STEAM AUDIT – Italy, nr.3
FACTSHEET

Companies connection to energy efficiency
The Company has an Energy Manager and an energy team that manages energy items: CHP plant, equipments efficiency, metering progress and implementation, etc.

Steam system
CHP plant for heat and power generation: 9 endothermic engines (27 MW total) powered by natural gas, with 9 heat recovery system generators (HRSG) for the production of technological steam.
Steam at 9 bar and 175°C is used in: 1 centrifugal turbine chiller, 2 steam exchangers 9 bar steam/clean steam, for the production of ultrapure steam for the air conditioning of the clean room, 1 heat exchanger 9 bar steam/hot water to allow, if the heat exchange with the engine parts is not sufficient, the achievement of the specific request (hot water at 85 ° C).

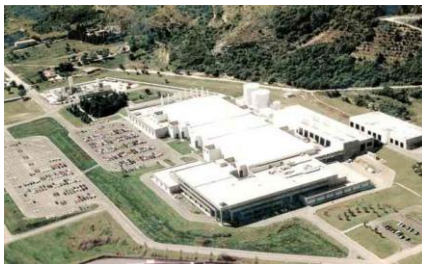
Steam system problems identified
No rilevant problems.

Proposed energy saving measure(s), investments, and expected results (in figures)
Installation of new insulation material on condensate recovery pipes: investment cost valued about 15.000 € with energy saving of 1.440 MWh/year (40.000 €/year).
CHP plant revamp: net investment cost valued about 5.000.000 € with energy saving of 3.300.000 Sm3/year (1.000.000 €/year).

Implemented proposed energy saving measure, investments and results achieved
Proposed energy saving measure haven't yet been implemented.

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 time and costs.

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



Italy

Electronic

Electronic devices

1.500 employees

Total (estimated) Investment
€ 5.015.000

Total (Estimated) Savings
3.315.000 Sm3/year

Non Energy Benefits
CO2 emission reduction
Reduction of cost and time for maintenance