NGE®, the technology offered by AB, is based on a membrane system, characterised by flexibility, scalability and low energy consumption for a real competitive advantage.
The process consists of several phases: a first pre-treatment step, followed by a purification phase, i.e. of removal of pollutants (H_2S, VOCs) from biogas coming from the anaerobic digester and a final phase of methane separation (CH_4) from carbon dioxide.
The end result is a renewable energy source, biomethane, which reduces emissions, exploiting existing gas networks and increasing national production, with positive repercussions in terms of circularity in the use of resources in the agri-food sector.
Combined with the **CH4LNG liquefier,** BIOCH4NGE® can produce a quality gas suitable for liquefaction and transport by road as an alternative to feeding into the grid.
In support of the plant, AB also makes available **DISCO$_2$VERY**, the CO_2 liquefier which allows to purify and liquefy gas rich in carbon dioxide coming from the BIOCH4NGE® system, in order to obtain liquid CO_2 suitable for food and industrial use. To power the entire system, AB offers a wide range of **ECOMAX®** cogeneration solutions.

Tailor-made services

Every company, whether in the agro-zootechnic or industrial sector, has its own needs, which AB knows how to interpret. We provide tailor-made services to each customer, which guarantee long-term investments and optimal performance over time.

- **Feasibility study and selection of the best solution**
- **Consulting on regulations and incentives**
- **Assistance in the authorisation phase**
- **Plant design and production**
- **Installation and start-up of systems**
- **24/7 maintenance and assistance service**
- **Spare parts always available**
- **Financing**

The benefits of the AB approach, the only partner for biomethane

Integrated solution supplied by a single provider:

- → Centralisation → Varied equipment and reduction of different self-consumption producers
- → Unique control system, remotely accessible and connected with the Internet of Things (IoT) technology
- → Perfect integration of the different subsystems: ECOMAX® cogenerator, BIOCH4NGE® biogas upgrading, CO2 DISCO$_2$VERY liquefaction and CH4LNG biomethane liquefaction.

Minimisation of risk due to interfaces between:

- → Varied equipment / from different manufacturers
- → Technologies not natively compatible
- → Different suppliers

Control of prefabrication, supply, installation and start-up times

BIOMETHANE IN A UNIQUE SOLUTION THANKS TO AB'S ONE-STOP SHOP

WATCH THE VIDEO ▶

Compressed biomethane for feeding into the grid

Among the various upgrading technologies for biomethane available on the market, AB offers the BIOCH4NGE® solution for compressed biomethane, which uses a membrane system, **the most widespread and most commonly used in the world.**
The membranes are made up of special polymeric materials characterised by a selective permeability useful for the separation between CH_4 and CO_2.

BIOCH4NGE® is a configurable solution for:

- Adapting to the quality of the biomethane produced
- Minimising methane leaks
- Achieving maximum recovery and reduction in consumption
- Meeting the requirements of the so-called Biomethane-Ter Decree in terms of size, self-consumption and sustainability

*example image
Layout and elements to be defined based on the available spaces and the configuration chosen

How the process works

1

In the first phase, a **chilled water heat exchanger**, supplied by a chiller, lowers the biogas temperature from the digester, **while a condensation** separator removes excess water. Downstream of dehumidification, a **blower compresses** the gas at the suitable pressure for subsequent treatments.

2

Biogas then passes into the **activated carbon tanks** for the abatement of volatile organic compounds and hydrogen sulphide.

3

Once filtered, the biogas is compressed and enters **the heart of the BIOCH4NGE®** upgrading plant, where methane is separated from carbon dioxide using a multi-stage membrane system. The biomethane that conforms to the required standard is sent to the compression process, if needed, before being injected into the grid.

4

BIOCH4NGE® is completed by a series of preparatory options for feeding into the network and other accessories to support the operation of the system. Upstream of the biogas treatment, the **desulphurisation system is available** to lower the hydrogen sulphide content and the washing tower to reduce the ammonia content, if the quality of the gas requires these specific treatments.

5

In the case of a low concentration of oxygen in the biogas, an **oxygen concentration system** from ambient air makes it possible to provide the necessary quantity so that the chemical adsorption reactions of contaminants by activated carbons take place correctly.

6

AB offers a range of **regenerative thermal oxidisers (RTOs)**, to eliminate even the smallest percentages of residual methane in the off-gas.

7

Biomethane is produced at a pressure in a range from 7 to 15 bar to minimise consumption, but also to facilitate injection into distribution networks where necessary.
A **booster compressor** can be supplied to reach the pressure required by the transport networks.
Before being injected into the grid, the REMI cabin measures the flow rate and analyses the quality of biomethane in order to establish its compliance with the grid requirements or the need to recirculate the non-compliant gas.

