

Customer Spotlight:

ADM Gets Real-Time Visibility with Enel X Connect

For more than a century, the people of Archer Daniels Midland Company (NYSE: ADM) have transformed crops into products that serve the vital needs of a growing world. Today, ADM is one of the world's largest agricultural processors and food ingredient providers, with more than 33,000 employees serving customers in more than 140 countries. With a global value chain that includes more than 460 crop procurement locations, 300 ingredient manufacturing facilities, 40 innovation centers and the world's premier crop transportation network, ADM connects the harvest to the home, making products for food, animal feed, industrial and energy uses. Learn more at www.adm.com.





The Challenge

ADM maintains a strong physical presence in the world's most productive growing regions. An unparalleled asset network—including grain elevators, food processing facilities, flour mills and export facilities—allows the company to respond nimbly to changing market conditions and opportunities. With such a large global footprint, tracking energy costs and identifying areas for improvement is critical to the company's bottom line.

The Solution

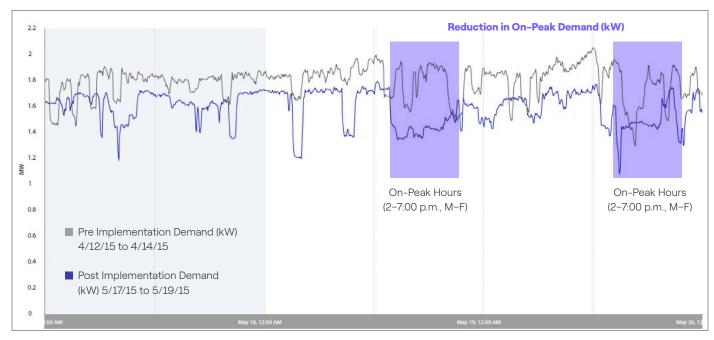
Avoid Peak Demand Charges

ADM deployed Enel X Connect at one of the company's peanut processing plants in Georgia. During an initial audit, an Enel X energy adviser working with the ADM team noted that the plant's peak demand charge was four times greater in the summer months than in the winter. Using Enel X Connect, the ADM team worked with the Enel X energy adviser to identify opportunities for flexibility in plant operations to reduce peak demand.

The team devised and implemented a strategy to adjust temperature set points in the facility's on-site cold storage during on-peak hours (2–7 p.m.) and isolate the area. During this period, they were able to reduce overall energy demand without compromising product quality. Once the peak period ends, the team resumes normal operations and allows access to the area. The team also shifted its pellet mill operations outside of on-peak hours to avoid further charges. These minor operational changes required no financial investment and will result in \$23,000 in annual savings.

Stay on Track with Reports

The ADM operations team uses Enel X's Peak Demand Identification Report to measure and verify the impact of their efforts to reduce peak demand, maintain appropriate demand thresholds and avoid costly demand charges. The weekly report is automatically sent to team members' email accounts.



ADM's operational changes to avoid peak demand charges required no financial investment and will result in \$23,000 in annual savings.

Utilize Software to Identify Spikes in Usage

At a flour mill in Indiana, ADM uses Enel X Connect to determine unusual spikes in energy usage. With real-time visibility into their energy data, the team determined that two independent operations were occurring at the same time, creating an unexpected spike in demand. The team shifted the runtime of one of the conflicting processes—making sure to avoid similar conflicts with other mill activities—and significantly flattened out the facility's load.

Enel X Connect allows the team to identify the energy consumption of individual processes, and measure and verify that the corrective measure is implemented. Adjusting the sequence of these operations has resulted in \$19,000 in annual savings at no cost to ADM.

Enel X Connect not only gives users access to their real-time energy data, but also has an alerting capability that notifies users when spikes and dips occur in electric demand. For example, after the team identified the spike at the Indiana plant, the team set alerts at certain demand thresholds to warn them of the potential to reach peak demand levels that would trigger higher charges on the site's utility bill. The alerts have helped drive process improvements and the team is able to avoid future charges.

Benefits

- View energy data for multiple facilities in a central application
- Access real-time energy utility and submeter data
- Complete no- and low-cost operational changes that lead to big savings
- Measure and verify operational improvements
- Enforce process improvements for utility bill management