

FTI is forging a path toward a cleaner, brighter future powered by renewable energy.

Faith Technologies Incorporated — Menasha, Wisconsin

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Faith Technologies Incorporated isn't just meeting modern energy demands—it's revolutionizing them, reducing costs and championing cleaner energy in the process.

Leading the way with vision and purpose

Nestled in the charming city of Menasha, Wisconsin lies the headquarters of Faith Technologies Incorporated (FTI), a company committed to making an impact on the energy revolution. Executive Vice President Wade Leipold and the team at FTI are transforming the energy landscape through innovative and holistic advancements spanning the e-mobility and energy management sectors. FTI is leading the way to a more efficient future by focusing on technology, strategic project consulting, and process engineering that enhance productivity, value, sustainability, and safety.

Initially established as a construction and electrical contracting firm, FTI has evolved into an energy company with a mission centered on prioritizing sustainability and decarbonization. Today, it's best known for its work with distributed energy resources, such as solar power, wind energy, battery energy storage, and microgrids.

The company is committed to providing customers with costeffective and environmentally friendly advancements. "Energy is going to be crucial for all of us as we continue to move forward. We're taking a look at how to use it in the best way possible," says Leipold.

Since each customer has its own unique needs, not every project shares the same blueprint. FTI takes a holistic approach when creating its custom plans. "We engage our customers at the very beginning, understanding what their needs are, being able to provide assessments to drive the solutions they're looking for. We engineer and construct those solutions. And then we continue to support them on an operations, maintenance, and optimization path," says Leipold.

FTI has enjoyed a great deal of success in its efforts so far, and it reports having already eliminated 249 million pounds of carbon from the Earth's footprint. Leipold says that the company's mission is to create a more sustainable future for all. "Decarbonization and sustainability are a central focus for us because our core values are around energy. We look at where we are, where society is, our electrification movements, with EVs and electrification of homes, and we realize that in order to produce that energy, we're going to have to come up with unique solutions to support our society."

Goal

Empower customers with resilient, sustainable energy solutions that slash costs and lighten their environmental footprint.

Story

Fueled by innovation, FTI and Schneider tackled three groundbreaking projects, leveraging their deep-rooted collaboration to push the boundaries of possibility.

Solutions

FTI and Schneider incorporated sustainability into each project with solutions like EcoStruxure Microgrid, Power Monitoring Expert, Microgrid Operation, Building Automation, and Energy Control Center.

Results

- Combined renewable energy technologies to achieve a sustainable and resilient energy ecosystem
- Designed a microgrid system to power the conversion of methane from cow manure into a continuous source of renewable natural gas
- Integrated energy technologies to power an entirely off-grid 19,000 square-foot facility

Schneider

Shaping the future through partnerships

Part of what makes the company successful is the way it engages with like-minded partners to help achieve its goals. "We've been working with Schneider Electric since our inception and continue to grow our collaboration. Part of that is driven by the cultures of Schneider Electric and FTI. Decarbonization is in the DNA of both companies," says Leipold.

FTI's strategic partnership with Schneider underscores its dedication to innovation, utilizing Schneider solutions in many projects to offer enhanced energy management functionalities. "EcoStruxure provides us with end-to-end inclusive capabilities. It starts with connecting on the edge, connecting to end devices, being able to pull in that data and driving more efficiency and optimization," says Leipold. This collaboration allows FTI to harness cutting-edge hardware and software, optimizing energy use and fostering resilience and sustainability for its customers.

Through its commitment to innovation and collaboration, FTI has demonstrated its ability to achieve decarbonization goals through three exceptional projects. These examples serve as a testament to the power of partnership and creativity in driving positive change for both customers and the environment.

Creating a renewable energy ecosystem at Bubolz Nature Preserve

The Bubolz Nature Preserve, located in Appleton, Wisconsin, provides educational and recreational opportunities, fostering an appreciation for nature among the



Wade Leipold, Executive Vice President, Faith Technologies Incorporated

community. To enhance these experiences and serve the preserve's new lodge—a central hub for exploration and activities— FTI and Schneider embarked on creating a unique microgrid system for the preserve, marking a significant project within the ongoing partnership. As Leipold describes it, "Bubolz Nature Preserve is one of the first microgrids that we collectively set up to give back to community members and provide additional services for them."