Find out in the video how the process works

WATCH THE VIDEO ▶

The benefits of BIOCH4NGE®

Industrial product entirely designed and manufactured by AB, pre-assembled and tested in our production plants before shipment.

Outdoor modular solution designed to be installed outside.

Compact and engineered in every aspect to optimise dimensions and simplify maintenance operations.

Plug & play installation to limit construction work and takes place inside contained spaces.

Sustainable as it meets both the requirements of the gas produced and the gas emitted into the atmosphere and in combination with AB's secondary abatement systems ensures complete zeroing of CH_4 emissions.

Remote control thanks to a centralised monitoring and supervision system, managed by AB.

Membrane system benefits:

Simple upgrading process, without intermediate steps and without the use of chemicals or consumption

High scalability and flexibility that allow operation even at partial load

High efficiency and low consumption thanks to the control system that makes it possible to modulate the operating pressures of the separation stages

Affordable cost even for medium-small sizes plants

The BIOCH4NGE® SOLUTION RANGE

BIOCH4NGE® is available in standardized sizes covering a wide range of incoming biogas flow rates, from **50 to 5,000 Nm^3/h**, and can be integrated with modules dedicated to biomethane liquefaction and CO_2 valorization. Custom configurations can also be developed to meet specific plant requirements.

SMALL-SCALE BIOMETHANE
Compact Excellence with BIOCH4NGE® SERIE 1.

BIOCH4NGE® SERIE 1 is available in standardised units from **50 to 340 Nm3 /h** of biogas.

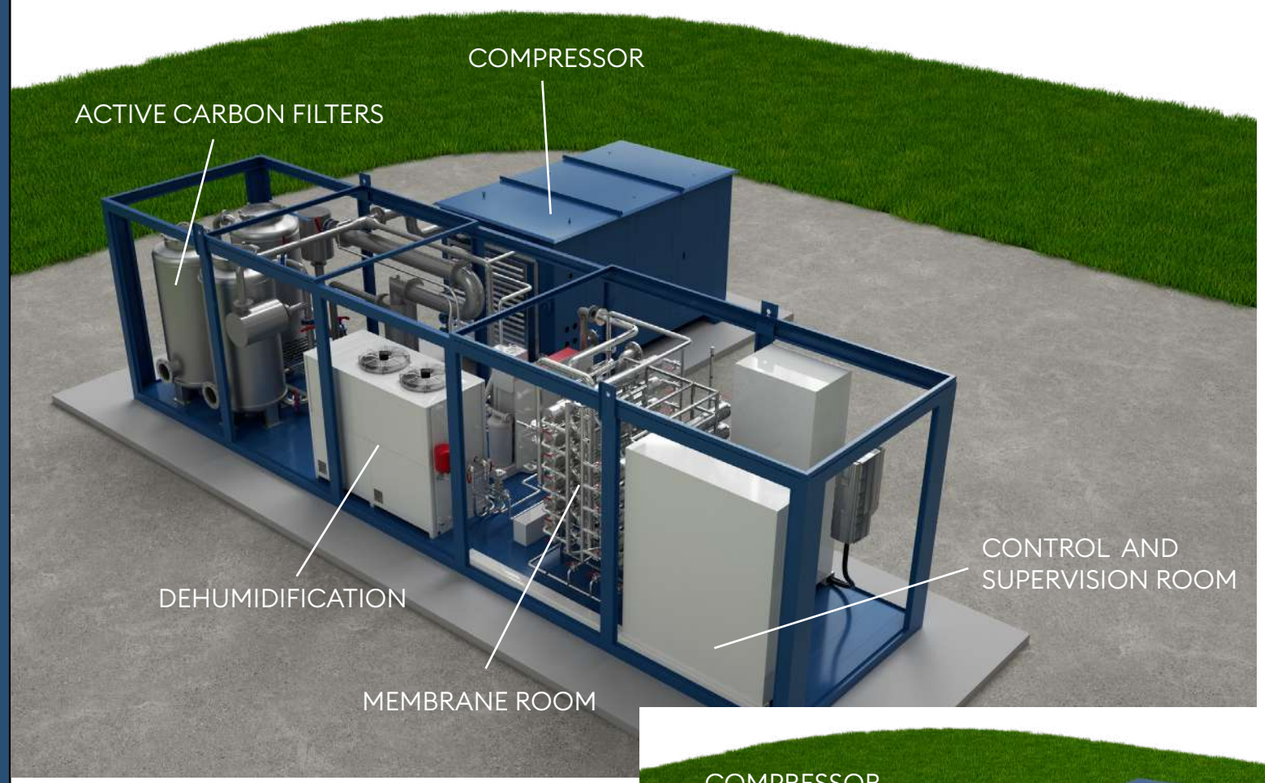
INDUSTRIAL PRODUCT
An industrial product entirely designed and manufactured by AB, pre-assembled and tested in our production facilities before shipping.

