

CUSTOMER SUCCESS STORY



Home Energy Monitoring iPhone App for Flow Control Product Manufacturer

iPhone App for Remote Energy Resource Management

Our client's product provides remote energy resource management through the use of smart adaptive gateways in the home or office. These gateways combine a variety of wide and local-area communications services with an advanced control structure allowing the management of millions of devices from a cloud based environment.

Challenge

For end consumers, the ability to easily monitor their individual energy usage is a critical component in making informed purchase decisions. To broaden the appeal of their energy management solution, an Apple iPhone® application was needed.

Green Energy Corp built an iPhone application that allows customers to view energy consumption through a smartphone touchscreen interface. Customers opt-in through a device activation process. After activation, energy measurement data is periodically uploaded to a server in the cloud. Then, customers can simply log into their account to view historical, current, and forecasted energy consumption. They can also view and control their thermostat settings, set and track monthly budgets, and share this information via Facebook[®] and other social media sites.

To enable these capabilities for many users, it was necessary to create a high performance iPhone application service which would satisfy demanding end consumers while simultaneously maintaining throughput of our client's cloud environment. Their challenge was to rapidly deliver this iPhone application while keeping their development team focused on other critical platform enhancements. Thus they turned to Green Energy Corp – a software development partner with significant Smart Energy, cloud services, and web portal development skills.

Task

Build cloud-based web services to support the iPhone and other smartphones

While their existing platform already collected and stored device usage data, there was no consumer-friendly way to view the information. In addition, communicating with iPhone applications required a programmatic interface – many concurrent instances of which would not negatively impact the core platform. Green Energy Corp proposed developing high-performance RESTful web services deployed in the cloud to collect, format and store usage data, support user authentication, and handle information, and control requests from the iPhone application.

Delivered

The Green Energy Corp team delivered a seamless user experience built on Javabased frameworks and web services interfaces. The solution was usable and fail-safe for users with modest navigation skills via the familiar Apple iPhone touch-screen interface. The high-performance design and scalability of this solution effectively augmented our client's core platform and will allow them to easily add similar types of interfaces to new consumer devices in the future.

Results

This engagement reflects the volatile, fast-paced, and nascent nature of the Smart Energy Market and how Green Energy Corp is able to adapt to the customer's needs. During the development phase of the project, our client decided to take advantage of an opportunity to participate in a major trade show that interjected an aggressive milestone not originally included in the project plan. Because of Green Energy Corp 's intimate knowledge of Smart Grid technology combined with our iterative and flexible software development methods, we were able to quickly shift focus and collaborate with our client's and the iPhone application developers on a last-minute integration schedule. Together we were successful in delivering a working system to our customer in time to participate in a critical sales and marketing opportunity.

About Green Energy Corp

Green Energy Corporation is a technology company that provides software engineering services to communications, utilities and energy companies and delivers software products to enable the Smart Grid of the future.

Our offerings include the GreenBus[™] open source platform that enables utilities to move from legacy operations systems to the smart grid, and software engineering services for communications and utility companies.

The GreenBus forms the foundation for TotalGrid.org — a Green Energy Corp sponsored open source community dedicated to modernizing national power systems and microgrids while driving the development of the Smart Grid. Visit TotalGrid.org for more information.

Contact Us

For more information about our software engineering solutions, please visit **greenenergycorp.com** or call 303-453-8338 to speak to a Green Energy Corp representative.

If you are interested in developing applications for the GreenBus, or for more info on the **GreenBus Alliance Program**, contact us at 303-453-8380

Headquarters

12050 North Pecos Street Suite 210 Denver, Colorado 80234 303.453.8300

Centennial Campus North Carolina State Offices Venture IV Building 1730 Varsity Drive Suite 500 Raleigh, North Carolina 27606 919.836.9916

Durango, Colorado Offices 1150 Main Avenue Unit C Durango, Colorado 81301 303.453.8361

info@greenenergycorp.com

Total Grid Management and GreenBus are trademarks of Green Energy Corp. All rights reserved ©2010

Rev 02/2011

