

# Murihiku Regeneration

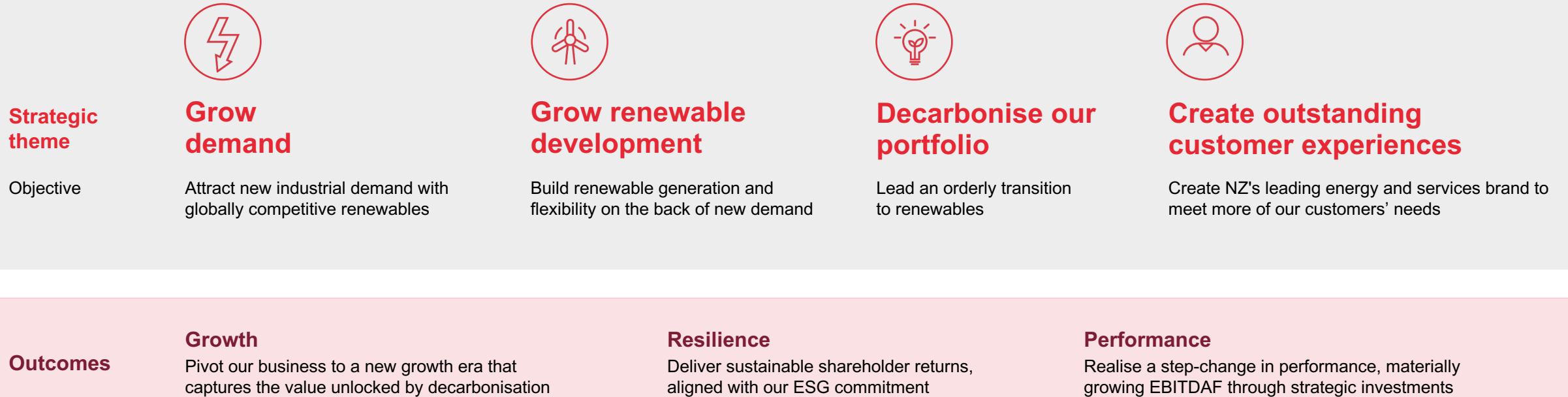
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## Infrastructure panel

May 2023



# Our strategy to lead NZ's decarbonisation



# NZ Steel's electric arc furnace



This is the biggest example we have in New Zealand of the move towards electrification and is tangible evidence of the demand for renewable energy as well as supporting Contact's renewable development pipeline



- "Off-peak" electricity supply agreement
- Value of demand response over peaks reduces the cost of electricity

