



CASE STUDY TITLE

Energy Management,
EN/ISO 5001:2018

SUMMARY

Many Danish organizations have successfully reduced their own climate and environmental impact by using standards. The companies emphasize increased resource and energy efficiency in internal processes as well as increased use of climate-friendly materials.

The Energy Management standard, EN/ISO 5001:2018, helps companies create systems and processes that optimize and reduce resource and energy consumption. The standard has direct relevance to the achievement of Goal 7: Affordable and Clean Energy; Sub-goal 7.3: By 2030, the global speed for improving energy efficiency must be doubled; Indicator 7.3.1. Energy intensity is calculated on the basis of primary energy consumption in relation to GDP.

BACKGROUND

According to a new study of almost 600 Danish companies, reduced environmental impact, the benefits of applying standards in connection with a green transition include reduced environmental impact, increased use of climate-friendly materials and greater distribution of green solutions.

The study demonstrates that 45% of the companies use standards to deploy their green solutions, which contribute to reducing the environmental impact for their customers or the end-users. When it comes to selling products and services, a high degree of trust in the solutions is important for the customers as well as a simpler communication about these. The fact that standards contribute to the quality of such solutions is also important to the companies.

AT A GLANCE

COUNTRY

- Denmark

LEVEL

- National

SDG ADDRESSED

- SDG 7 - Affordable & Clean Energy

Standards are an effective tool in the internal work of Danish companies with the environment and climate. The standard of energy management, ISO 50001, has become even more important than in the past, with the increased focus on climate, the Danish government's goal of reducing CO2 emissions and, in particular, the UN's Sustainable Development goals (SDG), which, among other things, improve energy efficiency in general. Energy management minimizes the private sector's energy and resource consumption and helps to reduce CO2 emissions locally. As such, the standard contributes to the achievement of SDG 7.3, double the global rate of energy efficiency improvement by 2030.



STRATEGY

Energy management is an effective tool for companies to improve their energy performance, energy efficiency, energy-consuming units and energy consumption. The Danish experience has shown that in the very first year of implementing energy management, a company can make an energy saving of approximately 10%.

One of the companies that has worked purposefully with energy management for a number of years is Nordic Sugar, which is part of Nordzucker, the Nordic region's leading sugar producer. which produces around 2.5 million tons of sugar every year. Of this, the vast majority is sold to the food industry. Among consumers, Nordic Sugar is probably best known in Denmark for the Dansukker brand.

The standard enables organizations to deliver a strategic approach to the management of energy, with a stronger emphasis on the integration of energy management with business activity. Through the implementation of the standard, organizations can work purposefully, systematically, and continue to comply with the political climate objectives. Many innovative measures focus on sustainability and at present, sugar factories use about 50% as much energy as in 1990. In addition, the water in the sugar beet is used in production, where it covers 80% of water consumption, while other residues from production are used for fertilizers and animal feed.

'It is an advantage that for many years the sugar industry has had a tradition of using the entire raw material and has focused on saving water and energy. However, there is no doubt that the climate and environmental agenda mean that we need to do more both in the short term and in the long term while increasing competition in the sugar industry is pushing the earnings. And this requires both long-term planning and greater agility,' says Iver Drabaek, Head of Sustainability at Nordzucker.

RESULTS & IMPACT

Effects from Using the Standard

- Ensures a clear involvement and commitment of top management as well as the organization of the work with energy management.
- Contributes to reducing CO2 emissions.
- Experience from Danish companies shows that they save approx. 10% of their energy consumption from the operation of own buildings and facilities already after the first year.
- Many companies choose to be certified in this standard, which makes the work with energy management easy to communicate to partners and customers etc.

What are the Main Gains of Using the Standard?

- The company gets an internationally recognized method to work systematically to reduce energy consumption.
- The company minimizes energy consumption and costs in the organization and frees up funds for other activities.
- The company gets a tool to reduce CO2 emissions.
- The company can document to the outside world to ensure 'order in its own house' and work purposefully to improve energy efficiency.





CHALLENGES & LESSONS LEARNED

'Many of our large customers have sustainability goals, which it is an advantage that we can support. The sugar industry has always focused on energy and climate, and as a product, sugar from beets is largely circular. But we want to do even more for the environment and climate, which is why we are in the process of finalizing our 2030 plan,' says Iver Drabaek, Head of Sustainability at Nordzucker.

Here, a large number of innovative measures focusing on sustainability, including the fact that sugar factories today use about half as much energy as in 1990. In addition, the water in the sugar beet is used in production, where it covers 80 percent of water consumption, while other residues from production are used for fertilizers and animal feed.

'It is an advantage that for many years the sugar industry has had a tradition of using the entire raw material and has focused on saving water and energy. However, there is no doubt that the climate and environmental agenda mean that we need to do more both in the short term and in the long term, while increasing competition in the sugar industry is pushing the earnings. And this requires both long-term planning and greater agility,' says Iver Drabaek.

In addition to energy management, Nordic Sugar uses a number of other standards to ensure that the company and its products comply with the law, customer requirements and its own ambitions.

'The most important thing for us is the food safety standard, which also includes management. In addition, we use standards for quality, environmental management and working environment - and for us it is not just certificates that we need, but important working tools,' says Iver Drabaek.

POTENTIAL FOR REPLICATION

Energy management is an effective tool for companies to improve their energy performance, energy efficiency, energy-consuming units and energy consumption. And Danish experience has shown that implementation of energy management can already in the first year give the company an energy saving of about 10%. There is a wide range of standards that can support companies' work on sustainability and help flesh out the UN's Sustainability Goals and translate them into a business context.

CASE STUDY DEVELOPED BY:

Pouline Terpager
Chief Consultant
Danish Standard

