

FNFRGY MANAGEMENT INFORMATION SYSTEM

The consumption of energy in industrial processing facilities is under increasingly intense scrutiny, not only for rising costs, but also for its impact on the environmental footprint of production and the accompanying tariffs. Energy is no longer just a necessary input of production. Instead, it has become a critical operating metric that needs to be actively managed and optimized.

Managing energy costs is not trivial. To begin with, it is often difficult to know how much energy *should* be used; it not only changes with production rate, but also with other key parameters including ambient temperature and precipitation, feed material composition, equipment state, and other process-specific conditions. And even if abnormal energy use is observed, it can be challenging and time-consuming to track down the source of high consumption to correct the situation. Making this process even more difficult is the fact that there is often no central place to collect, or better yet visualize, this information.

The SpartanPROTM Energy Management Information System (EMIS) helps you keep your facility running in its most energy efficient state by providing a modern web-based visualization tool to quantify and track down excessive energy consumption in real time. This key component of the ISO 50001 Energy Management System

Standard includes:

Connection to real-time and historical energy consumption rates

- Accurate forecasting of energy consumption based on current ambient and operating conditions using advanced data analytics (including machine learning and AI)
- Economic framing of energy use based on current market prices
- Embedded alerts, troubleshooting support, and root cause analysis capabilities
- Visibility at multiple levels for every user, ranging from enterprise-wide to individual equipment

The increased visibility to excess energy consumption events provided by EMIS solutions has resulted in significant energy savings for large industrial consumers, with reductions of up to 10% within the



first two years of use. Spartan's modern and flexible design can be integrated with your existing data systems for either an on-prem or cloud-based deployment. To view a live demo of our solution and being your journey toward lower energy use, please contact your local Spartan representative today.

Ref: https://www.nrcan.gc.ca/energy-efficiency/energy-efficiency/energy-management-industry/iso-50001-energy-management-systems-standard/20405