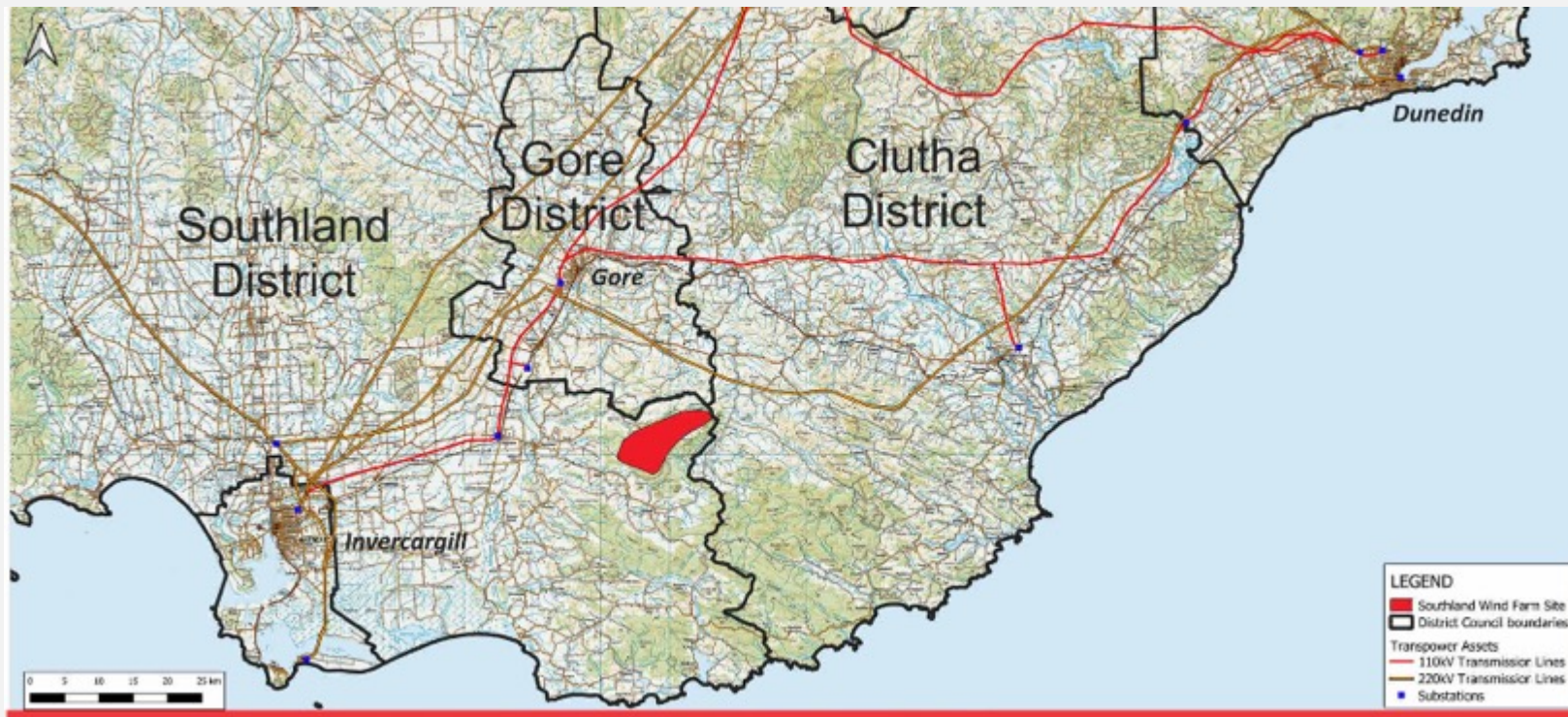


- NZ's largest emissions reduction project
- Emissions saving of 800,000 tonnes per annum
- Equivalent to 1% of NZ's gross emissions




- Equivalent of taking approximately 300,000 cars off the road, or
- all the cars in Christchurch off the road

# New renewable generation: Southland wind option



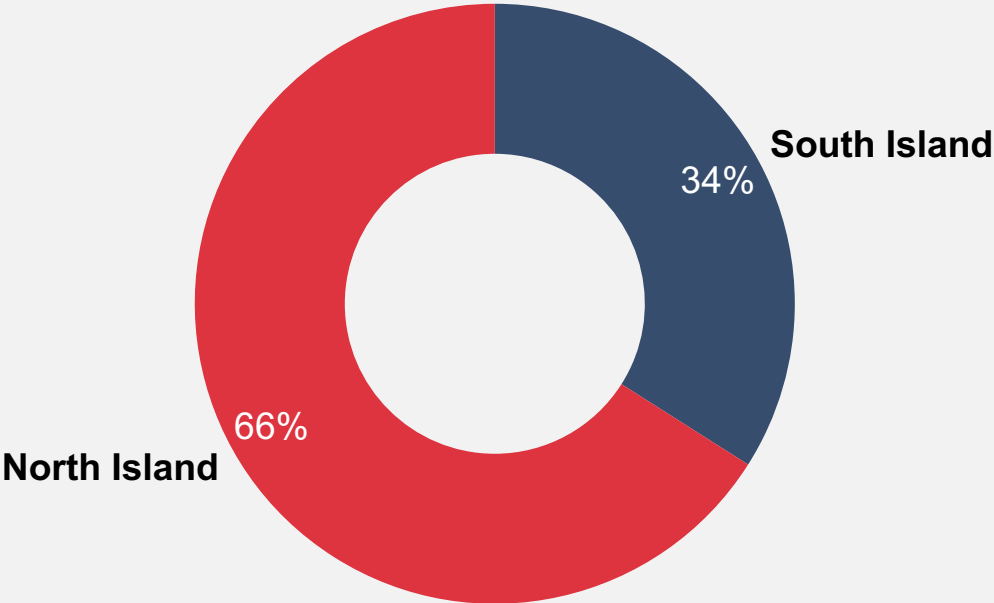
## Key project statistics

-  East of Wyndham in the Southland District
-  About 50 wind turbines
-  Tower height up to 135m  
Rotor diameter up to 170m
-  Up to 300MW
-  900-1200GWh – equivalent energy needs of up to 150,000 households

# Southland's energy future: opportunity and issues

## Decarbonisation opportunity

Coal consumption by island



## Resulting issues

Cost and timing implications



### Consenting

Speed versus process



### Transmission

Rollout of Ultra-Fast Broadband comparison

Transpower's WACC versus Government's cost of borrowing



### Distribution

Bypass options