INTRODUCTION
Tetra Pak is a leading provider of packaging, capital equipment and turnkey systems to the food industry and other sectors and supplies many household names.

Tetra Pak CPS Ltd is a wholly owned subsidiary of Tetra Pak and manufacturers cheesemaking equipment with capacities up to 12 metric tonnes/hour for dairy customers worldwide.

The company operates from a purpose-built factory based in Sherborne, Dorset. It has 80 employees and a long history of manufacturing food processing plants and cheesemaking equipment.

THE CHALLENGE
Due to Tetra Pak CPS Ltd’s sustainability focussed ethos, the facility wanted to explore opportunities to reduce its environmental impact, particularly around the reduction of energy consumption.

Voltage optimisation technology was identified as a viable solution that would meet their aims, in addition to providing energy cost reductions.

Powerstar were selected due to their market leading reputation, engineering expertise and aligning sustainable ethos.

Following a full site survey and evaluation, it was found that the site’s average incoming voltage was 243.7V with the maximum voltage reaching as high as 251.3V.

As the majority of electrical equipment in the UK is designed to work optimally at around 220V, the excessive voltage added unnecessary wear and tear to the equipment, leading to a shortened lifespan. In addition, the overvoltage was leading to a significant amount of wasted energy.

THE SOLUTION
From voltage recordings, the site’s voltage profile was found to be unstable. Powerstar recommended the installation of a Powerstar MAX, an electronic-dynamic voltage stabilisation and optimisation solution. The system stabilises, conditions and optimises the supply by an average of 22.1V.

The Powerstar MAX system is providing Tetra Pak CPS Ltd, with guaranteed annual consumption savings of 10.6%.

KEY FIGURES
- **Annual Consumption Saving:** 10.6%
- **Annual CO₂ Reduction:** 22.3 tonnes
- **kWh Consumption Savings:** 41,200 kWh

CUSTOMER REFERENCE
“Powerstar identified waste that we did not think we had. They diligently overcame issues during commissioning and have provided us with a fault free system that saves what they promised.”

Mark Boxall, Managing Director
Tetra Pak CPS Ltd