

# Offshore Wind

## Backcasting its influence on the winter of 2024

Embargoed till 11am, 28 August 2025

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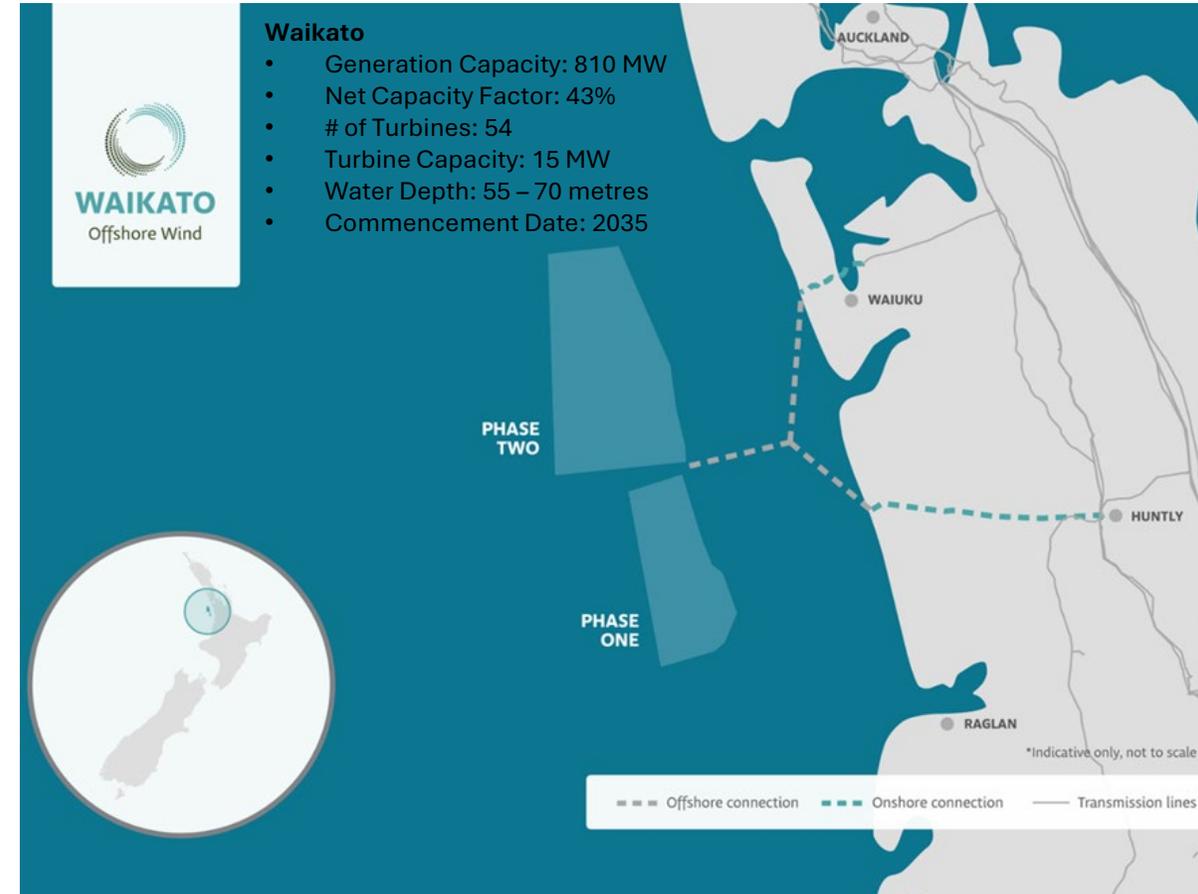
2025 New Zealand Wind Energy Summit

# Introduction to NZOWL

- Established in 2019
- Offshore RE regulation
- Building social license
- BlueFloat Partnership



# Two project sites



# What happened in the winter of 2024?



Hundreds of workers have lost work and many face layoffs, due to factory close downs, blamed on high energy prices. (File photo)



Methanex NZ will idle its M... months and sell the gas it would usually turn into methanol... and Genesis Energy. (File photo)



# A Modelling Study

- Energy Link commissioned
  - NZOWL projects added to theoretical modelling
    - Taranaki – 500MW
    - Waikato – 500MW
- + both at 1,000MW

