CoolPlanet

Global food & beverage company saves 19% per year and builds security via ISO 50001

KEY STATS

19%

ENERGY COST REDUCTION
PER ANNUM

24%

ACHIEVED ISO 500001
CERTIFICATION

€620,000

ENERGY SAVINGS ACHIEVED
IN 2 YEARS

OVERVIEW

"As part of the ISO 50001 certification, we passed both our first and second stage audits within a nine month period, without any non-conformities. The auditors said that "rarely do we see such a good implementation, especially during a second-stage audit." CoolPlanetOS is a great tool for ISO 50001 as it helps with collation, tracking and control of energy consumption"

Environmental Health and Safety Manager
Global Food and Beverages Company, located in Europe

This large international food and beverage corporation (the company), which is based in Europe, employs 6000 people and operates in 130 countries. It has three primary brands with multiple products in each. CoolPlanet was originally engaged by the company in 2017 to implement CoolPlanetOS, its energy management platform. The objective was to quantify its energy use and make cost savings in two of its major European food processing plants, an oat mill and a feed mill. Then 2 years later, CoolPlanet led the implementation of ISO 50001 the energy management certification.

CHALLENGES

Initially, CoolPlanet set about retrieving energy consumption data (energy bills from the last 12 months) from the seven different energy lines, to create a digital twin of the energy usage from both plants. Using CoolPlanetOS, it was easy to create a feasibility study and demonstrate multiple paths to reduce costs (and see plenty of anomalies). Once CoolPlanetOS was implemented and all the data points were feeding information (ERP, SCADA, Data historians, and CMMS), real time reporting and analysis allowed CoolPlanet to advise on some big energy savings opportunities.

SOLUTION

A number of key projects were identified where major efficiencies could be realised and implemented within a two-year period:

- Upgrade to new efficient LED **lighting**
- Installation of Variable Speed Drives and Fixed Speed **Motor** Controls.
- **Compressor** Replaced

- A new **Biomass Boiler** and heat recovery via steam trap replacement, insulation replacement and an automated blowdown system (learn more about biomass energy here)
- Heat Recovery from **Air Compressors**

The verified savings came to over €620,000 are were realised in just 2.1 years.

All projects were completed on schedule without any major delays. Key equipment was upgraded or replaced, with very short shutdown times and both plants now have high-quality electrical and mechanical installations.

The success of this first phase was due to establishing a strong working relationship between our CoolPlanet project team and the company's key energy managers, through open communication and proactive weekly update meetings.

RESULT

ISO 50001 Implementation
Now the company had in-depth data analysis capability at its fingertips with CoolPlanetOS. Its plant and energy managers could see there was so much more potential for long term continuous improvement in energy efficiency and cost savings.

The company also needed to demonstrate and communicate its environmental credentials (by how much it was reducing its carbon footprint) to its stakeholders and customers, and show progress against its overall sustainability strategy.

ISO 50001 framework was a way to achieve both of these objectives, plus it was also a way to manage the risk surrounding future energy supply. So in March 2021, it engaged CoolPlanet once again to lead them on their journey to becoming ISO 50001 certified.

CoolPlanet has in-house certified experts on ISO 50001 plus its own Authorised Energy Management Auditors, and was perfectly placed to guide the company through each of the 10 steps required to gain ISO 50001 certification.

Building a Team

A new team structure clarified areas of responsibility and motivated everyone.

Recruiting a member of the senior leadership team helped to assure support for a new energy policy and strategy, and to ensure allocation of budget for planned energy initiatives. CoolPlanet worked with the EnMS Champion to establish requirements, and implement and maintain them, in accordance with the ISO 50001 standard.

The EnMS champion also played a key role in getting the rest of the energy team (the maintenance manager and department managers) on board with the new set of goals and practices. Also, a newly established calendar of weekly and monthly meetings, made it possible for important participants to continuously share their ideas.

Data and documentation
As the company had implemented CoolPlanetOS three years previously, it was simple to pull the right energy consumption reports quickly. CoolPlanetOS has pre-packaged dashboards and self-updating reports specifically designed to meet ISO 50001 audit requirements.

Our energy team can identify our gaps. The performance of any given SEU may now be reviewed with just one click, together with the open actions that need our attention.

Our CoolPanet project manager led the collating of all the documentation (about twenty different documents in all, including reports) in scope. The documentation acts as an important reference point, and can be easily/quickly updated for upcoming annual audits and of course recertification.

NEXT STEPS

The next set of projects that have been identified include:

- Solar photovoltaics on rooftops of one plant
- Optimising existing steam/heat in the biomass boiler plant

About CoolPlanet

CoolPlanet is a global leader in industrial-scale decarbonisation. By combining technology and world-leading engineering expertise, CoolPlanet helps large organisations reach Net Zero faster, at scale. The company's Decarbonisation Management System CoolPlanetOS has been trusted by the world's biggest brands for the last 15 years. CoolPlanet clients include: GE Healthcare, Zimmer Biomet, Viterra, Louis Dreyfus Company, BT, and Dairy Farmers of America.

Let's talk

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◯ CoolPlanet

The decarbonistation platform of choice for global brands.

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