STEAM AUDIT – Austria, Real Estate I

FACT SHEET



The company's approach to energy efficiency

Together with its customers, the company develops tailor-made solutions in harmony with the environment. Energy efficiency measures are being implemented continuously, which are also supervised by external consultants.

Steam system

The steam generator has a nominal capacity of 25 t/h. Steam is produced at a pressure level of 10 bar and a temperature level of 180 °C. Natural gas is used as fuel. The recorded data show an average load of about 14%. 84% of the steam is used in textile production processes. The condensate return rate is about 90%; the temperature of the condensate amounts to 90 °C.

Steam system problems identified

Due to the reduced capacity of the production site, the utilization rate of the steam generator has fallen to 14%. The steam boiler is now massively oversized, and only half of the possible power is reached in peak demand times. The only sensible way to increase the efficiency is to replace the existing steam generator with a smaller one, which would then be better utilized to capacity and run longer in the optimal operating range.

Proposed energy saving measure(s), investments, and expected results (in figures)

The proposed measure requires a substantial investment of approximately 640,000 €. A reduction of energy consumption of 5,400,000 kWh/a is expected. This results in a cost reduction of 163,000 €/a and a static amortisation period of 3.92 years. For the decision on investments in steam generation, both the economic development and the development of the production output of Fussenegger must be particularly taken into account.

Achieved and/or expected non-energy benefits (NEBs) as a result of implemented and/or proposed measures and investments involved

An increased security of supply, reduced maintenance costs, lower emissions to residents, and a positive marketing effect in the overall context of sustainability are expected non-energy benefits.

Involvement of internal stakeholders

Mr Sandro Huber, being the person within the company responsible for steam plants, was the main contact for this project. From the beginning, Mr Huber was highly motivated, so the collaboration was constructive throughout the whole project.



Fussenegger Wirtschaftspark GmbH & Co KG

www.fussenegger.com

Austria

Real Estate Company

Generation of energy and heat as well as the rental and administration of the site

199 employees

Total (Estimated) Investment

640.000€

Total (Estimated) Savings

163,000 €/a 5,400,000 kWh/a

Non-Energy Benefits

Increased security of supply
Reduced maintenance costs
Lower emissions to residents
Positive marketing effect