

Fonterra's decarbonisation journey

Murihiku Energy Expo

December 2022



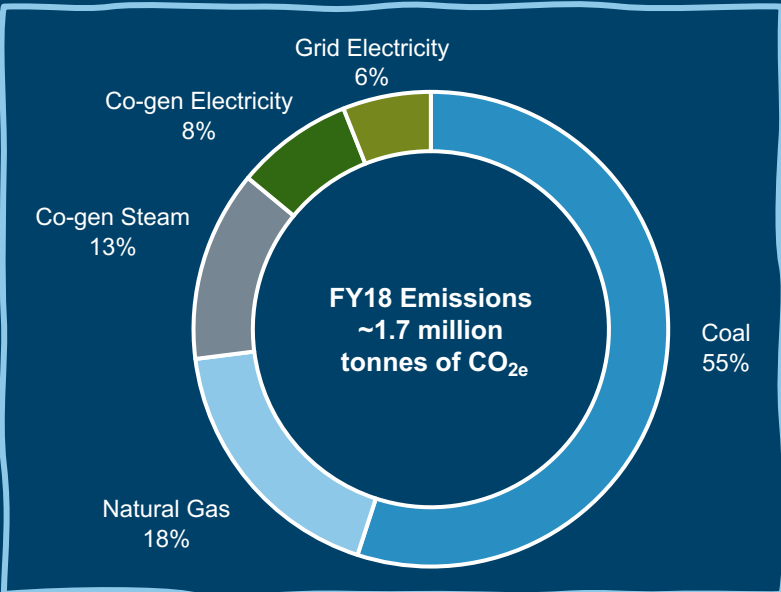
Fonterra has a national plan to transition from fossil fuels

Across Fonterra’s 28 sites in NZ, there are nearly 100 boilers and air heaters, with greater than 1,300 MW of installed capacity.

Fonterra has a plan to transition the remaining 9 coal using sites (20 assets) by 2037 – this is a phased prioritised plan to manage a range of factors, including asset condition, fuel availability, resourcing (both internally & externally), and capital allocations across the business.

This plan is reviewed annually and timing and activities will change – including adoption of new technology as part of the decarbonisation plans.

We also have our first plan to transition from natural gas.



2050: Net Zero Operations

- We will have reduced our manufacturing emissions as much as possible and will offset any emissions that remain.

2037: No Coal

- Continue to focus on fuel switching to renewable energy at our coal sites, including thermal demand reduction projects.
- Use learnings from transitioning away from coal to finalise a transition from natural gas on our way to 100% renewable energy for Operations.

2030: 30% reduction in absolute emissions

- Continue to implement initiatives to fuel switch, reduce thermal demand by improving heat recovery and energy efficiency across manufacturing sites.
- Work with internal and external partners to develop a sequenced approach for transitioning New Zealand assets out of coal. This includes assessing wood biomass, electricity, and low emission alternatives and expanding our capability in innovative solutions through technology trials.
- Accelerate electrification of our light passenger fleet and install charging stations across our sites.



2020: 20% reduction in energy intensity

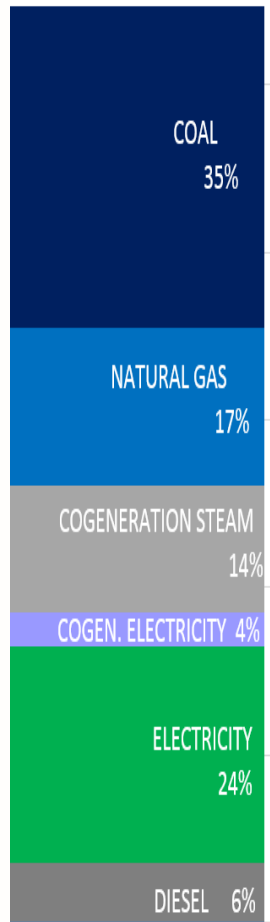
We hit our 2020 target to reduce energy intensity at our manufacturing sites by 20% from a 2003 baseline. Combined, that’s enough energy saved to power all the households in New Zealand for 1.5 years and avoided emitting 3.3 million tonnes of CO₂.