*How could OSW have influenced the energy system?*



# Assumptions & Limitations

Complex and difficult

- Demand
- Offers
- Generation Sources



# What we found...

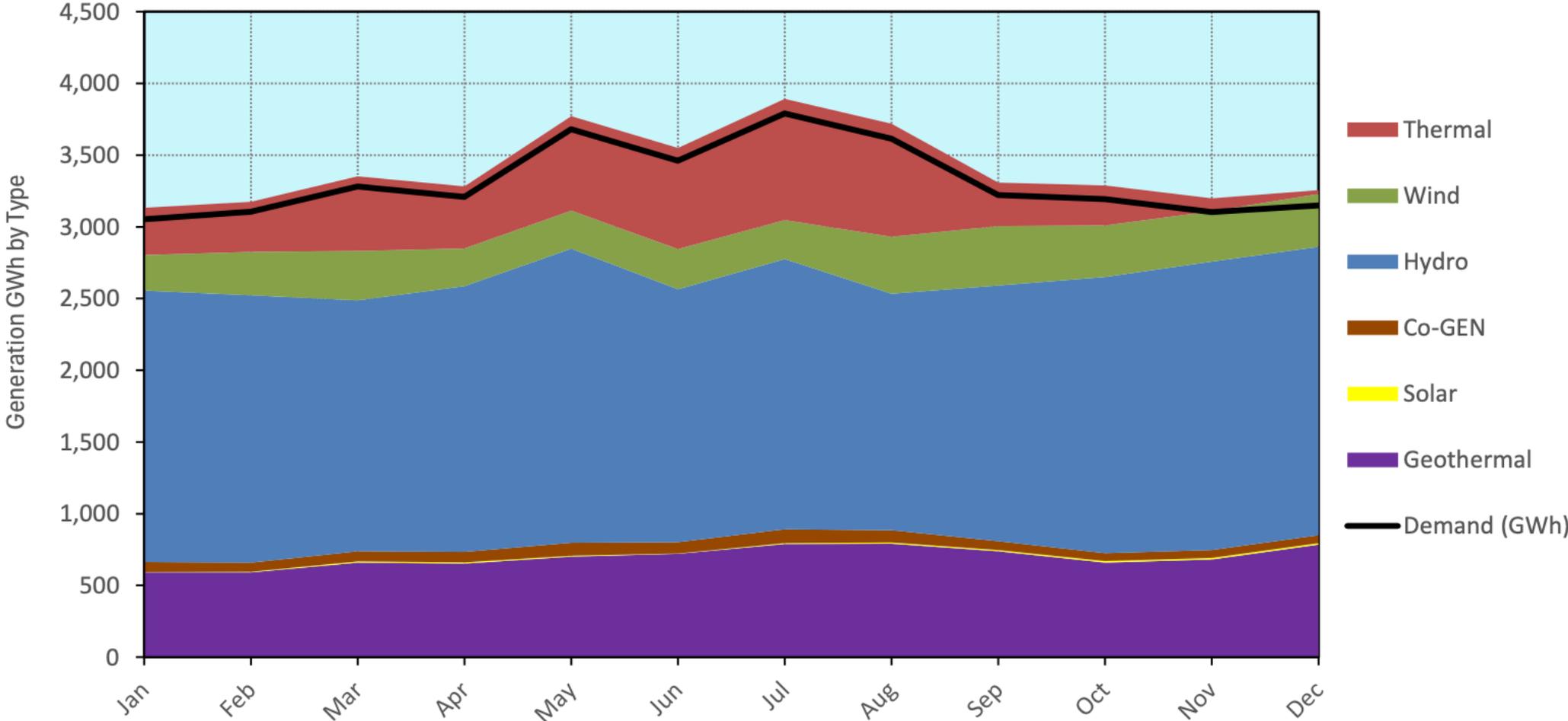
Scenario	Thermal	Hydro	Wind (incl. OSW)
500 MW Waikato	-9%	-5%	+42%
500 MW Taranaki	-13%	-7%	+55%
1,000 MW Combined	-21%	-11%	+95%



