

Promoting a robust electricity market

woolworths 6

supermarket



Woolworths takes a holistic approach to energy management. It doesn't help us at all if our stores get taken out by a power outage."

Woolworths is investing significant capital into upgrading energy efficiency and management across its 188 stores, six distribution centres and three support centres in New Zealand. Demand response is one of the enablers Woolworths will implement to realise emissions and consumption reduction benefits from this investment.

Energy operations for the company sit under a trans-Tasman facilities management team, which operates a whole-Group approach to demand response, energy efficiency and optimisation.



## Demand response capabilities.

Woolworths is currently rolling out their Energy Management Centre (EMC) in New Zealand after a successful implementation in Australia. This will allow complete visibility over energy management in each store and provide data to drive energy efficiency and facilities maintenance insights across the Group. Twentyfive stores in New Zealand are currently up and running with the EMC, and adoption continues at pace, with the majority of stores expected to be completed in 2025.

The transition to having its energy needs centrally managed will help Woolworths facilitate a move from responsive to preventative energy and facilities management. As a side benefit to this mode shift, the Energy Management Centre will likely identify additional efficiencies and opportunities for demand response within the existing store network.



## How would demand response work for Woolworths?

Woolworths participates in demand response programmes in Australia, is investigating opportunities in New Zealand and says there is scope to take load off on a discretionary basis. The company still needs to test the impacts of this potential demand response including managing the optimal response of batteries, solar, EVs, refrigeration and heating and air conditioning.

Once centralised by their Energy Management Centre, Woolworths will have immediate control of a vast network of fridges, freezers, lights, heating and air conditioning across all stores that could provide opportunities for demand response.

Woolworths is exploring, for example, a programme where it turns off cooling systems for incremental periods. The high connectivity and immediate response time provided by the connection to the Energy Management Centre will allow equipment connected to fridges and freezers across its network to be turned off for as little as thirty seconds and up to thirty minutes, which does not affect their overall temperature or impact food safety and customer experience.

Upgrades to lighting systems over the long term to meet Woolworths' sustainability ambitions may also benefit from the central control of the Energy Management Centre, and similar demand response initiatives could be trialled.

"As we move towards a more decarbonised energy economy with transition of transport to EVs and reduction in the use of natural gas appliances, we need to be more flexible with our energy use. The EMC allows Woolworths to dynamically control its energy use and respond to market and network conditions"