

### Companies connection to energy efficiency

The company have been using cogeneration unit of electricity and steam provided by two methane-fueled turbines and a heat recovery steam generator that can guarantee total autonomy of the production process, cost savings and a huge reduction of emissions into the air.

### Steam system

The nominal capacity of the steam system, which consists of a CHP plant equipped with two turbogas and a heat recovery system generator is about 9 t/h. The turbogas use natural gas as fuel. The main consumers are the raw material storage, spinning and polymerization. Appr. 95 % of the condensate returns from the consumers.

### Steam system problems identified

The steam system is quite efficient, although different efficiency measures have already been implemented in the past years.

### Proposed energy saving measures, investments, and expected results

Installation of insulation material on condensate recovery pipes (3.470 MWh saved, 160.000 euro of investment);  
Introduction of steam management (2.300 MWh saved, 92.000 euro of investment);  
Implement an effective steam trap maintenance program;  
Energy efficiency improvement of the CHP plant.

### Implemented proposed energy saving measures, investments and results achieved (in figures)

Several heat recovery interventions have been implemented in order to reduce the fuel consumption for the steam production.

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

All of the proposed measures will improve the overall efficiency of the steam system, lead to lower CO2 emissions and maintenance costs.

### Involvement of internal stakeholders

The company is really involved into the implementation of the proposed measures to achieve cost-effective energy savings.



Italy

Textile industry

Yarns

500 employees

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**Total (estimated) Investment**

**€ 252.000**

**Total (Estimated) Savings**

**MWh 5.800**

**Non Energy Benefits**

Lower CO2 emissions

Improved efficiency of the steam system

Lower maintenance costs