# Generation Mix Outcomes



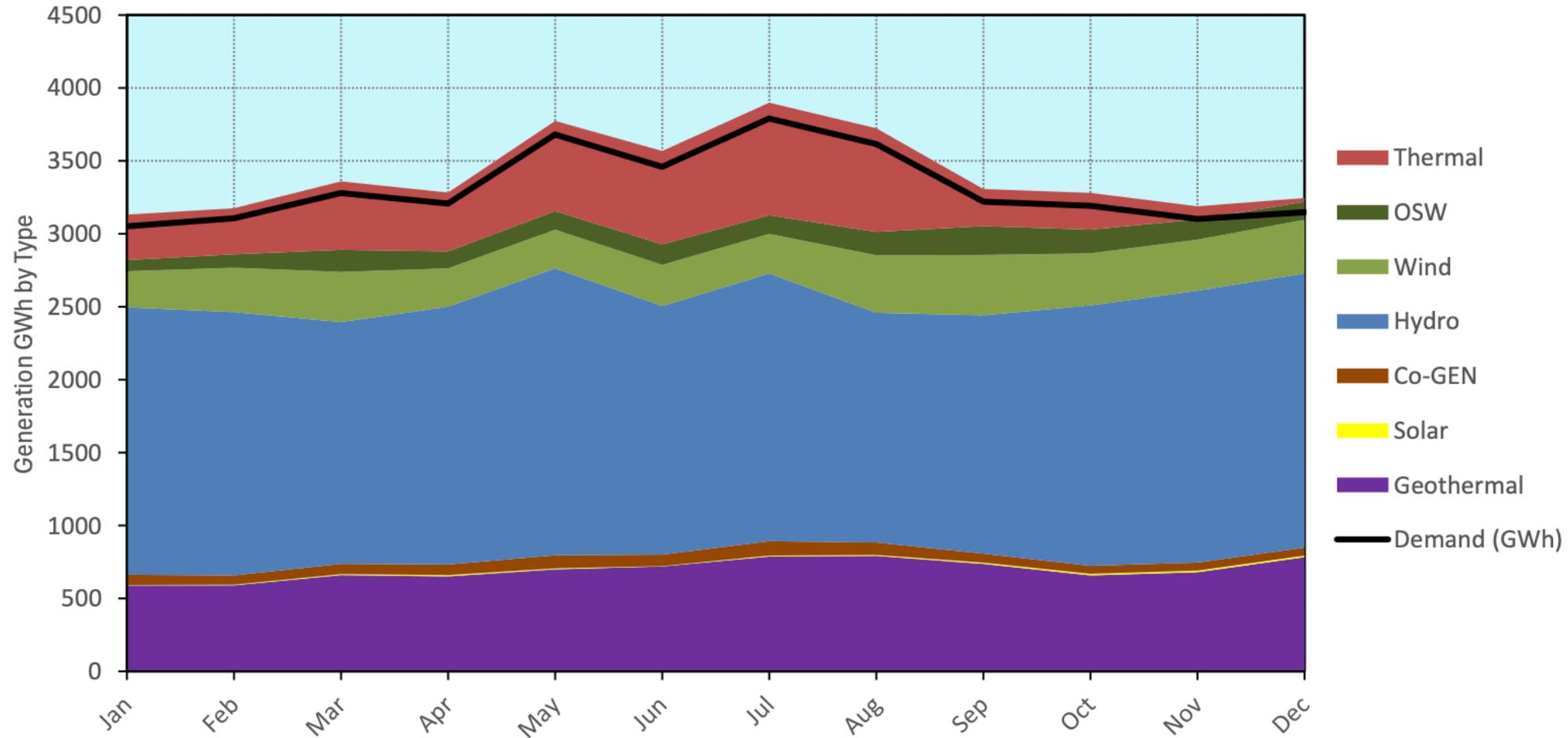
Generation Mix Backcasting Basecase



# Generation Mix Outcomes



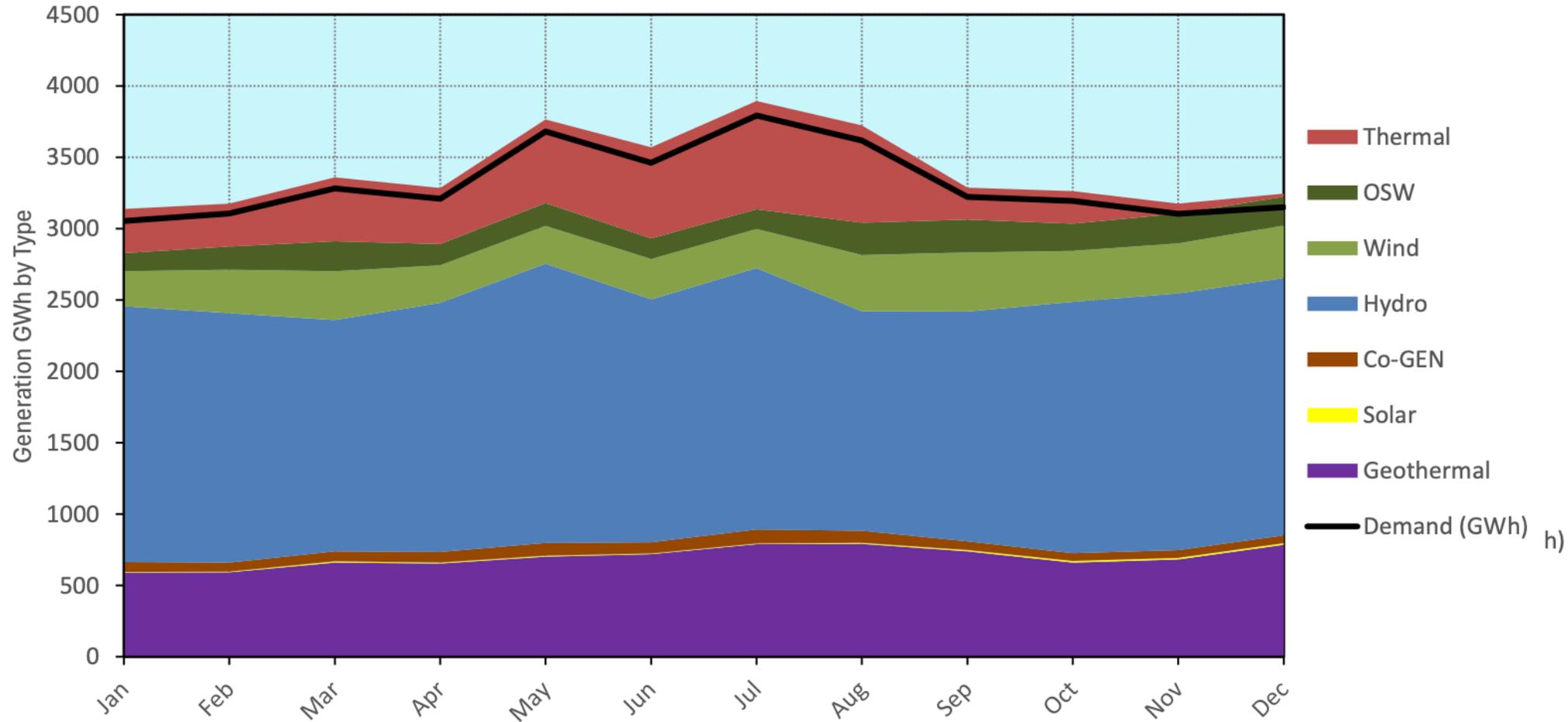
Generation Mix Backcasting 500 MW Waikato OSW



