

AXIO POWER

Spatial Edge's services provides competitive advantage to a growing renewable energy developer

Introduction

Axio Power is a growing enterprise with a team of highly experienced renewable energy developers. They provide reliable utility-scale solar power to the grid for a sustainable energy future. Axio Power has a pipeline of projects totaling over 500MW distributed across USA and Canada (www.axiopower.com).

The Challenges

The biggest challenge in the renewable energy industry is achieving high efficiency through optimal project timelines. A typical renewable energy project consumes the most time during pre-construction due to tasks such as site selection, land securitization, and permitting activities. For Axio Power, reducing the time required for site selection was the first major challenge. Traditionally, developers had to travel to various sites to conduct a feasibility study, acclimate with the terrain, and meet with local authorities regarding permitting issues. This led to Axio Power's search for an innovative method that would eliminate some of the labor intensive steps thereby saving time, cost and ultimately increasing project efficiency.

The traditional paper maps collected from various sources and lengthy excel tables filled with multiple information added more fuel to the project efficiency challenge. Tagging these paper maps with the information from excel tables for market study consumed more time. More importantly, assessing competition posed a great challenge. Comparing press releases and spreadsheets with queue application information was not an effective method to visualize competition in a dynamic business environment.

After reading about the use of Geographic Information Systems (GIS) in renewable energy development, the lead project developer at Axio Power contacted Spatial Edge to determine how GIS can specifically help and what resources are required to implement a GIS.

Why Spatial Edge?

Spatial Edge has a wide array of experience in providing GIS solutions for varied industry verticals. Spatial Edge's associates have advanced business degrees in addition to their specialized GIS knowledge. These factors leveraged Spatial Edge's entry into the renewable energy industry, offering innovative applications for project development. Spatial Edge's strong functional team coupled with unfathomable support and cooperation from Axio Power enabled to successfully address the challenges.

Solutions

GIS technology is a perfect solution to Axio Power's daily struggles due to its capability to analyze and visualize data in unlimited ways. Initially, Spatial Edge spent considerable amount of time to understand the business environment that Axio Power operates in. We overlaid several layers of geographic datasets like renewable resources, administrative boundaries, terrain characteristics, and several other spatial layers to narrow down prospective project sites. As Axio Power gradually understood the power of GIS, we developed unique GIS methodologies and procedures customized for Axio Power's project development needs. We also performed advanced analysis and created unique datasets to help Axio Power understand their competitive environment. Spatial Edge's GIS methodologies provided critical information when evaluating both potential project sites and strategies on how to enter new markets, even before developers stepped into the field. Our sophisticated tools, procedures, models, and maps helped Axio Power save time and also enabled easy transactions with the RTOs and utilities.

Client Feedback



“We were extremely happy to work in conjunction with Spatial Edge, not only because it resulted in a more fitting solution to our strategy, but also because we learned to a great extent the power of GIS,” says **Barnaby Olson, Axio Power's VP of Development.**

When asked about Spatial Edge's role in strategic decisions, he added *“Spatial Edge has really helped us open our eyes to competition in a way we never imagined. Understanding competition was a huge advantage to our development processes. In addition, Spatial Edge has increased our professional appearance through high quality map production and other innovations.”* He adds a note on Spatial Edge's culture as *“extremely customer oriented with quick delivery, something very important to us.”*

When asked to provide feedback about Spatial Edge's work for Axio Power, **Will Plaxico, Lead Project Developer** says, *“Undoubtedly, Spatial Edge's services have greatly reduced our development time. Not only have their services increased the accuracy and sophistication of our processes by integrating information from multiple sources, but also has shifted our focus on innovative project development strategies. When entering new markets, we are now able to focus our efforts on the most promising area only and efficiently use our limited resources as intelligently as possible.”*



Mr. Plaxico also mentioned that Spatial Edge helped them foster innovation in their business activities. He says, *“Working with Spatial Edge was an eye opening experience to the power of GIS. Although we had an idea of GIS’s use in our efforts, we never realized that the technology could be innovatively applied in the countless ways that Spatial Edge demonstrated. One good example is in land acquisition efforts. The methodology that they created to aggregate common owners and provide us a much more realistic, relevant picture of land ownership has decreased our time to understand land ownership by 70%! As a result, there were big savings; and, most importantly, it provided us a more competitive edge in the renewable energy market.”*