

SIEMENS

Leverage industrial IoT to reduce energy costs and optimize energy usage



Organizations must find innovative ways to reduce energy usage and associated costs

Due to rising energy costs, strict regulations and increasing customer expectations, industrial organizations must continuously look for ways to optimize energy usage. However, it can be difficult to do so because many organizations have an incomplete view of their overall energy usage across complex factory environments. These organizations often use manual processes and outdated, siloed energy data and therefore have no transparency into how much energy their factories and assets are consuming – or wasting. This challenge is even steeper for factories with legacy assets. Without transparency into overall energy usage, it is difficult to define reasonable approaches for reducing energy costs. Organizations risk hefty fines and eroding public trust if they cannot achieve energy optimization.

To solve these challenges, organizations need to take a two-phased approach: first, gain complete transparency into asset energy usage across globally distributed factories and second, devise strategies to continuously optimize operations and reduce energy usage.

The path to energy optimization starts with industrial IoT

Organizations can leverage the industrial Internet of Things (IoT) for complete transparency into energy usage. By using IoT to connect machines, products, plants, and systems, organizations can collect energy usage data in near real-time and begin to get a clear picture of actual energy usage. From there, businesses can utilize analytics tools to optimize energy usage and define key performance indicators (KPIs) to continuously test against. By doing so, businesses can start uncovering ways to reduce energy usage. Energy consumption can be optimized across individual assets, as well as multiple factories around the world, enabling businesses to save costs, meet regulations and satisfy customer expectations.

MindSphere provides insights into energy usage, waste, and optimization pathways

MindSphere®, a leading industrial IoT as a service solution, connects machines, products, plants, and systems for deep data insights that can enhance operational efficiencies. MindSphere enables companies to gain complete transparency of their energy usage and delivers data driven insights that organizations can leverage to devise strategies to reduce energy usage and waste.

Visualize and optimize energy usage with near real-time monitoring dashboards



Leverage granular machine insights

- Visualize, track and analyze kilowatt-hours used, energy losses, performance deviations, temperatures and status for each asset across factories
- Optimize asset usage and maintenance scheduling to minimize energy usage and waste



KPI and metrics tracking

- Gain near real-time visibility into energy consumption data
- Set alerts to track energy spikes out of the norm
- Predict machine health to minimize high energy usage



Reduce energy waste

- Track energy usage across the entire value chain
- Pinpoint where energy usage can be optimized
- Ensure all assets are running optimally during non-peak hours when it is less expensive

Leverage MindSphere for energy optimization

Most industrial organizations have a strong need to reduce their energy usage and costs but don't have the data insights needed to devise impactful strategies. With an industrial IoT as a service solution like MindSphere, organizations can gain complete transparency into energy usage across factories and assets in order to achieve energy optimization. As a result, organizations can reduce costs, comply with regulatory requirements and keep customers happy.

To learn more about MindSphere
visit www.siemens.com/mindsphere