The initiative aimed to reimagine the preserve's energy usage by constructing a microgrid capable of powering the entire facility sustainably. Leipold emphasizes that "It's not just a microgrid. We were looking to see what we could do to really push it to the limits." "Energy is going to be crucial for all of us as we continue to move forward. We're taking a look at how to use it in the best way possible."

— Wade Leipold



The Lodge is Bubolz Nature Preserve's environmental center.

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The Bubolz Nature Preserve's Microgrid Immersion Center educates visitors on the technology behind the preserve's microgrid.

Unlike conventional microgrids that primarily rely on solar and battery storage, the Bubolz project integrated a variety of distributed energy resources. The array includes solar panels, battery energy storage, a hydrogen fuel cell, a combined heat and power unit, and a generator. This multifaceted approach enables a dynamic energy management system where different energy sources interact and complement each other, optimizing efficiency and minimizing costs.



The preserve uses Energy Control Center by Schneider Electric to manage and optimize power.

A crucial component in realizing this system is Schneider's Energy Control Center (ECC). "It optimizes what energy source to pull at any given time based on how much energy's available," says Leipold.

This innovative energy solution not only provides Bubolz with a sustainable power supply but also endows it with resilience against external power disruptions. One stormy day, the preserve was able to maintain full operation despite widespread outages in the surrounding area, saving a wedding at the facility from disaster.

FTI further augmented the microgrid's functionality with additional technologies such as Power Monitoring Expert and building automation systems. These integrations allowed for energy monitoring and control within the lodge, optimizing its lighting and HVAC systems for even greater energy efficiency and cost savings. The money saved is passed on to the community in the form of better programming. "The microgrid at Bubolz Nature Preserve has a lot of benefits to the community. We're able to provide energy at a much lower cost for the lodge. They're able to provide their resources in other areas to give a greater experience to the individuals that are coming in and taking part," states Leipold.

"We incorporated Schneider's Energy Control Center. It optimizes what energy source to pull at any given time based on how much energy's available."

— Wade Leipold

2001 Reduced emissions equivalent to planting

nearly two million trees *Data from Faith Technologies Incorporated The Bubolz Nature Preserve stands as a testament to the possibilities of combining renewable energy technologies to achieve a sustainable and reliable energy ecosystem, serving not only as a recreational space but also as a model for future energy projects.

Converting methane gas into clean energy at Dallmann East River Dairy

U.S. Energy, a leader in renewable natural gas (RNG) production, partnered with FTI on a unique aspect of its project at Dallmann East River Dairy in Brillion, Wisconsin. The core objective was to harness the dairy's abundant cow manure, a potent source of methane, and convert it into renewable natural gas. Leipold describes the challenge: "How can we capture methane off that manure instead of having it released into the air? That was the basis for creating biodigesters." This innovative approach significantly reduces the dairy's carbon intensity score, aligning with sustainability goals.

FTI's microgrid solution, incorporating solar power, battery energy storage, Schneider Power Monitoring Expert, and Square D products, was instrumental in powering this RNG production process. This integrated system ensures efficient energy management and further diminishes the dairy's environmental footprint. The resulting clean, usable gas is now injected into pipelines, primarily serving high-demand markets like California.



The Dallman East River Dairy Farm, Brillion, Wisconsin.

This project, with its strong emphasis on microgrid efficiency, showcases an innovative way to support the biodigester's energy needs. The dairy farm and its surrounding community now benefit from a cleaner environment while contributing to nationwide efforts toward sustainable energy solutions.

159,957 MWh^{*}

generated with renewable energy

*Data from Faith Technologies Incorporated



Dallmann's microgrid with battery storage exemplifies FTI and Schneider's clean energy collaboration.





FTI's Lakeside Vision Center integrates a microgrid for sustainable operation.

