CEMEX reduces energy consumption with energy insights solutions

Centrica Business Solutions' energy insights solutions are enabling global building materials giant CEMEX to make direct cost savings and efficiency improvements.



Looking for a solution to build on

CEMEX is one of the world's biggest producers of building materials, with operations in more than 50 countries. Its industrial-scale plants and equipment consume large quantities of electricity at hundreds of production facilities, quarries, distribution centers and marine terminals. Any energy savings and efficiencies, when applied throughout its operations, would deliver huge financial and production benefits.

Savings on an industrial scale

Centrica Business Solutions initially deployed its energy insights solutions at three CEMEX locations. The deployment involved applying wireless, self-powered sensors to monitor a range of essential machinery, including pumps, conveyors and crushers.

The live data was transmitted to Centrica Business Solutions' cloud-based analytics platform, PowerRadarTM, providing unique, comprehensive and real-time insights into energy consumption and asset performance, identifying inefficiencies, wastage and giving an overview of the overall health of the assets.

Managers could see immediately that the granular data and accompanying reports enabled them to swiftly identify opportunities to save energy, to fix under-performing or faulty equipment and to organize its maintenance programs more efficiently.

The results

Detailed analysis of the sensor data in PowerRadar showed that an aggregate conveyor motor at one of CEMEX's quarries was overloading and tripping out, creating a bottle neck in the process. Fixing it immediately increased production. When added to further energy saving measures made possible by the PowerRadar analysis, the solution delivered significant annual savings.



Roll out to sites



Direct cost savings and efficiency improvements



Monitoring equipment efficiency



The energy insights solution has provided valuable equipment level information across a broad range of our sites, allowing us to implement energy reduction and process optimization improvements."

Michael Greer, Energy Manager, CEMEX UK

Why Centrica Business Solutions?

- Detailed analysis of energy data allows CEMEX to quickly identify faulty equipment, resulting in operational and cost savings
- Ease of deployment means the wireless sensors can be installed rapidly without any disruption to the plant operations
- Predictive maintenance alerts help to extend the life of important assets

As a result, CEMEX rapidly expanded the use of energy insights with more than 1,600 sensors now monitoring equipment at 42 of its quarries.

