

MONASH INDUSTRY TEAM INITIATIVE (MITI) 2016-2017

Fonterra Dennington Energy Study

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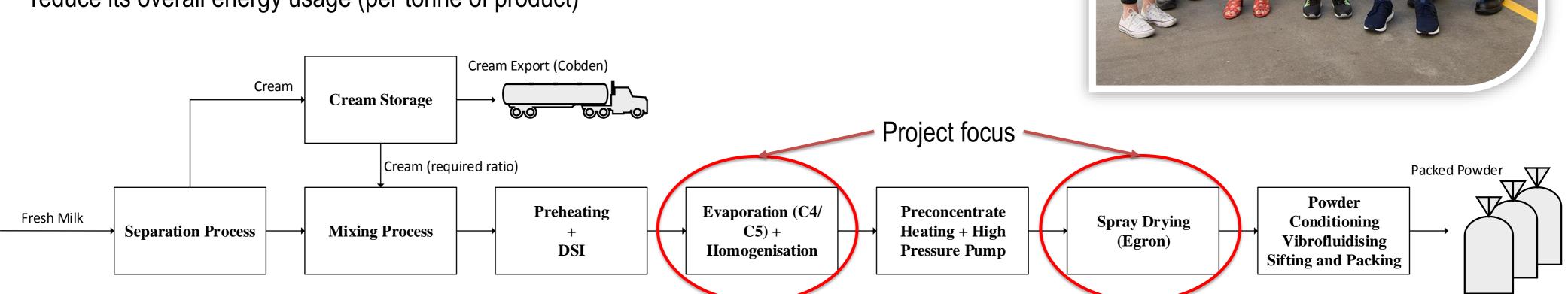
PROJECT SCOPE

PROBLEM STATEMENT

The Fonterra Dennington Milk Powder Production facility has been found to consume a considerable amount of energy per tonne of product. Why? Was this operational or spray dryer related?

PROJECT AIM

- To conduct an energy (power usage) study on the process at Fonterra Dennington milk powder production site
- To identify energy-intensive operations and suggest recommendations as to how the site can reduce its overall energy usage (per tonne of product)

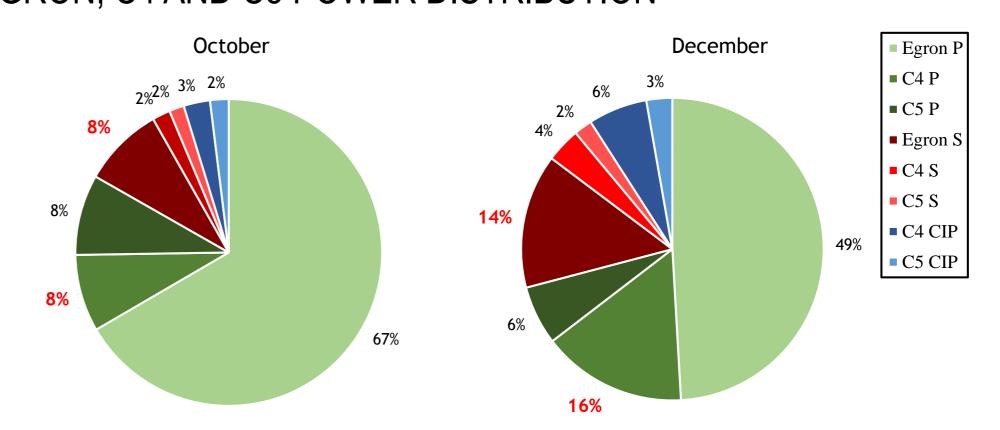


METHODOLOGY

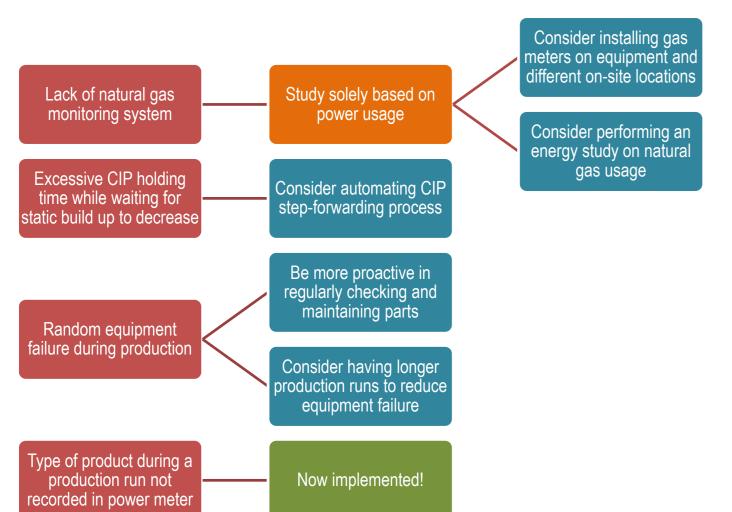
Data Gathering Data Analysis Outcomes Electricity data from Total energy usage Result SCADA system interpretation and Specific energy discussion Past electricity bills usage (Egron, C4 Suggestions for and C5) Shift reports improvement Mode (CIP, **Production and** Standby) Product specific

PROJECT OUTCOMES

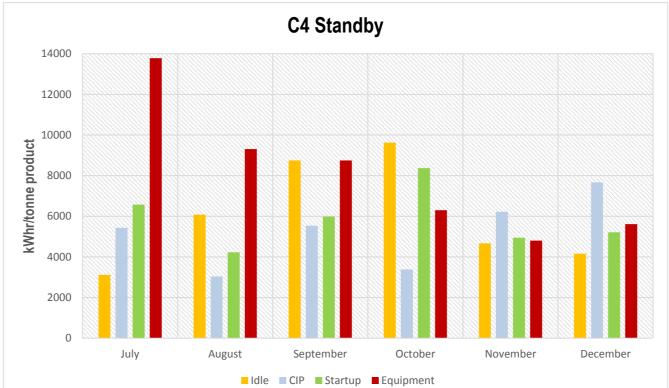




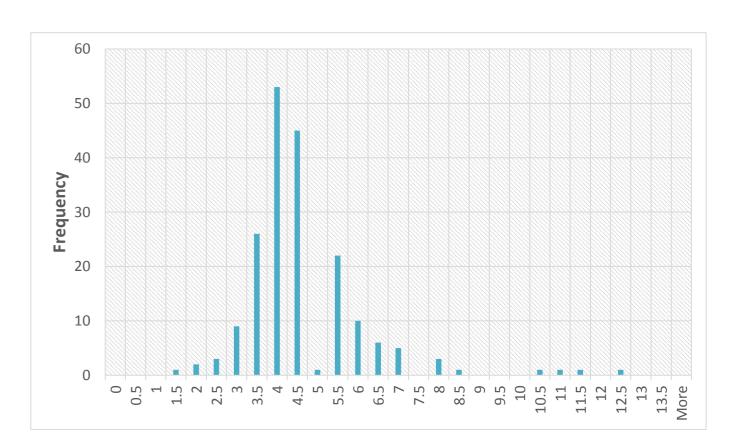
Future Recommendations



REASONS FOR EVAPORATOR STANDBY



DISTRIBUTION OF CIP TIMES



A project initiative of the Victorian dairy industry proudly sponsored by the Gardiner Dairy Foundation in partnership with Monash University