# Generation Mix Outcomes



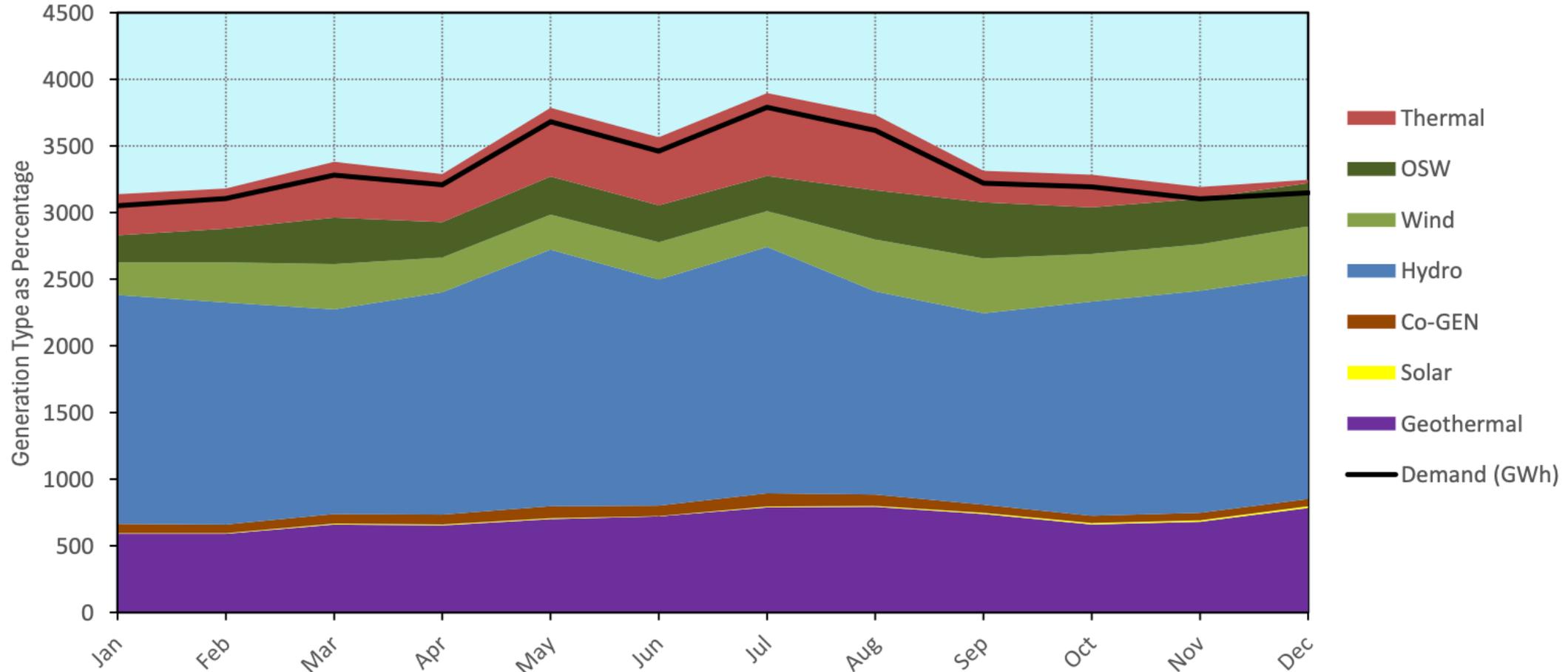
Generation Mix Backcasting 500 MW Taranaki OSW



