

HOW TO SAVE 5 MLN A YEAR

Case study
Schumacher Packaging



We help medium and large industrial companies become part of a zero-emission future. We want to co-create factories that we could have right outside our backyard. We advise, design, implement and finance energy efficiency activities. This is decarbonization that pays off.

1 445
industrial projects

We conducted a mandatory energy audit at the Schumacher Packaging plant, and then identified and implemented an investment that reduced emissions by 24,000 tons of CO₂ per year. This amount of carbon dioxide is emitted by one million Poles every day.

Schumacher Packaging is a global manufacturer of various types of paper packaging. With 29 branches, the company is one of the largest producers of solid and corrugated cardboard products in Europe.



Our work with Schumacher Packaging began with...

EED Audit



The client performed a mandatory energy audit of the company. We showed him actions that could contribute to achieving high energy savings in the plant and he decided to implement the investment with DB Energy.



CLICK TO LEARN MORE ABOUT THE COMPANY'S ENERGY AUDIT, WHICH IS MANDATORY FOR LARGE ENTERPRISES



The total investment cost was

EUR 10.5 mln

We have acquired White Certificates for Schumacher Packaging, with a total value of

EUR 2.7 mln

Initial expertise

DB Energy engineers noticed the very low initial efficiency of the boilers, which was only 65%. They also noticed numerous operational problems with their infrastructure and the lack of automatic regulation of operating parameters.



Key activities:

- the steam drum was repaired,
- the supporting structure was replaced,
- the boiler pressure part was replaced,
- the complete grating was replaced,
- the boiler brickwork and its insulation were replaced,
- collateral installations were implemented: the installation to dedust, desulphurise and denitrogenise flue gases,
- a new electric installation was put in place,
- processes were automatized which provided for the boiler's maintenance-free work.

The use of appropriate automation together with intelligent control algorithms allows predicting the boiler load. It makes the system more resistant to sudden changes in steam demand by reducing blow-offs.

The primary boiler automation is also responsible for controlling steam production in such a way that the boilers cooperate to achieve maximum efficiency of the combustion process and is responsible for ensuring the best possible use of the system for energy production within the existing back-pressure turbine with a power of 7.5 MWel.



CLICK TO WATCH A VIDEO ABOUT THE IMPLEMENTATION AT THE SCHUMACHER PACKAGING PLANT

We have achieved the thermal efficiency of boilers at the level of

85%

Project effects

Thanks to the introduction of comprehensive modernization, we succeeded in increasing boiler efficiency by 20%. We reduced the plant's demand for energy in fuel by 72 GWh - that's about 300 wagons of coal! Thanks to inference of White Certificates before the commencement of work, the Client also obtained the opportunity to obtain energy efficiency certificates worth approximately EUR 2.7 million.

The client's annual savings thanks to modernization amount to:

EUR 4.8 mln

The investment payback period is approximately

1,5 years

We have reduced annual CO₂ emissions by

24 thousand tons



24,000 tCO₂ is as much as

ONE MILLION POLES
emit every day

Decarbonization that pays off