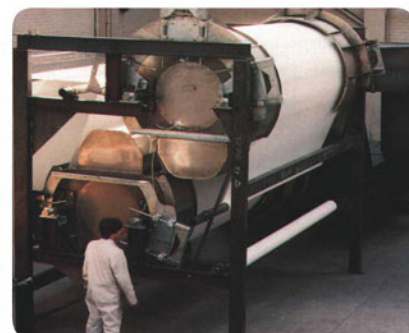


## Case Study

### Improved Monitoring and Targeting of Energy in a Paper Industry

Main activities	Paper plant which manufactures some 20,000 tonnes per year of posters, laminated manila and envelope products
Region	EU
Energy Consumption	320,000 GJ/year



#### Project goals

To reduce energy consumption by improving the monitoring and targeting of energy usage.

#### Main investments

The new monitoring and targeting system was designed to optimise the energy use of the machinery in the plant. This involved installing meters to measure the consumption of electricity, steam, gas and water, and to transmit electronic readings from those meters to a data logger every second.

#### Benefits

Greater frequency of the meter readings provided a timely and very reliable source of information on energy use. This allowed management to adjust the use of the machinery to reduce energy consumption. It also considerably reduced the labour required to perform the Monitoring and Targeting operation to just 2 days per week, and helped identify maintenance requirements at an early stage, reducing unplanned down time.

#### Application

Any complex industrial process.

Investment type	Cost (€)	Saving achieved (€/year)	Payback period from energy saving
Computer	3,000	160,000, of which 110,000 was from electricity savings	18 months for the total investment. The payback period for the electricity system was just 10 months
Software and configuration	15,000		
Data logger	12,000		
32 electricity meters	19,000		
Installation	14,000		
Wiring	23,000		
18 steam meters	80,000		
Installation	23,000		
Wiring connections	12,000		
8 gas meters	9,000		
Installation	6,000		
Wiring Connection	6,000		
4 water meters	6,000		
Installation	6,000		
Wiring connection	3,000		
<b>Total</b>	<b>237,000</b>		