COMPACTNESS
Compact and fully designed to reduce transport costs, optimize footprint, speed up installation and commissioning times, and simplify maintenance operations.

ADAPTABILITY
A configurable solution to adapt to the quality of the produced biomethane, minimize methane losses in the off-gas, achieve maximum CH_4 recovery and reduce electricity consumption.

Contribute to making your farm sustainable with BIOCH4NGE®, the advanced biogas-to-biomethane upgrading system.

AB has introduced BIOCH4NGE® SERIE 1, the biogas-to-biomethane upgrading solution with all the benefits of BIOCH4NGE® but in a more compact and competitive version to meet the needs of small farms.



*Indicative image
Layout and elements to be defined according to available spaces and chosen configuration

Liquid biomethane

If the injection of the biomethane produced into the grid is not possible, the biomethane can be liquefied for transport by road.
To this end, AB has created CH4LNG, the solution for the liquefaction of biomethane designed to be installed downstream of a BIOCH4NGE® system, with which it integrates perfectly.

*example image
Layout and elements to be defined based on the available spaces and the configuration chosen

How the process works

CH4LNG is based on an **integrated cryogenic process**, at low operating pressure, divided into 3 phases: treatment, liquefaction and storage.

8

Treatment: in the first part of the process, the TSA (Temperature Swing Adsorption) purification system lowers the moisture and CO_2 content through molecular filters and sieves.
Liquefaction: through several cooling stages, the biomethane under pressure passes to the liquid state and is made available at conditions of < -142 °C and 3 barg and, where necessary, at even lower temperatures and pressures.
The heart of the CH4LNG process is the cryo-cooler, based on Stirling Cryogenics technology, which is an alternative refrigeration machine that works by compressing and expanding helium in a closed cycle.

9

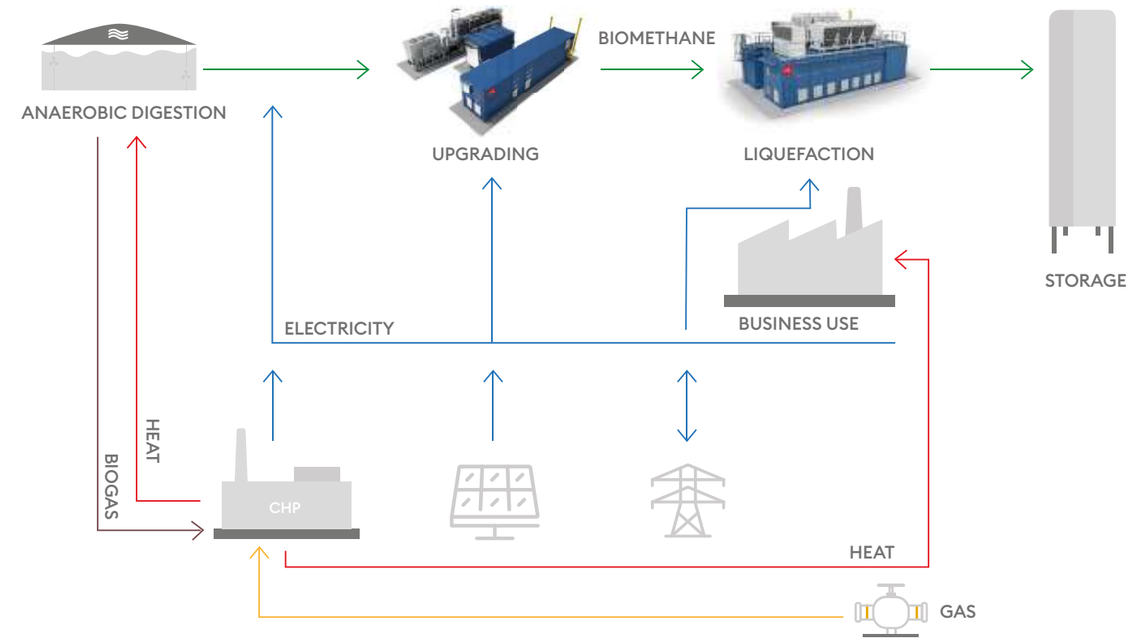
Storage: the bio-LNG is conveyed to a transfer tank, where the desired pressure and temperature conditions of the final product are achieved.