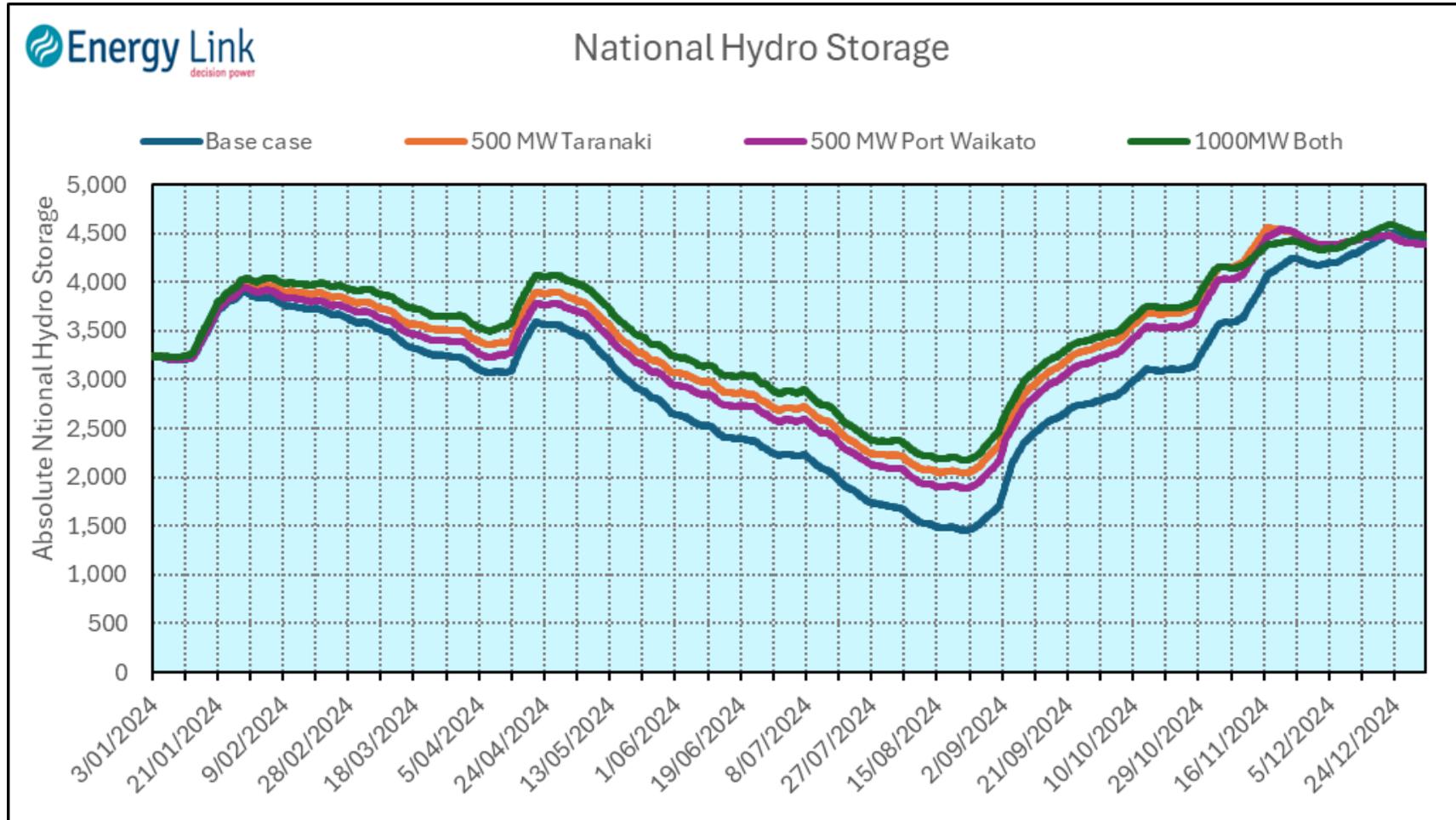
# Generation Mix Outcomes



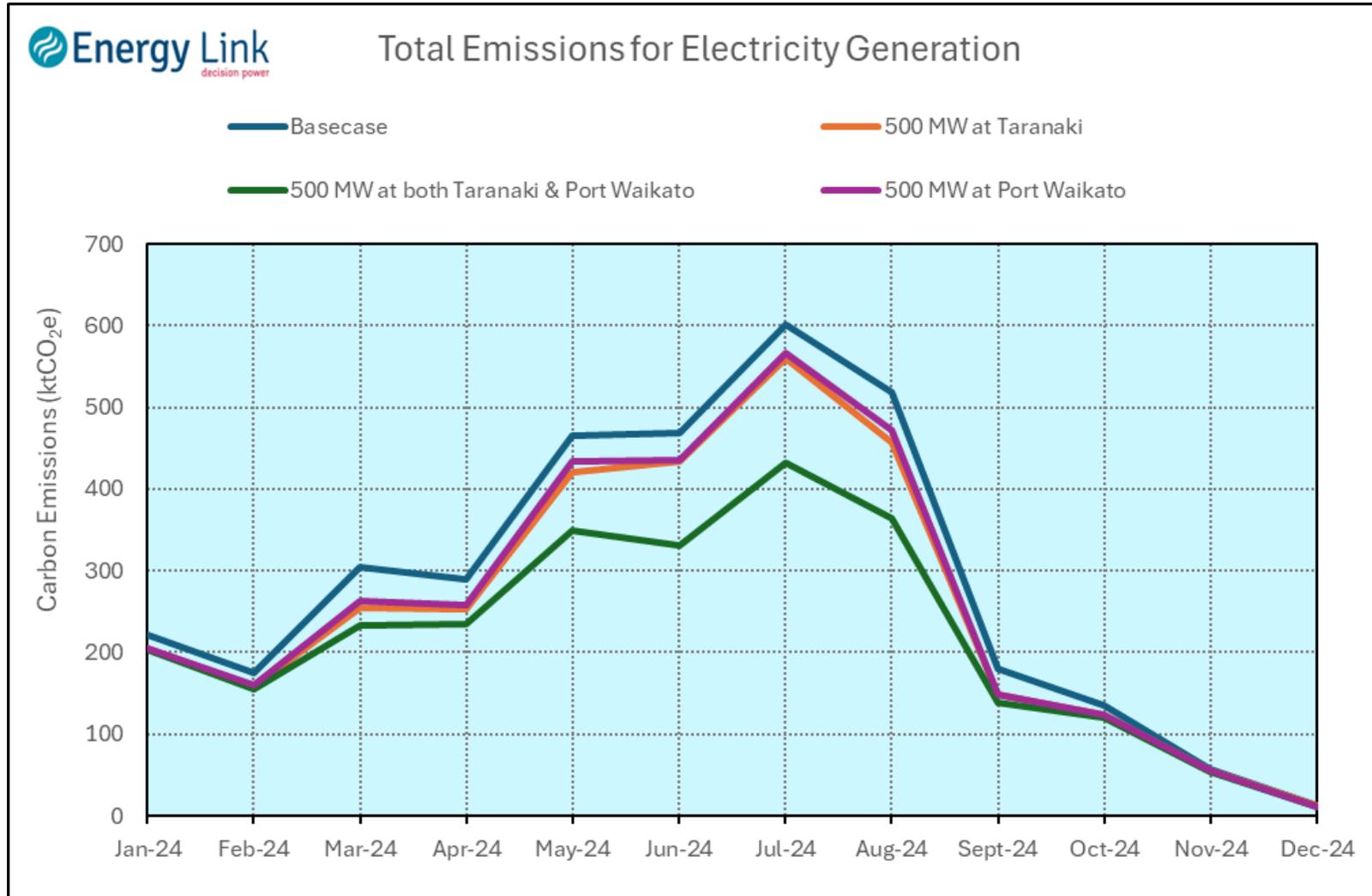
Generation Mix Backcasting 1,000 MW OSW



