

Turn CO₂-Rich Biogas into More Fuel



**HYCO1 delivers a
cost-effective pathway
that converts up to 100% of
both methane & CO₂ into
renewable diesel & SAF**



HYCO1

CARBON NEGATIVE. PLANET POSITIVE.

STOP LEAVING CARBON BEHIND

Every unconverted molecule of CO₂ represents lost fuel, lost revenue, and lost project potential. Yet most systems accept this inefficiency as inevitable.

HYCO1 does not.

Our technology platform is built around a simple premise: carbon should go into fuel. By rethinking how methane and CO₂ are handled from the start, HYCO1 enables a new standard for carbon efficiency and fuels production.

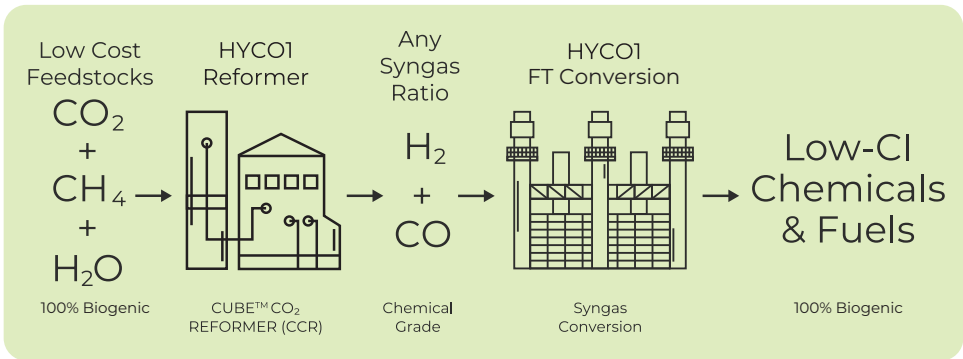
A COUPLED REFORMING AND SYNTHESIS PLATFORM.

Traditional reforming systems treat CO₂ as a constraint to manage. It is separated, vented, or carried through the process without contributing to product formation. The result is inefficiency: only a fraction of the available carbon ends up in the fuel.

HYCO1 takes a fundamentally different approach.

Using our CUBETM Technology and CO₂ Reforming Catalyst, methane and CO₂ are co-reacted in a single integrated reforming step to produce chemical-grade synthesis gas with a tunable H₂:CO ratio. Rather than a disposal problem, CO₂ becomes an active reactant. Under optimized conditions, up to 98% of feed carbon is converted into product.

That syngas feeds directly into Fischer-Tropsch synthesis using HYCO1's own FT catalyst, producing full-range FT crude for upgrading into SAF, renewable diesel, and other synthetic hydrocarbons.



CONVERT CH₄ AND CO₂ TOGETHER INTO VALUE.

HYCO1 technology has been validated in a fully integrated project at Agra Energy's 50 barrel-per-day commercial facility in Wisconsin. The feedstock reflects typical biogas composition: approximately 60% methane and 40% CO₂. The reformer is a conventional can-style SMR, familiar to most project developers. What changed was the catalyst system and the approach to CO₂.

The result is sustained operation with no coking, no catalyst failure, and no instability introduced by CO₂ utilization. This is a commercial facility operating under real-world constraints, without the ability to rebalance carbon inputs or supplement methane. Even so, it demonstrated what the industry had been missing: CO₂ can be converted into productive carbon at commercial scale without requiring a fundamentally new plant design. HYCO1 and Agra Energy have a technology collaboration agreement to further scale, replicate, and license the Wisconsin Commercial Facility.

3,000+
CONTINUOUS OPERATING
HOURS

85%+
CO₂ CONVERSION
ACHIEVED

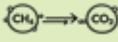



TRL-9
COMMERCIAL READINESS

MORE FUEL. LOWER COST. A STRONGER CARBON POSITION.

Converting CO₂ to CO boosts fuel output without added methane by enabling both CO₂ and methane to be directly utilized as CO for fuel production.

The economics are straightforward once the carbon flows are understood.

- 25 to 50% increase in fuel yield from the same biogas feed
- Up to 30% reduction in effective cost of production
- Carbon intensity of <0 to 30 gCO₂e/MJ achievable without reliance on carbon credits
- At Agra Energy scale, CO₂ conversion contributed an estimated \$2-3MM in incremental annual fuel value
- At 1,000 BPD scale, the same effect can represent tens of millions in incremental annual revenue

 FEEDSTOCK	 DAIRY BIOGAS	 LANDFILL GAS	 GASIFICATION
Typical Composition (CH ₄ /CO ₂)	60% / 40%	50% / 50%	Variable (High CO ₂)
Plant Scale (SAF Equivalent)	50 BPD	300 BPD	1,000+ BPD
CO ₂ Available (TPD)	~20 TPD	~150 TPD	500 - 2,000+ TPD
CO ₂ Utilization with CUBE™	>85% (Achieved)	80 - 95%	80 - 95%
Incremental Fuel Yield	25 - 35%	30 - 50%	20 - 40%
Incremental Annual Revenue	~\$2-3 Million	~\$12-18 Million	\$30 Million+
Key Benefit	Proven at commercial scale	Transforms project economics	Higher yield, lower CI, strong IRR

BUILT FOR DEVELOPERS WHO WANT MORE THAN RNG.

Dairy and agricultural biogas

Direct conversion of high-CO₂ streams without dedicated CO₂ removal step.

Landfill gas monetization

Upgrade biogas into higher-value liquid fuels with better margins.

Biomass gasification

Precise syngas ratio control at the reformer reduces the need for downstream water-gas shift and CO₂ removal steps.

Wastewater treatment facilities

Unlock the full fuel value of digester gas that on-site power and pipeline injection leave behind.

Remote and stranded gas resources

Modular, truckable skids deploy where pipeline access is limited or absent.

SAF, RD, or synthetic fuels projects

Higher-value fuel markets are accessible without a fundamental redesign of your plant.



A BETTER PROJECT ECONOMICS EQUATION


**“CO₂ is no longer a waste stream,
it is a new fuel opportunity.”**


**HYCO1 turns CO₂ utilization
into reality.**

**Bring us your feed gas
composition and target
product; we will show you
the optimal pathway to fuels.**

**Don't leave bio-carbon
on the table.**

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