POLY TRANSFORM PVT. LTD.

Closing the Loop with Clean Energy Innovation

Poly Transform Pvt. Ltd. is an innovation-driven clean technology company developing sustainable engineering solutions for today's most pressing global challenges — plastic waste management, clean energy generation, and renewable gas recovery. Though at an early stage, our ambition is global: technologies built today, designed for tomorrow's energy landscape.

"Empowering change by rethinking the standard."

Waste Plastic to Fuel | Fuel Cell Technology | Biogas to CBG/CNG

Pune, Maharashtra | India

DISCOVER — WHO WE ARE

Engineering Sustainable Solutions

Poly Transform Pvt. Ltd. is an innovation-driven clean technology company combining scientific research with practical engineering to address the world's most pressing challenges: plastic waste management, sustainable energy generation, and renewable gas recovery. Rather than specializing in a single product, we are building a platform of complementary technologies designed to evolve with the global energy transition.

Research & Development Laboratory

Our Innovation Platforms

- Waste Plastic to Fuel Technology — converting non-recyclable plastic waste into valuable liquid fuels.
- Fuel Cell Technology — supporting the transition toward efficient, low-emission energy systems.
- Biogas to CBG/CNG — converting organic waste into renewable biomethane for clean mobility and industrial energy.

Core Values

- Innovation with Purpose
- Scientific Excellence
- Sustainability
- Engineering Integrity
- Scalability
- Collaboration

OUR DEVELOPMENT PHILOSOPHY

Research → Design → Prototype → Testing → Optimization → Commercialization

INNOVATE — TECHNOLOGY PLATFORM

Waste Plastic to Fuel Technology

Poly Transform's Waste Plastic to Fuel platform is focused on recovering value from non-recyclable plastic waste through advanced thermochemical conversion. Rather than treating plastic waste as an environmental burden, we view it as an untapped energy resource — one capable of being transformed into valuable liquid hydrocarbon fuel, reducing landfill dependence and supporting circular economy principles.

Focus Areas

- Circular Economy
- Waste Valorization
- Alternative Fuels
- Resource Recovery

Applications

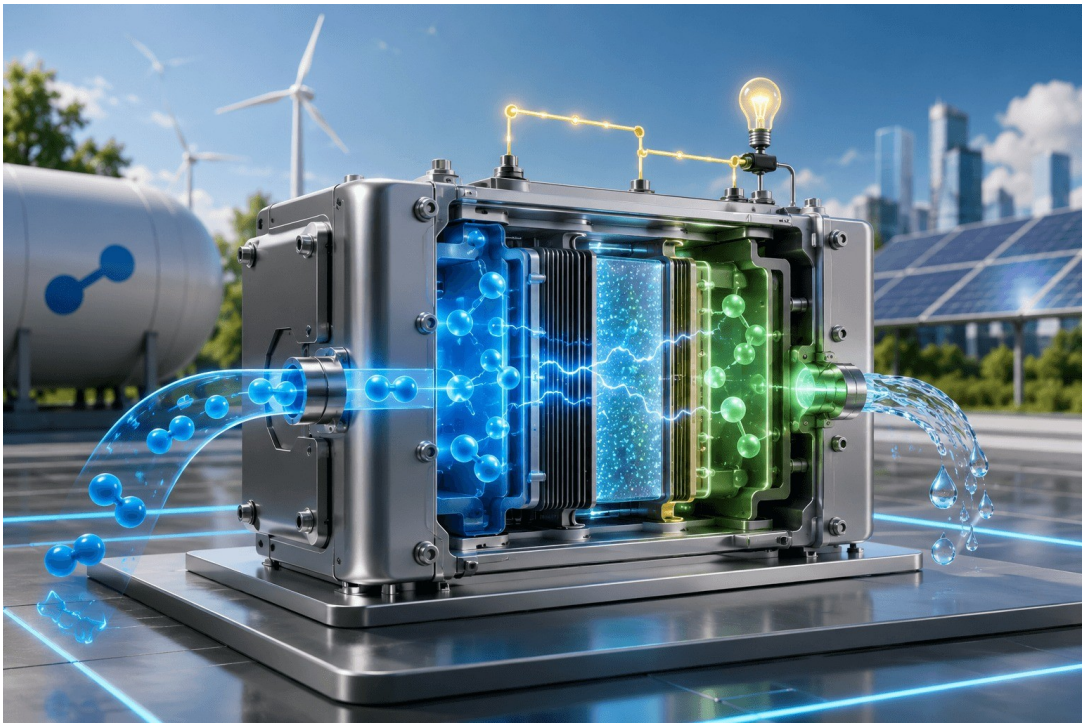
- Industrial Fuel
- Transportation Fuel (subject to applicable refining and regulatory standards)
- Waste Management Solutions

POLY TRANSFORM INSIGHT

A significant proportion of plastic waste generated globally cannot be economically recycled using conventional mechanical recycling processes. Advanced thermochemical conversion technologies can help recover value from certain non-recyclable plastic streams when implemented responsibly and under appropriate environmental controls.

INNOVATE — TECHNOLOGY PLATFORM

Fuel Cell Technology



Fuel cells convert chemical energy directly into electricity through electrochemical reactions, offering high efficiency, low emissions, and quiet operation compared to conventional combustion-based systems. Poly Transform is actively developing fuel cell technologies that support future applications in mobility, distributed energy systems, and sustainable power generation — particularly when powered by clean hydrogen.

Why Fuel Cells?

- Higher Efficiency
- Low Emissions
- Quiet Operation
- Scalable Systems

Future Applications

- Transportation & Mobility
- Backup & Distributed Power
- Industrial & Remote Energy

ENERGY INSIGHT

Fuel cells convert chemical energy directly into electricity without the combustion process used by conventional engines — producing water as the primary by-product, with heat as a secondary output.

INNOVATE — TECHNOLOGY PLATFORM

Biogas to CBG/CNG

Poly Transform's Biogas to CBG/CNG platform is focused on converting suitable organic and biogas streams into renewable biomethane through integrated purification, upgrading, and compression. By capturing value from organic waste that would otherwise go untreated, this technology supports clean mobility and distributed industrial energy while reducing dependence on conventional fossil gas.

Focus Areas

- Renewable Gas Engineering
- Anaerobic Digestion
- Biogas Upgrading
- Circular Waste Recovery

Applications

- Clean Mobility (CBG/CNG)
- Industrial Energy
- Distributed Power Generation

POLY TRANSFORM INSIGHT

Biogas upgrading transforms raw organic waste streams into pipeline-quality renewable biomethane, offering a scalable pathway to displace conventional CNG in mobility, industrial heating, and distributed power applications.

TRANSFORM — VISION & IMPACT

Building Tomorrow's Sustainable Industries

Poly Transform envisions a future where waste becomes a valuable resource and clean energy powers industries and communities. By investing in research, collaboration, and engineering excellence, we aim to contribute technologies that support environmental stewardship and industrial progress. Our work is aligned with global sustainability priorities, including Affordable & Clean Energy, Industry Innovation & Infrastructure, Sustainable Cities & Communities, Responsible Consumption & Production, and Climate Action.

Circular Economy	**Clean Energy**	**Sustainable Engineering**	**Future Innovation**

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"Engineering solutions that transform today's challenges into tomorrow's opportunities."

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