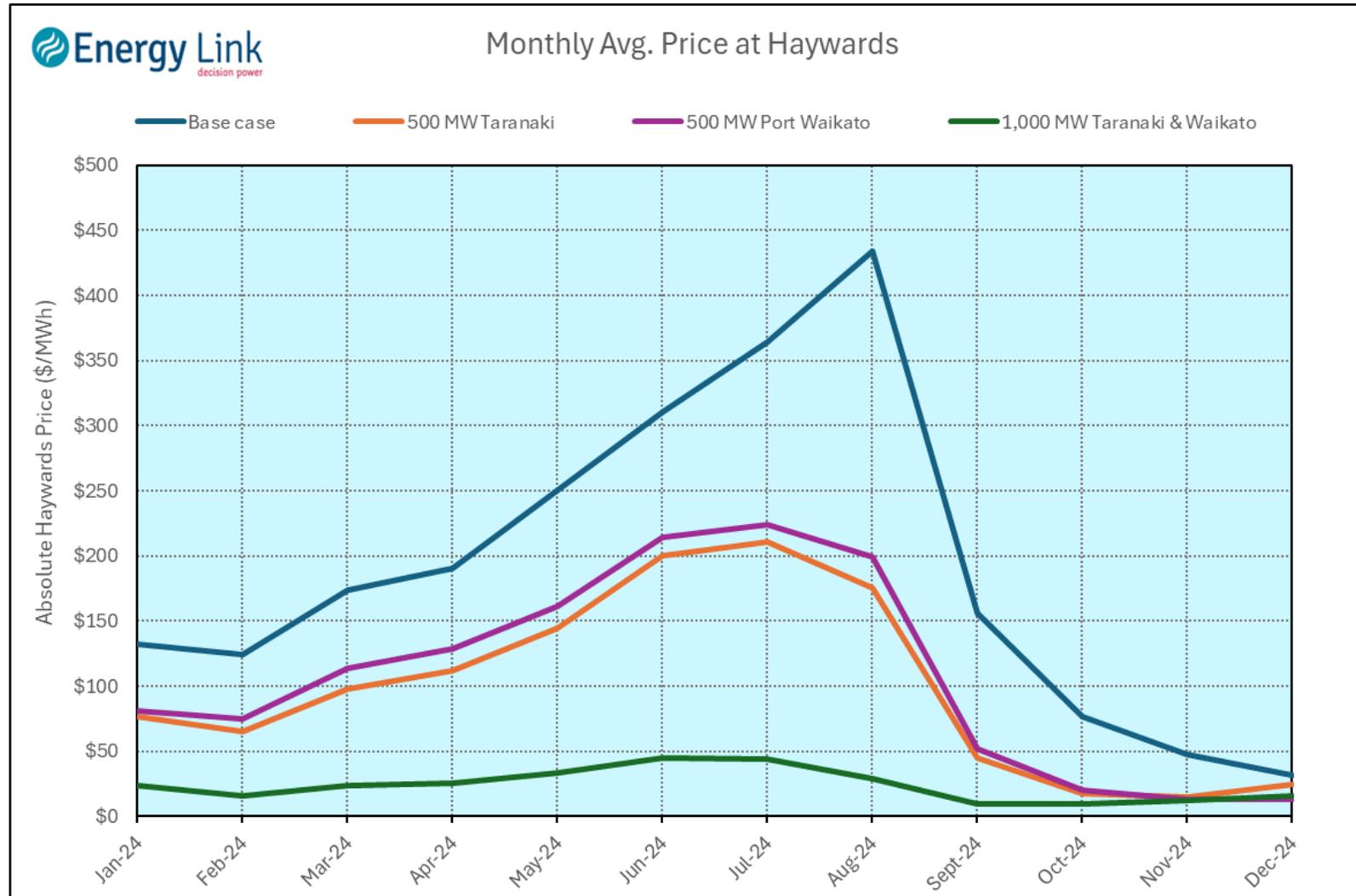
# Hydro Storage Changes



# Emissions from Generation



# How did this impact pricing?

