

Reducing Cost of Goods in Food Manufacturing

At a Glance



- 30% reduction in energy consumption
- Tailored audit for food manufacturing environments
- CHP system matched to site demand
- No production disruption during implementation
- Long-term value provided through improving the efficiency and resiliency of site utilities

► High Utility Costs in Food Manufacturing

Food manufacturing is one of the most energy- and water-intensive sectors in the UK, with utility costs accounting for up to 15–20% of total production expenses. As sustainability targets tighten and margins shrink, manufacturers face increasing pressure to reduce consumption without compromising output or compliance.

Key challenges include:

- High thermal demand for processes like pasteurisation, cleaning and cooking
- Continuous operations that limit downtime for upgrades or audits
- Aging infrastructure with inefficient boilers, pipework and compressed air systems
- Limited visibility into real-time utility performance and system losses
- Pressure to meet ESG goals while maintaining cost competitiveness

► Projective's Engineering-Led Approach

Delivered a structured audit tailored to the food manufacturing environment, identifying utility inefficiencies and engineering opportunities for long-term value.

Key audit features included:

- Utility flow mapping and loss analysis
- Operational behaviour review
- Audit - tailored to the site and food manufacturing
- Investment-grade recommendations with ROI modelling





Solution Summary



Audit-Led Insights

Identified
inefficiencies



30% reduction

In energy
consumption



Engineered upgrades

Improved
performance

► Solutions That Delivered Measurable Impact

Projective's tailored efficiency plan targeted the site's most energy-intensive systems. The team redesigned the hot water pipework to enable heat reuse, significantly cutting thermal waste. Insulation upgrades and boiler simplification further reduced energy losses, while a full optimisation of the compressed air system improved reliability and reduced unnecessary load.

A Combined Heat and Power (CHP) system was also proposed, precisely matched to the site's demand profile. This solution not only enhanced energy resilience but also unlocked long-term cost savings. Together, these interventions delivered a 30% reduction in energy consumption, all achieved without disrupting production.

► Reduced Costs, Resilient Operations

By combining deep technical expertise with a collaborative, client-first approach, Projective enabled the manufacturer to significantly reduce utility spend and improve system performance. The result was a more resilient, future-ready operation, achieved without any disruption to production.

Beyond the immediate energy savings, the client gained long-term value through optimised infrastructure, enhanced energy resilience and measurable progress toward sustainability goals.