CONSUMER CASE STUDY - MAJOR SOFT DRINKS MANUFACTURER, GREECE

Energy savings in the drinks industry

ABB identified annual savings of over €530,000 for a soft drinks manufacturer.

The client, a major international soft drinks company, asked ABB for help in reducing energy costs at a factory in southern Greece. The company was widely known for being proactive on energy saving and was keen to reduce energy consumption and costs at the factory. ABB was asked to assess energy consumption and management, and develop a portfolio of practical energy saving projects ready for implementation.

The site had been operating for over 20 years and has been used as a ‘model’ plant for the company to demonstrate and disseminate best practice. The production at the site included bottling, juice cartons and cans, and annual output was nearly 300 million litres. Prior to ABB’s involvement the site had a high level commitment to energy efficiency and was spending around €3 million on energy each year.

Solution
ABB carried out a week long investigation into energy at the factory, looking at all aspects of site operations and activities. The team delivered an Industrial Energy Efficiency (IEE) programme tailored to the clients requirements, identifying a portfolio of energy saving opportunities.

The IEE project portfolio included:
- Fixing leaks in the steam and compressed air systems
- Changes to staff behaviour
- Repairs and improved maintenance for the steam distribution system
- Heat recovery from the pasteurisation process
- Increased monitoring & targeting of gas and steam
- Minimising cooling demands from the PET moulding process
- Cleaning in Place (CIP) heat recuperation
- Improvements to the plant maintenance regime
- Economisers and condensate heat recovery
Total savings of over €530,000 were identified. Quick win savings comprised about one third of the total savings; the client was able to implement quick wins for a low capital cost, allowing immediate realisation of the savings. These savings could then be used to fund further, more capital intensive, investments in improved energy performance. By taking early action on the quick win options, momentum can be maintained, allowing continued and sustained improvements in energy performance.

In addition to improved energy performance, there were a number of further benefits due to the improvements initiated by the IEE process. Maintenance procedures were revised, leading to a reduction in plant down time, and improved production rates. By increasing the involvement of staff in energy matters, energy awareness was raised and best practice shared with other sites in the organisation. Improved monitoring allowed improved benchmarking and more accurate targets to be set for future performance.

**Benefits**
- ABB found total annual savings of over €530,000 - including €180,000 worth of savings regarded as ‘quick wins’
- Savings requiring some modest investment were found, totalling about €170,000
- Additional savings requiring more significant investment totalled about €185,000 with further benefits including:
  - Improved maintenance procedures and reduced downtime
  - Increase in production rates