Product description and usage	**Chemical and mechanical pulp plant within a medium size pulp and paper group.**
Region	**EU**
Energy consumption	**Yearly production of 150 000 tons dried pulp; oil consumption of 8 000 m^3 / year; steam consumption and production of 300 GWh / year.**
Project goals	**1. To reduce oil consumption in the bark boiler and pulp drying process with approximately 5 000 m^3 / year.** **2. To solve such problems at the plant as: combustion of waste bio sludge in the bark boiler; lack of steam in the pulp process during winter season; low power production from steam turbine; excess of bark (own bio fuel).**
Investments	**1. De-watering of bark and sludge fuel prior to bark boiler by installing a new bark bark press and by mixing bark and sludge prior to the press.** **2. Heat recovery from excess hot water in order to improve the total energy balance in the plant by installing new heat exchangers in the plant and by using the excess hot water energy to heat process water instead of using steam.**
Investment size	**Euro 2 000 000**
Efficiency results	**- Deceased oil consumption of approximately 50 GWh / year;** **- Increased steam turbine power production of approximately 10 GWh / year;** **- Deceased CO_2 emissions with 12 000 tons / year;** **- Decreased SO_2 emissions with 60 tons / year;** **- Less problems with bark and sludge combustion and no excess bark fuel;** **- Substantially decreased operational costs.**
Investment profitability	**Payback period of two years. Project got good publicity in the region.**