



micro**FTL**[™] Technology

Proven performance.
Modular design.
Lower cost.



Why sustainable fuels matter now

To meet global climate goals and reduce aviation and heavy transport emissions, the world **requires low-carbon liquid fuels** that are compatible with today's infrastructure. These drop-in fuels provide the fastest, most economic pathway for decarbonizing truck, ship, and airline fleets. The world is clamouring for sustainable fuels, provided they are affordable.

Sustainable aviation fuel (SAF) and **renewable diesel** are essential to decarbonizing sectors where electrification isn't viable. These fuels:

- Slash lifecycle CO₂ emissions by 80% or more (source: [IATA](#))
- Drop directly into existing engines, pipelines, and fuelling systems
- Create energy security by turning **waste, biomass, and captured carbon** into clean energy
- Unlock investment, jobs, and climate leadership

But to scale production fast enough, the industry needs modular, proven, and cost-effective technologies that work reliably across diverse feedstocks and geographies.

The critical role of Fischer-Tropsch in sustainable fuels

Any sustainable fuel made from syngas—produced from waste, biomass, biogas, or captured CO₂ and hydrogen—**requires Fischer-Tropsch synthesis** to transform that gas into liquid products such as SAF, renewable diesel, or eFuels products.

Syngas-to-liquid serves as the backbone of any sustainable fuel plant. And yet, most FT technologies on the market are relics.

Yesterday's conventional FT reactors were built for a different era—and it shows.



The problem with conventional FT

Slurry-bed and fixed-bed FT systems were designed for massive fossil-to-liquid facilities. They're huge, inefficient, and unproven with many of today's feedstocks.

Worse, they drive up cost, delay timelines, and require complex integration with other plant technologies.

No wonder so few projects are moving forward.

What projects need

Developers and technology integrators are looking for FT tech that is:

- Proven with today's feedstocks in real-world SAF and renewable diesel projects
- Modular and compact to simplify design and shorten the project development timeline
- Capable of making SAF and renewable fuels profitable by reducing both CapEx and OpEx
- Flexible enough to work with various syngas generation setups and feedstocks

What some developers may not know

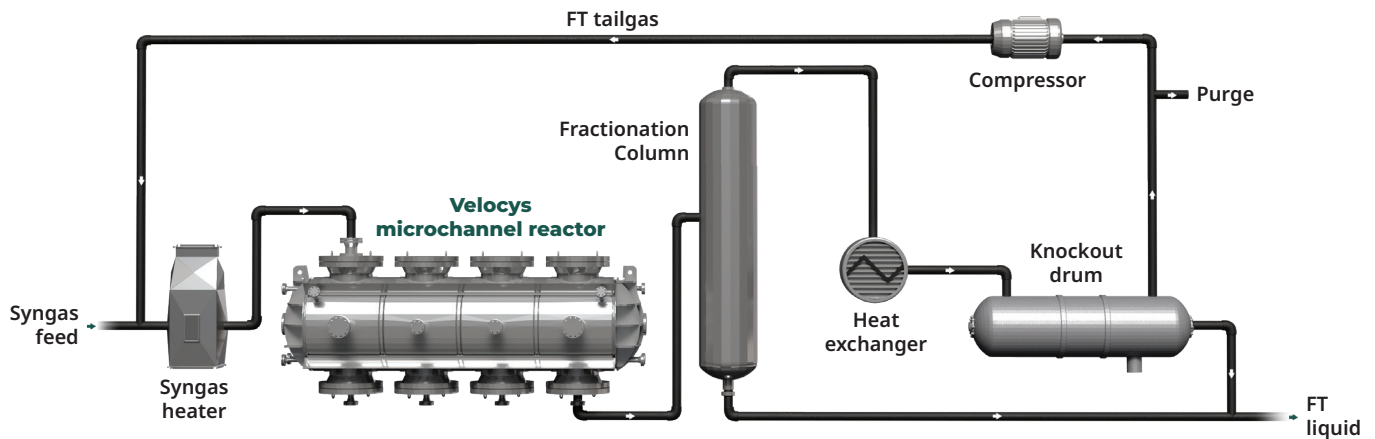
That technology already exists.

**It's real. It's proven.
It's available to
license today.**



It's called **microFTL™** from Velocys.

Flow schematic



microFTL solutions include the Fischer-Tropsch technology license, the process design package, proprietary FT reactor and catalyst, fully automated controls, and optional modular FT island design services.

Why microFTL

- Highest TRL of any FT system for sustainable fuels
- Highest syngas-to-fuel conversion rates—boosting IRR
- Modular microchannel reactors simplify scale-up
- Oxford-engineered catalyst delivers high activity
- Automated controls for consistent and safe operation
- Flexible integration into various plant designs and feedstocks



Proven results with demo and commercial plants



- **Envia:** Landfill gas-to-renewable diesel plant in Oklahoma



- **Toyo:** Woody biomass-to-SAF demo in Japan powering a commercial flight
(Photo courtesy of NEDO)

microFTLTM Technology

When it has to be economical.

When it has to work.

It has to be microFTL.

Built for today's SAF, renewable diesel, and eFuels projects

microFTL is the only Fischer-Tropsch solution ready for the new generation of fuels.

It lowers cost, simplifies integration, and gets your project off the drawing board and into operation.

Let's build the future together

Visit www.velocys.com or contact us at info@velocys.com