Pioneering off-grid sustainability at Lakeside Vision Center

Spanning over 19,000 square feet at the edge of a utility line where power outages are common, the Lakeside Vision Center stands as a statement of resilience and sustainability. As Leipold proudly describes it, "the Center is redefining what is possible. I enjoy bringing our customers and clients out there and watching their eyes light up as they see this facility and realize it's 100% off-grid. Seeing is truly believing." This facility on the east shore of Lake Winnebago, Wisconsin is indeed something to be proud of. It showcases how integrated technologies along with cutting-edge solar and battery energy solutions can create an environment where energy reliability and sustainability are no longer concerns but guarantees.

FTI's creation is more than just a building — it's an experiential journey for visitors. From staying overnight in its sustainable residences to exploring the seamless integration of different hardware and software, the center offers a hands-on understanding of living off-grid. Employing materials and construction methods focused on sustainability and modularity, the center demonstrates efficient, innovative building practices that can drive the future of construction. "We want to create a greener, brighter future for each and every one of us."

— Wade Leipold



pounds of CO₂ eliminated from the Earth's footprint

*Data from Faith Technologies Incorporated

Faith Technologies Incorporated (FTI) at a glance:

- Customized clean energy solutions for businesses and communities.
- Developed unique microgrids that combine multiple renewable energy sources.
- Created a microgrid system to support the conversion of methane into renewable natural gas
- Focused on designing and building sustainable communities independent of the power grid.



The Lakeside Vision Center offers visitors an immersive off-grid living experience.

The innovation doesn't stop at the visitor experience. FTI is taking it a step further to create a place where families can thrive totally off-grid. "As we continue to develop Lakeside Vision Center, one of the things we want to do is create phase two with a residential build-out," explains Leipold.

This initiative aims to showcase how homes can not only be their own energy sources but can also share power amongst each other, leveraging innovative technologies for optimal energy distribution and consumption. "We'll be using Schneider's electrical distribution equipment throughout, with hardware and software incorporated into each residence," says Leipold. EcoStruxure Power Monitoring Expert will play a key role in helping monitor energy use for this pioneering community with insights into each home's energy performance.

The collaboration with Schneider is pivotal, providing the Lakeside Vision Center with electrical distribution equipment and an "EcoStruxure provides us with end-to end inclusive capabilities. It starts with connecting on the edge, connecting to end devices, being able to pull in that data and driving more efficiency and optimization."

— Wade Leipold



FTI uses EcoStruxure Power Monitoring Expert to gain insights into energy performance.



array of hardware and software solutions designed to empower homeowners and revolutionize energy consumption. This partnership embodies the shared commitment to redefine what's possible in energy sustainability and efficiency, laying down the blueprint for future off-grid communities.

Driving meaningful change

FTI is at the forefront of a sustainability revolution, pioneering efforts by reimagining the use of energy and harnessing data to understand and optimize usage. This innovative approach is not just about meeting the needs of today; it's focused on ensuring a thriving world for generations to come. By taking every step toward sustainability seriously, FTI is committed to making a lasting impact on decarbonization. This includes looking toward the future with an ambitious vision of creating an environment where clean energy solutions become the norm, rather than the alternative.

As FTI continues to explore the potential of what can be achieved, it remains dedicated to ensuring the sustainability of our planet and the success of its customers.

"Our vision for tomorrow is to be able to create cost-effective, resilient, sustainable



The center's Xcape microgrid solution includes Schneider power inverters, controllers, and software.

energy for our customers as they continue to move forward. We want to create a greener, brighter future for each and every one of us," says Leipold.

The journey to a more sustainable world begins with bold initiatives like these, which hold the promise of meeting future needs and fostering a vibrant, clean world. By embracing innovation and striving for excellence, FTI plays a part in making an impact on sustainability for all, now and in the future.

Eco **G**truxure[®] Power



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IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is our open, interoperable, IoT-enabled system architecture and platform. EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers. EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level.

This includes Connected Products, Edge Control, and Apps, Analytics & Services which are supported by Customer Lifecycle Software. EcoStruxure has been deployed in almost 500,000 sites with the support of 20,000+ developers, 650,000 service providers and partners, 3,000 utilities and connects over 2 million assets under management.



One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise

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The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

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Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

Apps, Analytics, & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

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