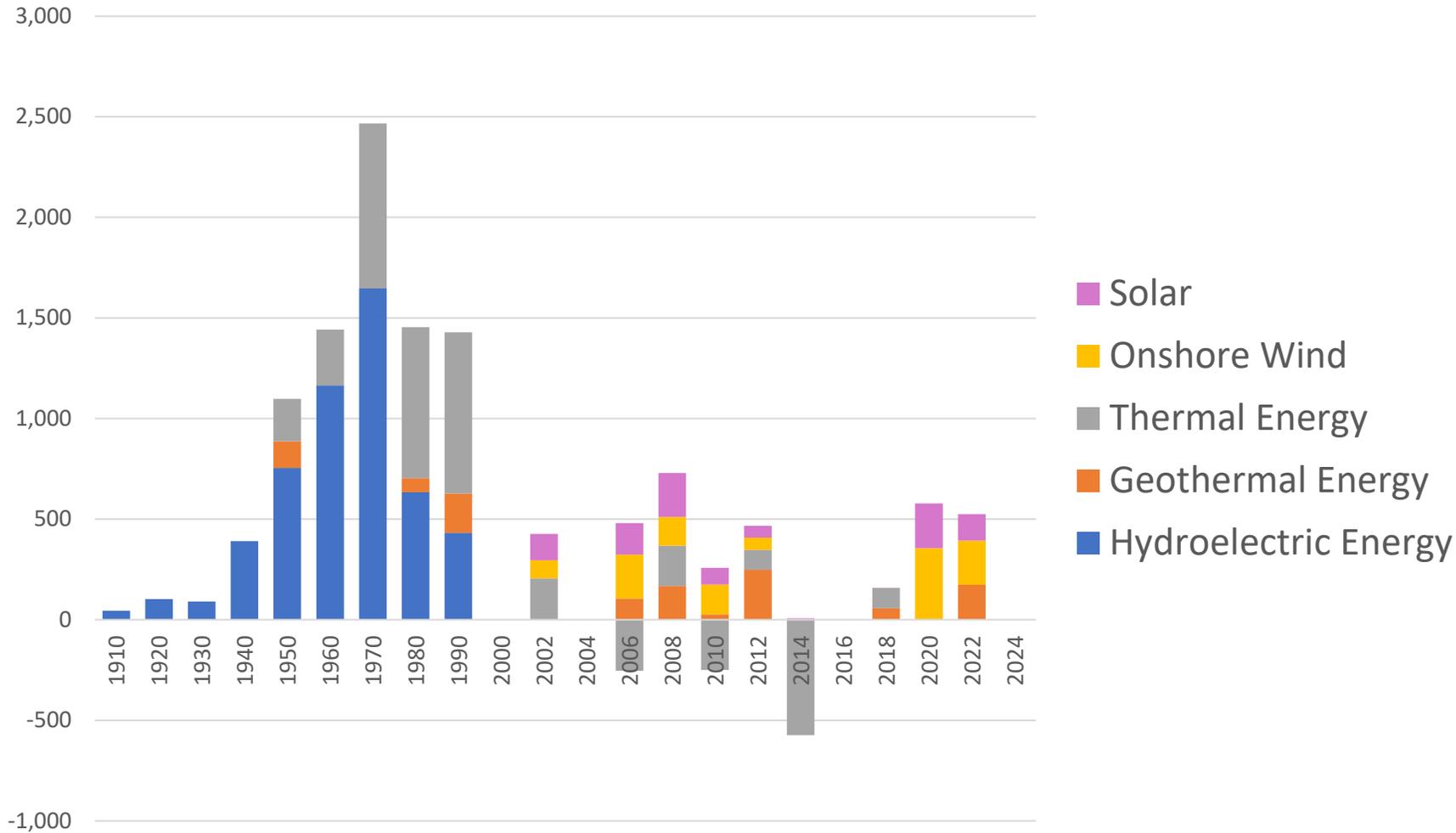


# The winter of 2024 with OSW



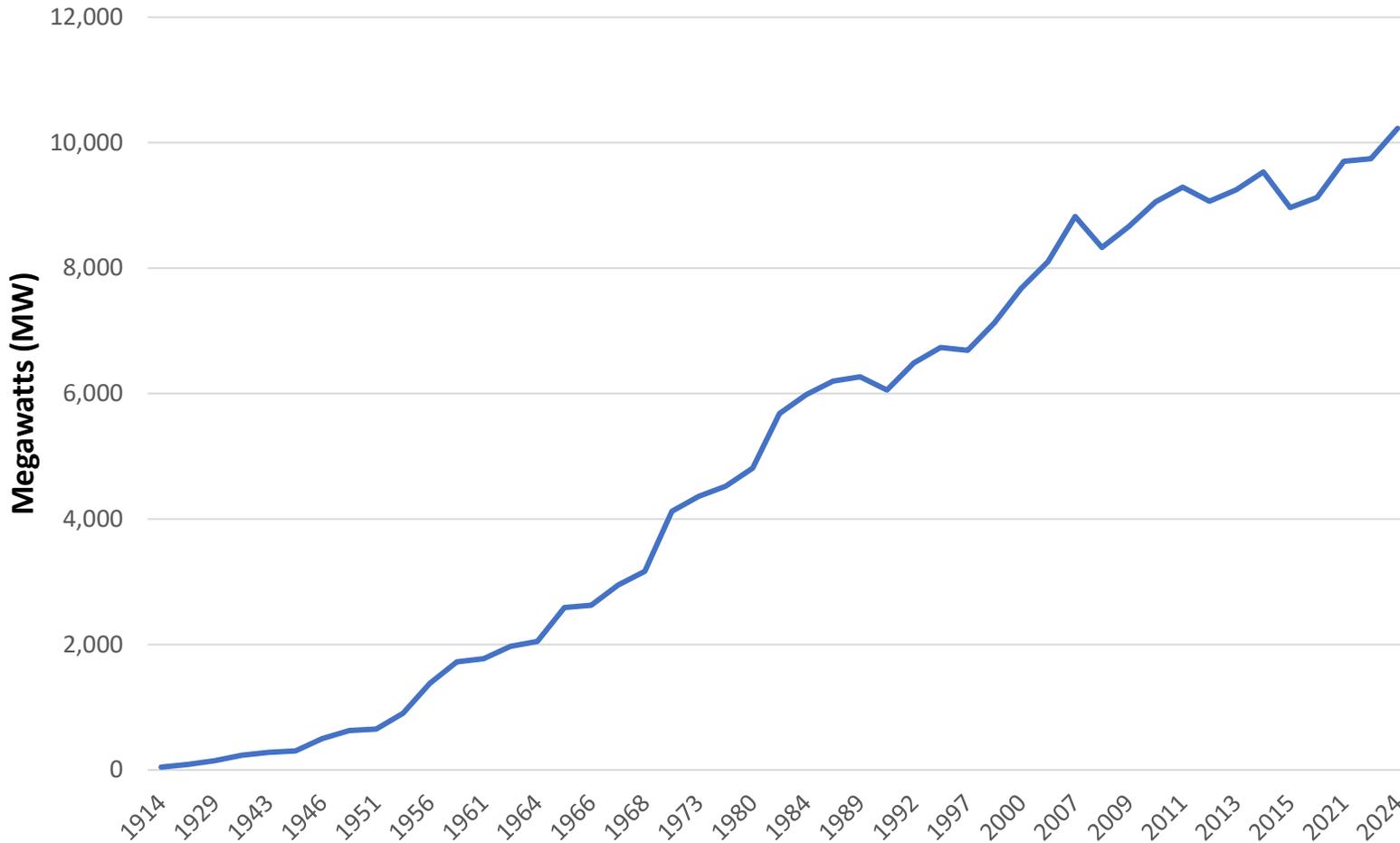
# Where are we now?