Find out in the video how the process works

WATCH THE VIDEO ▶

Production of liquid biomethane

The cryogenic process behind the CH4LNG system uses **only electricity**, for example, avoiding the use of liquid nitrogen. CH4LNG is the highly efficient containerised modular solution, which works without the use of liquefied technical gases, **also available for small plants.**



The advantages of CH4LNG

- Modular and compact
- Simple and very efficient process
- No liquid nitrogen required
- Granularity up to 1 TPD (1 cryogenerator)
- Constant specific consumption
- Scalable up to 11 TPD

ECOMAX® cogeneration solutions can power the entire system.

At the service of both the BIOCH4NGE® and CH4LNG installations, **AB** can provide the complete power supply system for electrical utilities, including medium-low voltage transformers, medium voltage switchboards and low voltage power distribution.

ECOMAX® produces electrical and thermal energy starting from a single fuel source (biogas or methane), to power the entire plant efficiently and sustainably.

AB's production and consumption optimization system (ABtimizer) maximizes the performance of ECOMAX® cogeneration plants when combined with a photovoltaic system, creating the perfect integration with BIOCH4NGE®, CH4LNG, and DISCO$_2$VERY.

*Indicative image - Layout and elements to be defined based on the available spaces and the configuration

Integrated energy system: biomethane, cogeneration, photovoltaic, and battery storage systems

The combination of these technologies transforms a biomethane plant into an integrated energy system capable of optimizing production, consumption, and flexibility.

The advantages of a **photovoltaic system** are well known: clean, zero-impact energy, with over 30 years of production and low maintenance costs.
In the case of a biomethane plant, installing a photovoltaic system to complement the cogenerator that powers the system provides an additional competitive advantage by further improving self-consumption efficiency. During hours when photovoltaic energy covers the plant's electrical demand, the cogenerator can be modulated to produce only thermal energy, returning to full operation when photovoltaic production is not available.

Integration with **battery storage systems** further enhances the value of the energy produced: excess electricity generated during peak hours can be stored and used when photovoltaic production is inactive, increasing the plant's energy autonomy and further reducing reliance on external sources.

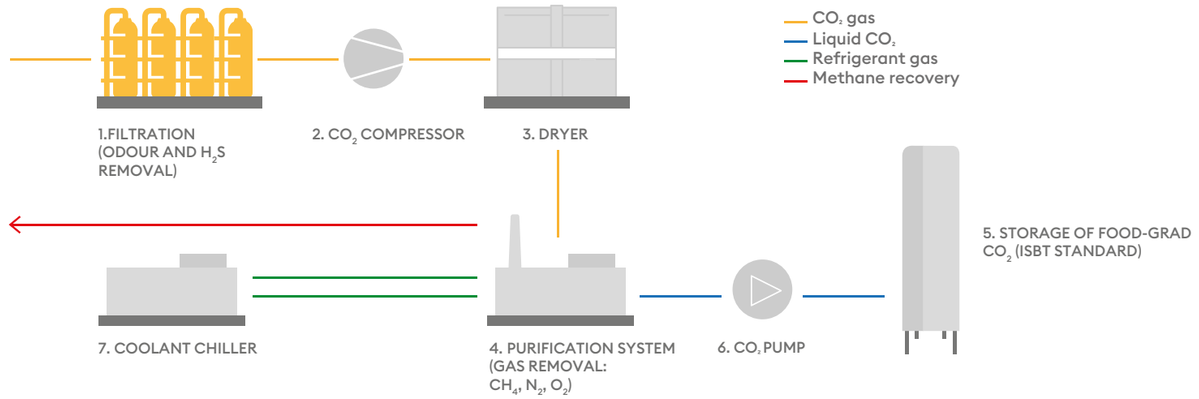
The use of **ABtimizer**, AB's software that coordinates photovoltaics, cogeneration, and batteries in real time, allows energy production to be optimized based on costs and the plant's needs.

Benefits

- Efficient and sustainable self-consumption
- Increased operational flexibility thanks to storage systems.
- Reduced peak demand from the grid and greater energy independence
- Compatible technologies that communicate with each other to select the most cost-effective configuration in real time
- Economic savings through reduced use of primary fuel.
- Greater availability of biogas for grid injection or upgrading

Liquefaction of CO_2

The DISCO$_2$VERY CO_2 liquefaction system makes it possible to purify and liquefy the carbon dioxide-rich gas coming from the BIOCH4NGE® biogas upgrading system, in order to obtain liquid CO_2 suitable for food and industrial use.
In this way, CO_2 is transformed from emissions into a resource, maximising the recovery of the substances that make up the biogas.



