



BIOGAS TO CBG / CNG TECHNOLOGY

Transforming Renewable Gas into Clean Energy

Poly Transform Knowledge Series • Quick Overview Edition

The Global Shift to Renewable Gas

As the world accelerates its transition toward cleaner, more sustainable energy systems, biogas-to-CBG technology is emerging as one of the most promising solutions for converting organic waste into usable, low-emission fuel.

Growing energy demand, waste-management pressures and the need to reduce greenhouse gas emissions are driving one of the most significant technological transformations of our time — and renewable gas is becoming an important part of that transition.



Waste Valorization	Energy Security
Circular Economy	Sustainable Development

ENERGY INSIGHT

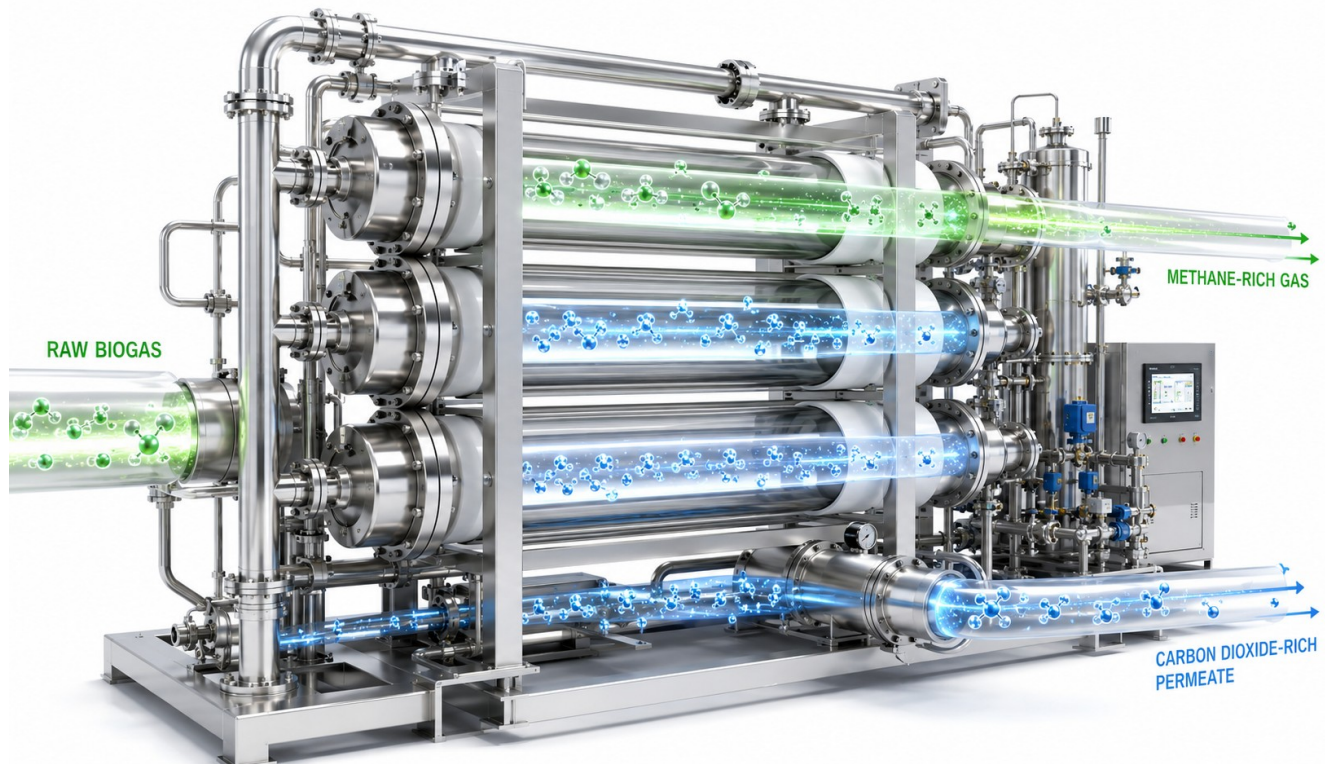
Biogas converts organic waste into a renewable, storable fuel — without the combustion of fossil resources.

SUSTAINABILITY INSIGHT

Renewable gas technologies contribute not only to environmental protection but also to long-term waste-management resilience and energy security.

From Raw Biogas to Renewable Gas

Raw biogas generated from anaerobic digestion is pretreated to remove moisture and hydrogen sulfide, then passed through a membrane separation system that selectively allows carbon dioxide to permeate while retaining methane. The resulting biomethane is compressed into CBG for use as a clean, renewable fuel.



Raw Biogas → Pretreatment → Membrane Separation → Biomethane → Compression → CBG

POLY TRANSFORM PRINCIPLE — PURITY ENABLES PERFORMANCE

The efficiency, reliability and value of renewable gas depend directly on how effectively contaminants and carbon dioxide are separated from raw biogas.

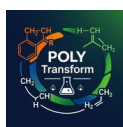
Enabling Tomorrow's Renewable Gas Systems



Clean Mobility	Industrial Fuel	Distributed Power
Municipal Waste Recovery	Agricultural Integration	Circular Economy

POLY TRANSFORM VISION

Poly Transform views biogas-to-CBG technology as a strategic research platform that complements our broader mission of advancing sustainable engineering solutions. Through scientific research and engineering excellence, we aim to contribute to the future of clean, circular energy.



POLY TRANSFORM PVT. LTD.

Closing the Loop with Clean Energy Innovation

“Engineering the Circular Gas Economy Through Research, Innovation, and Collaboration.”

CORPORATE OFFICE

Pune, Maharashtra, India

info@polytransform.in

+91 7499807305 / +91 9823183392

www.polytransform.in

Poly Transform Knowledge Series • Quick Overview Edition

All images & literature are copyright protected.