

August 25, 2026



Where Science Crafts *Synthetic Diesel*

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LEADING THE AMERICAN BIOFUELS REVOLUTION





Vision and Mission

- Formed in 2013 with a vision of developing a replicable “biorefinery template” to build a network of biorefineries in the wood-baskets of North America.
- While large fossil refineries will continue to operate, SynSel’s modular drop-in renewable fuel production platform allows widespread decentralized distribution of fuel producing facilities across the US and beyond.
- Our Mission is to lead and inspire the American Renewable Biofuels Revolution while promoting community resiliency, energy security, and environmental responsibility.

SynSel Team

Tim Tawoda – *CEO, Founder and Visionary:* Prior to SynSel, Tim was the founder and CEO of Preon, Inc., focusing on critical power systems for data centers and electrical energy from fossil fuels. Tim has held sales-engineer positions with Westinghouse and executive positions with Teledyne. *BSME, Bradley University*



Darrell Thornley - *Director Project Mobilization:* Darrell has over 40 years experience in the power and industrial process industries. Technical experience includes engineering, construction and project management. Business experience includes project development, finance, joint venture formation, business development, and operations. *BSME, Western Michigan University*



Walter Rogers – *Chief Legal Officer:* Walt is an IARDC-registered attorney practicing in Illinois. His career achievements include successful representation of Fortune 100 clients like Mobil Oil and United Airlines. *J.D., Notre Dame University*



Brian Buckta – *Executive Administrator:* Since 2013, Brian has played an integral role in establishing SynSel policies, procedures, platforms, and communications. He currently leads strategic executive assignments, bringing a wealth of professional experience in communications and administration. *A.A., Gateway Technical College*



Synthetic Fuel Advantage

- Produced from readily available, renewable biomass waste
- Superior diesel cold flow properties – “Arctic Diesel”
- 90% reduction in greenhouse gases compared to refining crude; greener than the electric vehicle (EV)
- Insulated from commodity crude price volatility due to geo-political disruptions
- Modularity accommodates mass-production & deployment
- Drop-in Fuel does not require blending with fossil fuels



SynSel

Plant Production

- Located at or near the feedstock source: input (wood harvesting) and output (oil refinery) supply chain eliminated
- 86 gallons of fuel per ton – typical competitor is 56 gallons per ton
- Modular – sites can be expanded; each module produces 6.2MM gallons per year
- Agricultural waste feedstocks in development
- MSW-to-fuel in the future (MSW = Municipal Solid Waste)
- 20 tons per day of agricultural biochar



SynSel Deployment Plans

- Total of 7 plants anticipated in Wisconsin
- Bemidji Minnesota SynSel plant #2
- Ontonagon Michigan – SynSel plant #3
- Annual US Deployment: 2027 2 mods; 2028 4 mods; 2029 8 mods; 2030 and beyond 16 mods
- Canada starts 2029; Scandinavia 2031
- SynSel Plants in Southern US:
4 x 200 TPD = 800 TPD
- Future deployments for Beetle Kill Timber and Wildfire Tinder Culling

Highlights of Florence Wisconsin Site

- First modular commercial wood-input biorefinery producing drop-in fuel
- 200 TPD wood waste on site – supply chain eliminated
- 70-acre SynSel biorefinery plant adjacent to wood mill
- Fuel utilized locally – “Arctic grade” diesel fuel
- Drop-in renewable gasoline and diesel fuel
- 28 full-time jobs at biorefinery
- Training and Education classroom; MTU 2-hour drive
- Accessibility to regional airport 20 minutes away
- Railroad siting for expansion



Forest Fuels Leadership Consortium

An unprecedented guiding force of motivated business, industry, and institutional leaders endorsing a network of biorefineries in the wood-baskets of North America, beginning in Wisconsin.

- **SynSel** – *Developer*
- **AFRY** – *Owners Rep*
- **R.J. Zavoral and Sons, Inc.** – *Civil Site Construction*
- **KBR** – *Engineer*
- **CATERPILLAR / Martin Energy Group** – *Combined Heat & Power Plant*
- **Honeywell** – *Automation, Monitoring & Control*
- **Michigan Technological University (MTU)** – *LCA, Research & Training*





Worldwide Energy Engineering and Consulting Services

- AFRY delivers expert-led engineering services across the full value chain. Trusted as a partner by the global energy sector, they bring deep insight and experience, enabling projects to perform on time, on scope and on budget – and working to the highest safety standards.
- AFRY expertise covers every aspect of power generation and energy market analysis, from the pre-investment phase to plant operation.
- With more than 2,000 consultants worldwide, AFRY assists clients in more than 80 locations throughout Europe, Middle East, Asia, Africa and Latin America.
- AFRY takes pride in being committed to sustainable development and the clean energy transition which protects the environment as well as making good business sense in everything they do.

RJ ZAVORAL **& SONS, INC.**

- Founded in 1951, R.J. Zavoral & Sons, Inc. is a family-owned earthmoving and construction-services contractor serving the Red River Valley. What began as a one-man dozer operation has grown into a major contractor with 75 years of experience.
- R.J. Zavoral's core focus is site construction, utilities, and foundations. The company combines proven construction practices with GPS and laser-guidance technology to deliver precise, efficient earthmoving solutions.
- With deep roots in the Red River Valley and extensive experience in site construction and utility work, R.J. Zavoral & Sons is well positioned to support SynSel projects while contributing to the communities in which they are developed.



- KBR delivers science, technology, and engineering solutions to companies around the world.
- Our vision is to create a safer, more sustainable world by delivering innovative technologies and solutions that help our customers achieve their most important objectives.
- KBR will provide advanced engineering services for SynSel's 200 ton-per-day Florence, Wisconsin facility, including Pre-FEED, FEED, detailed design, and engineering support during commissioning and startup.
- KBR has supported the commercialization of woody biomass-to-fuels technology since 2012, including work on demonstration plants and dozens of engineering studies and plant designs worldwide, ranging in scale from 100 to 2,000 tons per day.



- Martin has installed over 1,500 gas and diesel power systems and 500+ CHP plants in the United States and around the world. Many of these systems operate in demanding environments, with ambient temperatures ranging from -30°F to 110°F .
- Martin Energy Group is one of Caterpillar's most capable integrators of natural gas (NG) generator sets in CHP systems. These systems serve industrial facilities requiring reliable electric power and thermal energy as steam, hot water, or chilled water.
- By integrating high-performance Caterpillar natural gas gensets with advanced heat-recovery systems, Martin delivers CHP systems with ultra-low emissions and high efficiency—maximizing the energy from our nation's natural gas resources.

Questions & Answers

Thank You

Please Visit our Booth at the
Conference Entrance, Across from
GTI Energy's Booth.