AB CO_2 LIQUEFACTION TECHNOLOGY

WATCH THE VIDEO ▶

The **DISCO$_2$VERY** system receives a gas stream, mainly composed of carbon dioxide, rich in contaminants (primarily H_2S, VOCs and moisture) and unwanted gases coming from the **BIOCH4NGE®**. This off-gas is purified from contaminant gases through adsorption on activated carbon and compressed to a pressure between 16–18 barg.

At this stage, the CO_2 is dried, reducing moisture through condensation and adsorption on molecular sieves, and then sent to cryogenic distillation. In this final phase, the CO_2 is liquefied and stripped, removing dissolved gases (CH_4, N_2 and O_2) until the desired specifications are achieved. The liquid CO_2 is then sent to a storage tank, awaiting collection.

The removed gases, the so-called incondensables, can have different destinations:

- Recirculated to the **BIOCH4NGE®** to increase methane (CH_4) recovery
- Valorized for thermal and electrical energy production in an **ECOMAX®**
- Released into the atmosphere, but only after being oxidized inside an **RTO** to reduce methane (CH_4) emissions

The liquid CO_2 produced can be captured and stored underground (**CCS** = **C**arbon **C**apture and **S**torage) or directly utilized (**CCU** = **C**arbon **C**apture and **U**tilization) in various industrial sectors. In particular, its main applications are in the food industry as an additive (**E290**), in compliance with Regulation (EU) No. 231/2012, and in the Food & Beverage sector (**ISBT/EIGA**) for beverage carbonation.

Properties of liquid CO_2 produced

Pressure	Temperature
from 16 to 18 bar	from -23 °C to -27°C

Regenerative thermal oxidisers (RTO) for after-treatment of **waste gases**

AB has designed two ranges of RTOs for the treatment of off-gas from biogas-to-biomethane upgrading processes, capable of ensuring methane emissions to the atmosphere in line with sustainability targets.

These solutions are designed to treat the off-gas generated during biogas upgrading processes, which feature different membrane configurations for separating methane and CO_2. Depending on the process, the residual methane content in the off-gas can range from higher values (around 5–7%) to very low percentages (0.5–1%).

The systems use thermal recovery chambers filled with ceramic material, operating cyclically to provide highly efficient heating and cooling. The oxidation chamber reaches temperatures between 850 and 950 °C, necessary for oxidizing methane compounds. Start-up can be achieved using a biogas-fired burner or, in more compact versions, electric resistances, avoiding the use of auxiliary fuels.

Thanks to the intrinsic heat recovery and the energy content of the off-gas, the system operates in a self-sustaining (autothermal) mode after ignition, without any additional external energy input.

ReVOCs: the sustainable solution for VOC removal from biogas

ReVOCs is particularly suitable for large-scale plants and for high VOC concentrations, typical of systems treating the organic fraction of separate waste collection.

It is an advanced pretreatment technology that removes VOCs, H_2S, and moisture, ensuring compliance with grid specifications and protecting downstream equipment.
Unlike traditional systems, which use activated carbon that must be replaced or regenerated off site, ReVOCs employs regenerable activated carbon with a dedicated in-line regeneration system, reducing costs and logistical complexity.
With removal efficiency above 85% and the ability to destroy VOCs through oxidation, ReVOCs enhances the performance of upgrading plants and supports the production of high-quality biomethane.
Key advantages include lower operating costs, fewer carbon replacements, guaranteed operational continuity, and improved safety in material handling. The solution also retains the strengths of AB technologies: modularity, ease of installation and maintenance, and high efficiency.
Applied to high biogas flow rates (> 800 Nm^3/h) and high VOC concentrations (> 1,000 mg/Nm^3), ReVOCs helps make biomethane plants more sustainable, resilient, and high-performing, actively supporting the energy transition.

Here are some of the numerous biomethane production plants that we have installed around the world.

IRELAND, Ulster

Biogas flow rate: 10,060 Nm³/h

Valorisation of zootechnical waste

Biomethane produced and fed into the grid: 5,603 Nm3/h

Products:
3xBIOCH4NGE® 10 + BIOCH4NGE® 25

IRELAND, Leinster

Biogas flow rate: 2,500 Nm3/h

Valorisation of agricultural and food industry by-products (in particular residues from beer and whiskey production)

Biomethae produced and fed into the grid: 1,394 Nm3/h

Products:
BIOCH4NGE® 25

ITALY, Vicenza

WATCH THE VIDEO ▶

Biogas flow rate: 2.200 Nm³/h

Valorisation of agricultural waste (i.e. livestock effluents such as manure, slurry and pollen provided daily by 120 farms).

