

### Companies connection to energy efficiency

The company has been committed to sustainable paper production since the beginning, acting not only out of self-interest but also conforming to the crucial market requirements of ecology and economy. The demand of consumers for eco-friendly methods in this industry has increasingly come to occupy centre stage in the last few years. In addition, the company positively achieved a certification to ISO 14001 and ISO 50001.

### Steam system

The nominal capacity of the main steam system, which consists of one boiler, is about 22 t/h. The nominal steam pressure is 16 bar. The boilers use wood chips as fuel. The main consumers are the paper machine. Most of the condensate returns from the consumers, but there are also consumers use the steam directly.

### Steam system problems identified

There were two relief valves at the cylinders that opened when there were changes in vapour pressure due to changes in production. The relief valves blew steam into the free, which meant a loss.

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

A compensation pipe was made between condensate tank 1 and cylinder 1 and 2. The steam connection reduced the relief valve opening so much and a saving of 1,680 MWh was achieved.

### Implemented proposed energy saving measure, investments and results achieved

The investment costs for the steam connection costed 37,450 €, the payback period is about 8 month.

### Achieved and/or expected Non Energy Benefits (NEBs) as result of implemented and/or proposed measures and investments involved

The projects increase the overall efficiency of the steam system. The amount of new feed water was reduced which also reduces chemical and salt consumption and all in all, the CO<sub>2</sub> emissions are also reduced.

### Involvement of internal stakeholders

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



Skjern Papirfabrik A/S  
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6900 Skjern  
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Paper

Coreboard, Greyliner, Sheets  
and Grey board – Solid board

74 employees

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#### Total (estimated) Investment

€ 26,600

#### Total (Estimated) Savings

€ 37,450 p/y

1,680 MWh p/y

#### Non Energy Benefits

Increased production

Lower CO<sub>2</sub> emission

Lower chemicals and salt  
consumptions