Overview of Fonterra's NZ Energy Supply & Emissions

(includes supply chain and milk collection)

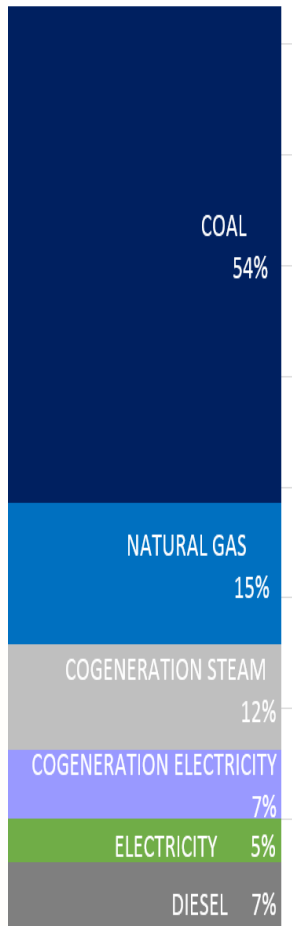


FY18 energy use
~24 PJ

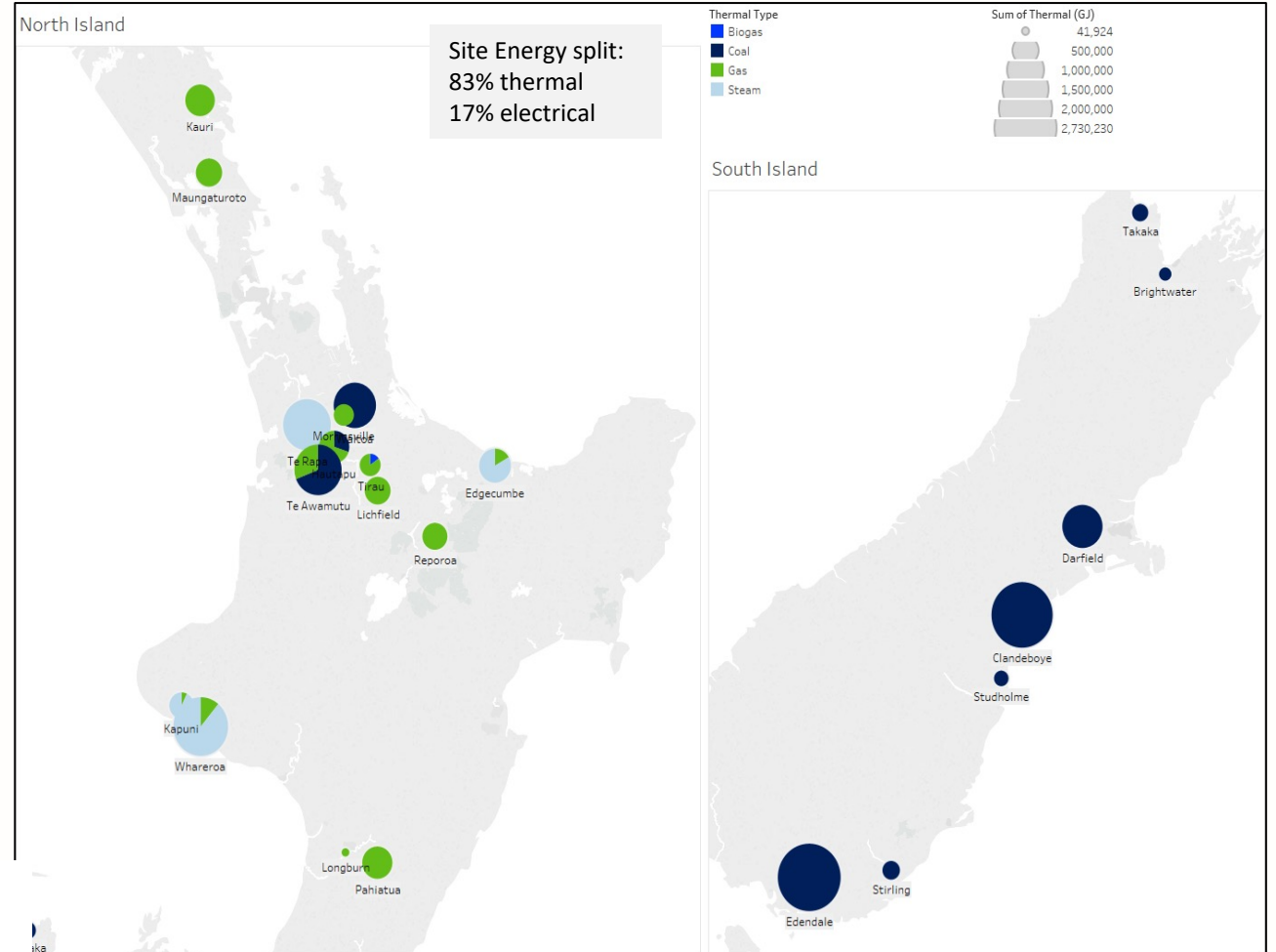


WOOD BIOMASS 0.1%

FY18 Emissions
~1.7m tonnes CO₂e



Source and size of thermal energy supply for NZ manufacturing sites



Overview of our approach for 30% by 2030 Emission Reduction & Transition off Fossil Fuels – both Coal & Natural Gas