Liquefied biomethane: 7,000 tons of liquid biomethane per year for heavy transport (200 trucks covering 100 thousand km a year).

With the ECOMAX® cogeneration plant, which can be fed both with biogas and natural gas, energy is produced to support other processes, meeting the sustainability requirements and at the same time guaranteeing the best economic performance.

Products:
2 x BIOCH4NGE® 10, ECOMAX® 12 + ECOMAX® 9, 2 x CH4LNG 11

ITALY, Lodi

WATCH THE VIDEO ▶

Biogas flow rate: 500 Nm³/h

Enhancement of agro-food waste

Biomethane produced and fed into the grid: 300 Nm³/h into the grid

Products:
BIOCH4NGE® 5

ITALY, Cremona

WATCH THE VIDEO ▶

- **Biogas flow rate:** 1.000 Nm³/h
- **Enhancement of livestock slurry and agricultural by-products**
- **Biomethane produced and fed into the grid:** 550 Nm³/h
  With the ECOMAX® cogeneration plant energy is produced to support other processes, meeting the sustainability requirements and at the same time guaranteeing the best economic performance.
- ☑ **Products:**
  BIOCH4NGE® 12, ECOMAX® 6

FRANCE, Grand-Est

- **Biogas flow rate:** 1.000 Nm³/h
- **Enhancement of livestock slurry and agricultural by-products**
- **Biomethane produced and fed into the grid:** 500 Nm³/h
- ☑ **Products:**
  BIOCH4NGE® 10

ITALY, Cremona

- **Biogas flow rate:** 1.200 Nm³/h
- **Enhancement of organic fraction of municipal solid waste (OFMSW)**
- **Biomethane produced and fed into the grid:** >600 Nm³/h
- ☑ **Products:**
  BIOCH4NGE® 12,5

SPAIN, Soria

WATCH THE VIDEO ▶

- **Biogas flow rate:** 660 Nm³/h
- **Enhancement of agro-industrial and urban organic waste, sewage sludge**
- **Biomethane produced and fed into the grid:** 418 Nm³/h
- ☑ **Products:**
  BIOCH4NGE® 7,5

FRANCE, Pays de la Loire

WATCH THE VIDEO ▶

- **Biogas flow rate:** 500 Nm³/h
- **Enhancement of organic fraction of municipal solid waste (OFMSW)** (82 tons of waste per day)
- **Biomethane produced and fed into the grid:** 250 Nm³/h
  (equal to a consumption of approximately 1,900 families), 4,800 tons of CO_2 each year not released into the atmosphere.

CANADA, Ontario

- **Biogas flow rate:** 1.070 Nm³/h
- **Valorisation of agricultural waste** (manure)
- **Biomethane produced and fed into the grid:** 579 Nm³/h
- ☑ **Products:**
  BIOCH4NGE® 10, ECOMAX® 3

FRANCE, Nouvelle Aquitaine

WATCH THE VIDEO ▶

- **Biogas flow rate:** 250 Nm³/h
- **Valorisation of agricultural waste**
  (14,000 tonnes of sewage, cereal waste and energy crops)
- **Biomethane produced and fed into the grid:** 150 Nm³/h
  (equal to the consumption of 1,200 inhabitants)
- ☑ **Products:**
  BIOCH4NGE® 2,5

GERMANY, Bavaria

- **Biogas flow rate:** 600 Nm³/h
- **Valorisation of agricultural waste** (maize silage and manure)
- **Liquefied biomethane:** 5 TPD
- ☑ **Products:**
  BIOCH4NGE® 5, CH4LNG 5

FRANCE, Grand-Est

WATCH THE VIDEO ▶

- **Biogas flow rate:** 600 Nm³/h
- **Valorisation of agricultural waste** (manure) **and agro-industrial waste**
- **Biomethane produced and fed into the grid:** 300 Nm³/h
- ☑ **Products:**
  BIOCH4NGE® 7,5

USA, New York

- **Biogas flow rate:** 660 Nm³/h
- **Valorisation of agricultural waste** (bovine manure and slurry)
- **Biomethane produced and fed into the grid:** 365 Nm³/h
- ☑ **Products:**
  BIOCH4NGE® 7,5

The manufacturing process takes place in our assembly and engineering center, the largest in the world in the biogas sector. 40,000 m² of interconnected buildings in Orzinuovi.

