

PROFILE

GREEN IT ENERGY APPLICATIONS

# GIVING OWNERS PANORAMIC INSIGHTS

**GREEN IT ENERGY  
APPLICATIONS**

**FOUNDED**  
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**HEADQUARTERS**  
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**WEBSITE**  
[www.greenitea.com](http://www.greenitea.com)

Rather than offer one-size-fits-all products and services, Green IT works closely with its customers to understand their needs so it can deliver unique solutions. (Courtesy: Green IT)

# *Green IT Energy Applications' range of software and IT services gives owners improved visibility so they can make smarter decisions about their portfolios.*

By **KENNETH CARTER** ▸ Wind Systems editor

It all started in an Iowa cornfield.

Today, Green IT Energy Applications is one of the renewable energy industry's leading providers of software and IT services. But as CEO Andrew Eisenberg explains, the company got its unlikely start "crawling around cornfields cataloging blade damage by day and scraping SCADA data by night."

The Green IT story begins in earnest with a 2003 preventative maintenance exercise that combined blade damage inspection photography and time-series SCADA data.

"Our initial engagement was to catalog damage with these giant telephoto lenses and build a database-driven application that overlaid production data on the maintenance records," Eisenberg said. "At the time, we were a boutique software firm with a jack-of-all-trades approach. This was an incredible opportunity to get up close and personal with wind-farm data and infrastructure. We dove in headfirst."

This early assignment set the tone for Green IT's consistently innovative combination of services.

## **THE BIRTH OF GREEN IT**

Green IT's initial analysis of errant production data ignited a period of rapid expansion for the company, according to Eisenberg. As that contract renewed, Green IT adapted to meet increasingly complex requests from its customers — a process that led the company from preventative maintenance into landowner data.

"The initial contract began with a troubleshooting exer-

cise, then grew into an opportunity to develop a wind farm inventory system," he said. "Collecting SCADA data led to collecting critical contract data, and that dovetailed into landowner data, which created the multilayered solution it is today."

Green IT quickly scaled its software to meet a wide range of demands, including landowner payments, budget, risk management, and asset management, according to Eisenberg.

## **MAKING A DIFFERENCE**

Over time, Green IT quietly established itself as an organization with the capacity to build unique digital tools to help renewable energy companies — wind owners, in particular — make their operations more efficient. Green IT's passion for the environment coupled with its willingness to innovate is what would cement the company's reputation.

"The global environmental movement to reduce and eventually eliminate our reliance on fossil fuels is one that continues to inspire our work at Green IT," Eisenberg said. "As we focus on targeting renewable energy ownership portfolios, we hope our technology can help facilitate a large-scale impact."

## **IS IT A SOFTWARE COMPANY? AN IT CONSULTING FIRM?**

Despite Green IT's good standing in the industry, there is often confusion about the breadth of its services. Green IT's



Green IT's software meets a wide range of demands, including landowner payments, budget, risk management, and asset management. (Courtesy: Green IT)



On the software side, Green IT helps collect data from pipeline, construction, and operations, which enables owners to analyze the data in real-time, build reports, and connect teams within a common workspace. (Courtesy: Green IT)

two principal business units — software and IT services — both serve to give owners perspective on their portfolios, according to Eisenberg.

“It’s our job to be an extra set of eyes and ears for owners so they can get the most out of their assets,” he said. “Green IT often serves as a bridge between distinct parts of the business — risk management and enterprise resource planning; asset management and automation; regulatory and network architecture. It’s one of our greatest strengths that Green IT’s team is comprised of technical experts who have deep, hands-on experience with all aspects of the renewable energy industry.”

### OVERSIGHT FROM ALL ANGLES

On the software side, Green IT helps collect data from pipeline, construction, and operations, which enables owners to analyze the data in real-time, build reports, and connect teams within a common workspace, according to Eisenberg. The software allows Green IT customers to oversee every aspect of a site by giving them access to all the data it generates.

“Our software transforms a static Power Purchase Agreement, for instance, into a series of actions, deliverables, and notifications,” he said. “From there, we are able to provide our customers oversight on the entire process.”

On the consulting side, Green IT’s Ownership IT program improves the consistency and security of operations

by identifying and eliminating vulnerabilities, according to Eisenberg.

“Owners are so focused on keeping turbines spinning, it’s understandable that their IT might fall by the wayside,” he said. “Neglected networks have the potential to rack up millions of dollars in fines, which is why we help audit and assess the infrastructure, build inventories, customize historization solutions, and help owners meet critical requirements.”

### PARTNERING WITH CUSTOMERS

One of Green IT’s core values is that it views customers as partners, according to Eisenberg. Rather than offer one-size-fits-all products and services, Green IT works closely with its customers to understand their needs so it can deliver unique solutions.

“Typical IT consultants will diagnose a problem, forward a bill, then move on to the next problem,” he said. “We’re much more interested in helping our customers understand the inner workings of their portfolios. The goal is to give them more control. By serving as the Subject Matter Expert on all manner of technical areas, we help bring projects online and then walk our customers through any problems they encounter along the way.”

For instance, Green IT recently re-architected a network when a few crucial pieces of equipment reached end-of-life.

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“The facility had changed hands a number of times, so the as-built drawings were no longer available,” Eisenberg said. “We were brought in to assess the facility and mitigate cyber risk. Once we put the plan into action, we were quickly able to secure the facility, implement appropriate segmentation, and establish clear distinctions between each of the parties.”

### EVER-EVOLVING TECHNOLOGY

Green IT's hands-on approach is not only a core value, but a smart strategy to stay ahead of the curve in an industry that demands constant reinvention, according to Eisenberg.

“Technology keeps changing,” he said. “Cybersecurity concerns and regulatory standards move in one direction. Year after year, NERC and ICS recommendations continue to tighten — this is a trend we don't see rolling backwards. AI and machine learning are certainly alluring parts of the future landscape, but in order to take advantage of these technologies, ownership requires standardization and con-

trol of data. Green IT ensures our customers adhere to a baseline of compliance by evolving our rich data collection and automated risk management.”

### CLOUD-BASED PLATFORM

New advances in data collection mean new approaches to data storage. This is fine by Green IT, according to Eisenberg, which anticipated the industry's adoption of the cloud by a few years.

“I remember when we launched our first software platform, the fact that we were cloud-based was taboo; everyone had to have spinning discs in their closets,” he said. “The industry's embrace of cloud technology has been a boon for us on the software and data collection sides. We've been able to deliver better products at a more competitive price.”

### FUTURE OF WIND

As Green IT and the wind industry evolve alongside each other, Eisenberg hopes to keep his organization nimble so it's ready to adapt to any new developments just around the bend.

“While repowering and offshore have already impacted the industry, I am most enthusiastic about Wind+,” he said. “The ability for storage to solve the variability quandary holds exciting potential to disrupt the energy landscape and further transform the industry.”

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