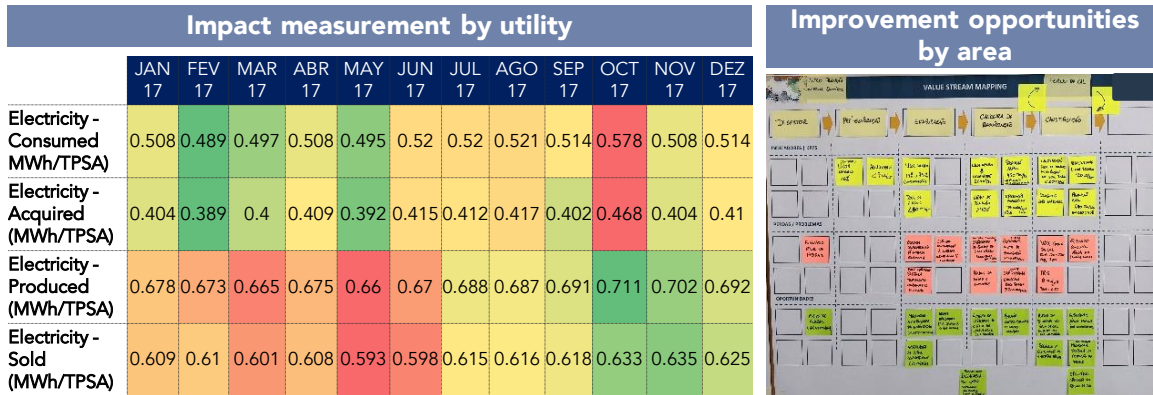
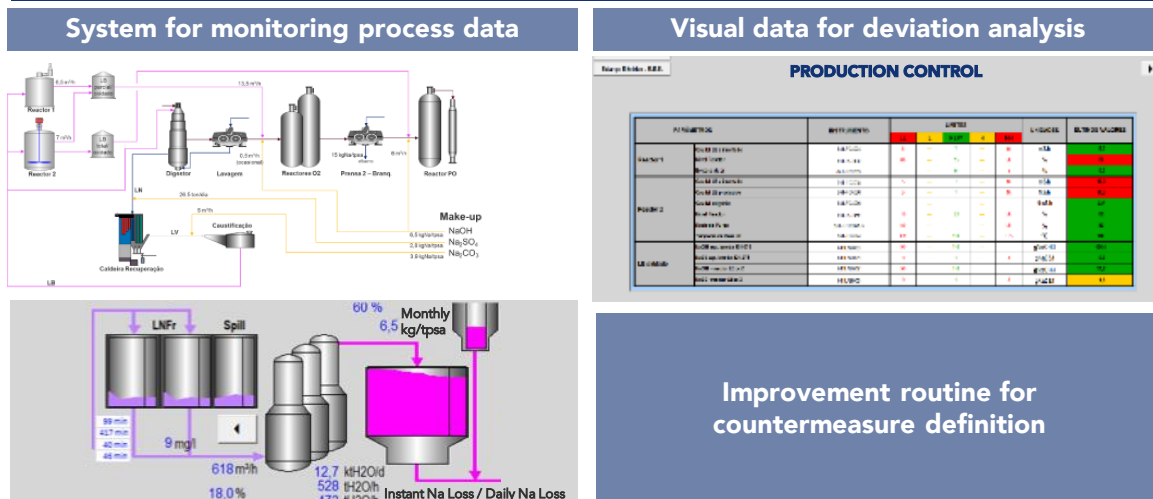


Efficiency in Process Industry

PICTURES BEFORE



PICTURES AFTER



Problem

- Average water consumption of 19.4 m³ per tonne produced
- Average electricity consumption of 518 kWh per tonne produced
- Average of 1,6 non-quality incidents per day

Root causes

- Excessive water use in certain circuits and lack of monitoring mechanisms
- Gradual increase of NaOH cost by 23%
- Lack of knowledge about the application of sub products in the internal processes
- Stops caused by wrong sensor readings causing overconsumption on restart

Solution Approach

- Optimisation of use of recovered water and reduction of clogging
- Creation of a control chart with real-time data for process monitoring
- Planned shutdowns for preventive maintenance, with focus on emission control and energy consumption
- Modification of maintenance components control system and storage conditions
- Implementation of tool to control processed solids, steam management and concentrator washing

Benefits

