Environmental benchmark analysis helped a North American juice producer reduce CO₂ footprint and water consumption

Customer
Juice producer in North America.

Challenge
- High CO₂ footprint and water consumption
- No established baseline for environmental KPI's

Solution
Environmental benchmark analysis, to understand the As-Is situation and identify improvement potential. Solutions proposed after analysis phase:
- To be driven by customer: optimization of CIP, upgrade of heating and cooling systems
- To be driven by Tetra Pak: CI (continuous improvement) activities, processing upgrades

Results
Identified savings:
- 3.5 tons CO₂ (20% reduction)
- 27 M litres water (30% reduction)
- 0.5 M€
Customer challenge

A juice producer in North America asked for our help to reduce their environmental impact in an effort to further build on their strong environmental profile and strategy. The customer plant had more than ten Tetra Pak® lines installed, as well as a high number of SKU’s and complex changeovers. The customer was experiencing high water consumption and CO₂ footprint and lacked a baseline for environmental KPI’s.

Our solution

By using our Environmental Benchmark approach, we were able to understand the As-Is situation and quantify the improvement potential for the customer.

Our team of experts within processing, packaging, environment management and continuous improvements conducted the on-site As-Is situation analysis. Measurement of cycle-times, flows, temperatures and other parameters were gathered. Furthermore we assisted in production scheduling analysis and opportunity analysis. The project lasted for seven weeks, of which two were spent on-site.

The solutions proposed following the analysis phase included optimization of the customer’s Cleaning in Place (CIP) and an upgrade to the heating and cooling systems. Continuous improvement activities were mapped, along with upgrades to processing equipment, which would help the customer reduce circulation costs.

Results achieved

We were able to identify an annual savings potential of:
- 3.5 tons CO₂ (20% reduction)
- 27 M litres water (30% reduction)
- 0.5 M€

Tetra Pak® Services

Tetra Pak® Services cover every aspect of your food production, from daily routines to business insights. Our tailored service solutions improve performance, optimise costs and ensure food safety throughout the lifecycle of your operation. With Tetra Pak as your partner, you get the people, portfolio and presence to achieve your performance goals.

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