WATCH THE ◄ VIDEO

BIOCH4NGE®: HOW IS IT MADE

AB Service is the **AB company** **dedicated to plant service and maintenance** with over 350 specialists operating all over the world.

Excellence is measured by actions, not promises. AB Service can guarantee you an excellent service, capable of providing nearly 100% plant availability. This is because we already have the expertise, specialized personnel, means, and technological infrastructure necessary to ensure optimal and consistent plant performance and to intervene promptly and effectively when needed.

WE CHALLENGE YOU TO FIND A BETTER SERVICE THAN OURS!

WATCH THE VIDEO ▶

Whatever the type of plant, AB Service safeguards it from failures and outages, thanks to a coordinated and scheduled series of interventions to maximise the plant's usability.
The advantages of an integrated service are evident from the moment the plant is commissioned: AB specialists facilitate the commissioning phase, follow and optimise the plant start-up phase.
In addition to the on-site assistance and a prompt turnaround time, AB Service monitors all the systems 24 hours a day, 365 days a year, with the activation of the remote diagnostics and assistance service.
AB Service also offers training and continuous updating courses to ensure the best operation of the plant for the customer and a correct management and maintenance.
Plant service and maintenance agreements are created and customised according to the customer's specific needs, to ensure high yields throughout the plant's life and to guarantee a greater predictability of operating costs.

Connection of AB plants

AB plants are equipped with remote control systems accessible via the Internet, which allow the user to choose the best operating structures, check operating conditions and monitor the plant output.
The supervision and monitoring system is a **central control point** for all plant parameters and an interface that is always active to allow the plant to be managed and regulated remotely, ensuring an even **more punctual and timely monitoring and prompt intervention service.**

Relying on AB's Full Service means being able to count on the following services:

Services included		Full Service
Preventive maintenance	Spare parts	Included
	Manpower	Included
Corrective maintenance	Spare parts	Unlimited (included)
	Manpower	Unlimited (included)
Assistance and technical support		24 / 7 / 365
Remote monitoring tools		Included
Availability guarantee		97% for upgrading
Additional services and/or plant management		On request
Training		Included
On-site intervention		In 24 hours
Spare parts: prompt delivery		Included

Our service in numbers:

COVERAGE ACROSS THE TERRITORY

350 ▶ TECHNICIANS WORLDWIDE

Each technician lives on average two hours away from the plants they maintain.

CONTINUOUS MONITORING AND ASSISTANCE

1.800 ▶ PLANTS CONNECTED TO OUR 24/7 CONTROL ROOM WITH 20 TECHNICIANS ON SHIFTS

9 GB ▶ OF DATA COLLECTED TO REFINE PREDICTIVE MAINTENANCE

50 ▶ FIELD TECHNICIANS AVAILABLE TO COVER HOLIDAY OR NIGHT SHIFTS

AVAILABILITY OF SPARE PARTS

57M ▶ IS THE TOTAL VALUE OF AVAILABLE SPARE PARTS ACROSS VARIOUS WAREHOUSES WORLDWIDE

We guarantee urgent deliveries 24/7

MAINTENANCE FOR THE ENTIRE LIFETIME OF THE SYSTEM

250 ▶ ENGINE OVERHAULS PER YEAR IN OUR IN-HOUSE WORKSHOP

30 ▶ SPECIALIZED MECHANICS

DEVELOPMENT OF EXPERTISE

30K ▶ HOURS OF ANNUAL TRAINING

65 ▶ BIOMETHANE CERTIFIED SPECIALISTS

Internal training center

DEDICATED VEHICLES

600 ▶ COMPANY-OWNED VEHICLES OPERATING GLOBALLY

AB: the global reference for energy sustainability solutions. Cogeneration integrated with photovoltaics and BESS, biomethane, and air emissions treatment.

There are various ways to do things. wants to offer the very best way to do them in the world of energy and sustainability.

Developing innovation at the service of energy has always been our focus.
For this reason, AB**'s leadership in the cogeneration sector has also expanded to biofuels, with systems for the purification of biogas, the liquefaction of biomethane and CO_2, photovoltaics, battery energy storage systems (BESS) and the treatment of emissions into the atmosphere.**
Since 1981, we have been working alongside companies who want to improve their competitiveness, saving energy and limiting emissions into the environment.
Expertise, production capacity and a high quality service, with the aim of providing our customers with the very best energy sustainability solutions.
The **AB Group**, represented by the **AB Holding** parent company, now has over 1,500 employees with a direct presence in 22 countries worldwide across Europe, North and South America, Asia, and Australia: a widespread network that allows us to dominate every specific market in terms of business activities, support and after-sales service, with dedicated branches in each country.

