
RENEWABLE NATURAL GAS FROM BIOGAS – **AB ENERGY LAUNCHES BIOCH4NGE® IN NORTH AMERICA**

GLOBAL LEADER IN SUSTAINABLE ENERGY PRODUCTION FOR THE GREEN ECONOMY POISED TO LEAD THE
NORTH AMERICAN MARKET IN RNG PRODUCTION

Markham ON and Pine Brook NJ – September 21, 2020: Bolstered by an evergrowing demand for cleaner energy sources, Renewable Natural Gas (RNG) has become a hot topic for discussion and action across North America.

RNG, also known as biomethane, is a refined natural gas from biogas produced from the bacterial breakdown of organic waste materials through anaerobic digestion. The sources of organics are typically food and food processing waste, farm animal and plant waste, select industrial wastewaters, and municipal sewage. Biogas is purified to RNG and injected into natural gas utility pipelines for distribution, or the RNG can be used to power vehicles.

According to The Coalition For Renewable Natural Gas (www.rngcoalition.com), over 130 RNG facilities operate throughout the US and Canada, with 37 more under construction this year and 73 undergoing substantial planning and development. This industry is experiencing massive growth fuelled by developing technologies and processes designed to extract valuable energy and resources from “waste” products.

Enter **AB Energy**. The company is proud to announce the introduction of its revolutionary **BIOCH4NGE®** technology to the North American market. The BIOCH4NGE® system is the culmination of nearly four decades of advancements from AB’s experience in the global cogeneration sector. BIOCH4NGE® is compact, modular, easily scalable, versatile in application, and exceptional in its ability to economically upgrade and purify raw biogas into RNG.

At its core, BIOCH4NGE® employs advanced membrane technology to separate methane from the water, carbon dioxide, hydrogen sulfide, volatile organic compounds (VOCs), and other impurities found in biogas.

- Raw “wet” biogas flowing from anaerobic digesters enters the first stage of the BIOCH4NGE® process, where primary filtration followed by a chilled water exchanger condenses water vapor to dehumidify the biogas.

- The gas is compressed, cooled by a second heat exchanger, and delivered under strict temperature and pressure conditions to vessels containing beds of activated carbon that remove hydrogen sulfide and VOCs.
- In the final stage, purified biogas is compressed and passed through AB's proprietary membrane system to separate the carbon dioxide and methane components. Refined methane exits the process, ready for beneficial re-use.

AB pre-assembles and tests each BIOCH4NGE® system in the company's production facility as part of its rigorous quality control regimen. This step dramatically reduces onsite installation and commissioning efforts, saving clients substantial costs and avoidable start-up challenges.

"BIOCH4NGE® is the crowning achievement of our RNG production sector," exclaims AB President Angelo Baronchelli. *"This technology represents the best of our engineering and industrial and operational expertise, delivering a highly efficient and reliable solution to recover methane from biogas. It's an ideal alternative process for clients already operating an RNG facility and a strong contender for those who are considering entering the market."*

For more information and to get the full story on how BIOCH4NGE® can improve operational performance while saving you money for your existing or planned RNG facility, please contact:

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About AB (www.gruppoab.com)

Founded in 1981 by Angelo Baronchelli, AB today is a global leader in cogeneration and developing renewable energy sources such as biogas and renewable natural gas. AB designs, manufactures, installs, and maintains best-in-class cogeneration solutions recognized globally. AB operates the cogeneration sector's most extensive production facilities in Orzinuovi, located in Brescia, Italy. To date, AB has supplied and installed more than 1,450 cogeneration plants representing 1,650+ MW of nominal electrical capacity. Supporting this installed base is AB's professional and widely accessible service network. More than 250 specialized technicians work around the globe to ensure facilities operate at peak performance and reliability. In the past few years, the company has quadrupled its production capacity and grown to employ over 1,000 dedicated professionals. Direct subsidiaries in Europe, Russia, North America, and South America represent AB's interests worldwide. In the US and Canada, AB is represented by AB Energy USA and AB Energy Canada, respectively.