Companies connection to energy efficiency

Elvirasminde has been working on energy and environment for many years. Elvirasminde works to target energy and production optimization. Continuous energy ratios are calculated in relation to production.

Steam system

The nominal capacity of the steam system, which consists of one boilers, is about 1.6 t/h. The nominal steam pressure is 10 bar, but currently the maximum needed pressure level is 3.8 bar. The boilers use light fuel. The main consumers are the suger boiler, combinder and steam tracing. Most of the condensate returns from the consumers. The steam pipes are partly insulatet.

Steam system problems identified

The boiler is regulated down to 30% load, which means that the boiler is too big. Some of the pipes are not well insulated so there is a saving in isolating these.

Proposed energy saving measures, investments, and expected results

Replacing the existing boiler to a smaller boiler is likely to save a saving of 207 MWh per year. Another saving is to isolate uninsulated pipes, which will save 10 MWh. After steam audit, the company has been sold and production growth is taking place and new steam consuming processes are implemented.

Implemented proposed energy saving measure(s), investments and results achieved (in figures)

The investment cost for replacing the boiler is approx. $50,000 \in$ and the payback periods is just one and a half year. Insulation of the pipes cost $1,100 \in$ and the payback period is 1.1 year.

Achieved and/or expected Non Energy Benefits (NEBs) as result of

implemented and/or proposed measures and investments involved Both projects increase the overall efficiency of the steam system and leads to lower CO₂ emission.

Involvement of internal stakeholders

The management of the company is highly interested in implementing measures to achieve cost-effective energy savings.

<u>STEAM UP</u>



Elvirasminde A/S www.elvirasminde.dk

Denmark

Food

Foam kisses

65 employees

Total (estimated) Investment € 48.000

Total (Estimated) Savings € 32,000 p/y 218 MWh p/y

Non Energy Benefits

Lower maintenance cost Reduction of boiler controls Reduction of chemicals