Ours is a "made in Italy" where the main production and engineering activities are concentrated in the modern industrial centre of Orzinuovi (in the Province of Brescia, in Italy), a 40,000-square-metre facility which houses all the Group companies with the exception of the foreign sales offices.
AB Engineering, with over 140 engineers, is dedicated to planning all activities related to the implementation of customised solutions to meet the needs of the final customer.
In AB Impianti, we carry out every single aspect of the construction activity of the plant.
AB Fin-solution is the company that deals with the operating leasing of machinery and offers users in each sector the possibility to rent an AB plant.
AB Grade is involved in research and development activities, a true centre of excellence that develops innovative energy transition technologies.
AB Ambiente, an agricultural company based in Orzinuovi, is a privileged area to experiment and directly test the solutions focused on the circular economy, where the pilot plants for the production of biogas and biomethane are in operation.
The Group's organisation is completed with **AB Service**, the company dedicated to the after-sales assistance and maintenance of AB plants around the world, thanks to the adoption of the latest Industry 4.0 technologies.

Sustainability

The New Normal

Our goal is to reach a state of “NEW NORMAL”, in which sustainability becomes a natural part of our processes and objectives.

AB AIMS TO POSITION ITSELF AS A BENCHMARK IN THE SUSTAINABILITY JOURNEY:

→ For our customers, by providing solutions and services designed to achieve sustainability goals–primarily in the energy and environmental fields and, consequently, also economic ones. Our approach is pragmatic and strongly realistic, aligned with the necessary evolution toward new business models.

→ For all stakeholders, as a virtuous example in a broader sustainability journey. We firmly believe that only by helping what surrounds us grow can we grow as well. For this reason, we actively collaborate with suppliers, schools, universities, local communities, and partners.

← FIND OUT MORE AND DOWNLOAD THE SUSTAINABILITY REPORTS

OUR CERTIFICATIONS REPRESENT OUR ONGOING COMMITMENT TO QUALITY, SAFETY, SUSTAINABILITY, AND EFFICIENCY.

By complying with recognized international standards, we ensure reliable production processes, environmental responsibility, protection of health and safety in the workplace, as well as compliance with European regulations for products and structures. Each certification we obtain reflects our commitment to operating with transparency and responsibility, providing customers with safe, high-quality solutions.

CERTIFICATIONS

UNI EN ISO 9001:2015
Quality System

To promote continuous improvement, process optimization, and cost reduction, as well as to ensure greater efficiency and quality of products and services.

UNI EN ISO 45001:2023
Health and Safety System

To manage health and safety at work, promoting safe environments and preventing accidents and occupational illnesses.

UNI EN ISO 14001:2015
Environmental System

To manage the organization’s environmental impacts, continuously improving business practices with a focus on sustainability.

UNI CEI EN ISO 50001:2018 Energy System

To continuously improve the organization’s energy efficiency through a structured and systematic approach.

UNI EN ISO 3834-2:2021
Welding System

To properly manage welding processes, ensuring the quality of welded joints.

UNI EN 1090-1:2012
Steel Structures

To ensure compliance with the requirements for mechanical strength, stability, and structural safety.

CE Certificates
Machinery Directive 2006/42/EC

To certify that machines comply with the essential health and safety requirements set out in the Machinery Directive, allowing their free circulation and marketing within the European Union.

Biomethane RNG channel

The Biomethane RNG Channel is the first video channel dedicated to the world of biomethane/RNG, with a **360°** view on the role it plays in the e**cological transition, in the de-carbonisation of transport and in energy safety.**

biomethanerngchannel.com

A tool to learn more about this alternative fuel, through the contribution of hundreds of industry experts and the direct experiences of those who have invested in a biomethane/RNG project.

The Biomethane RNG Channel was born from an editorial initiative designed and supported by the AB Group.
Together with Biogas Channel and Cogeneration Channel, it is an integral part of NetZero Tube, the first network of thematic channels dedicated to the key technologies necessary to achieve the zero net emissions goal.

DISCOVER THE CHANNEL ▶

NetZero tube

NetZero Tube: Since 2013, it has collected thousands of experiences and interviews with industry experts and continues to consult the main authoritative sources on the subject to help disseminate correct and up-to-date knowledge about the world of biogas, biomethane/RNG and energy efficiency.

netzerotube.com

Our daily commitment is aimed at being the “Better Way” for our customers. Because improving our customers’ way of producing and working is our way to contribute to the construction of a better world.

gruppoab.com