## Historic Installed Capacity (2024)



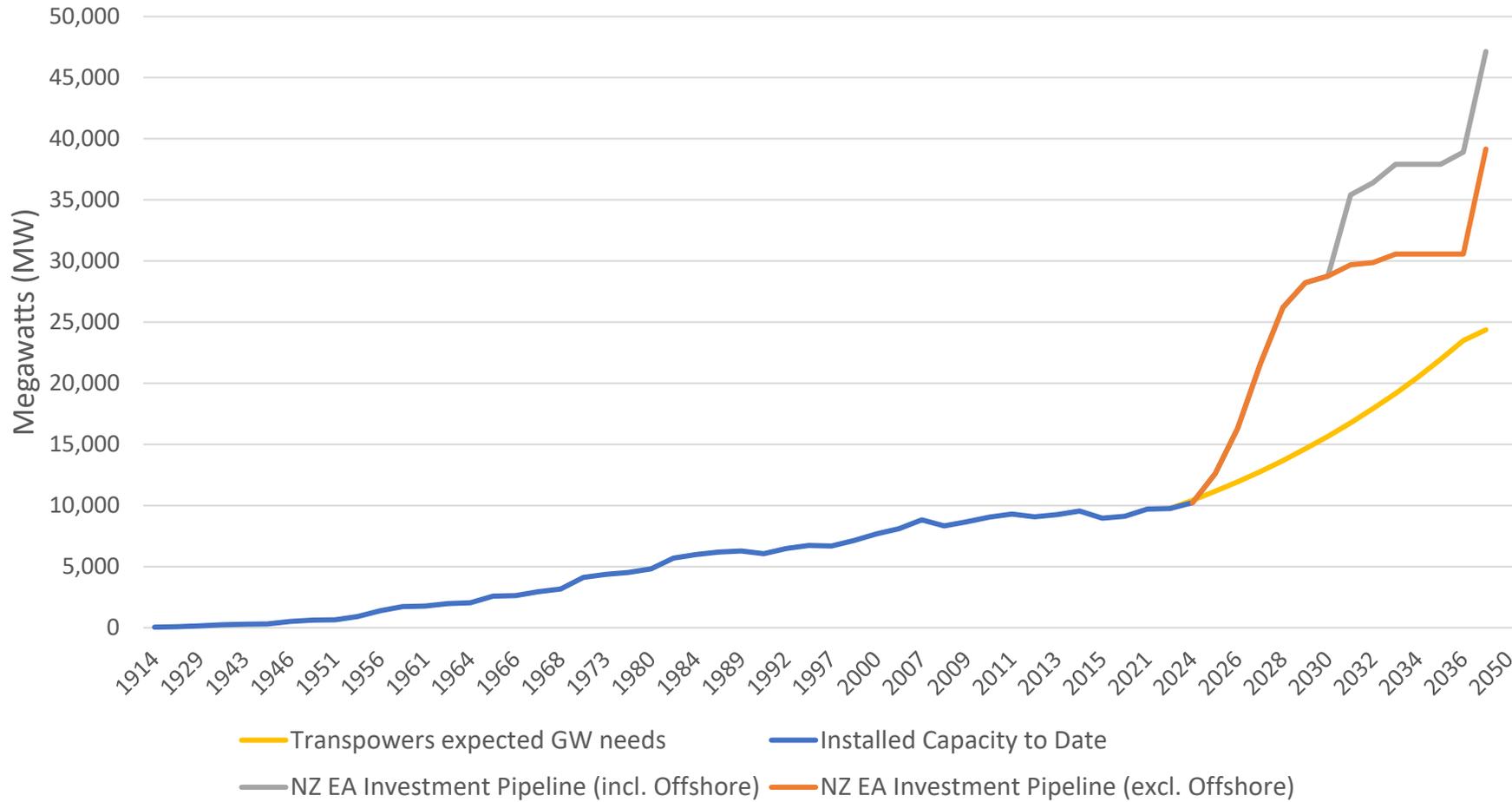
# Where are we now?

## Installed Capacity to Date

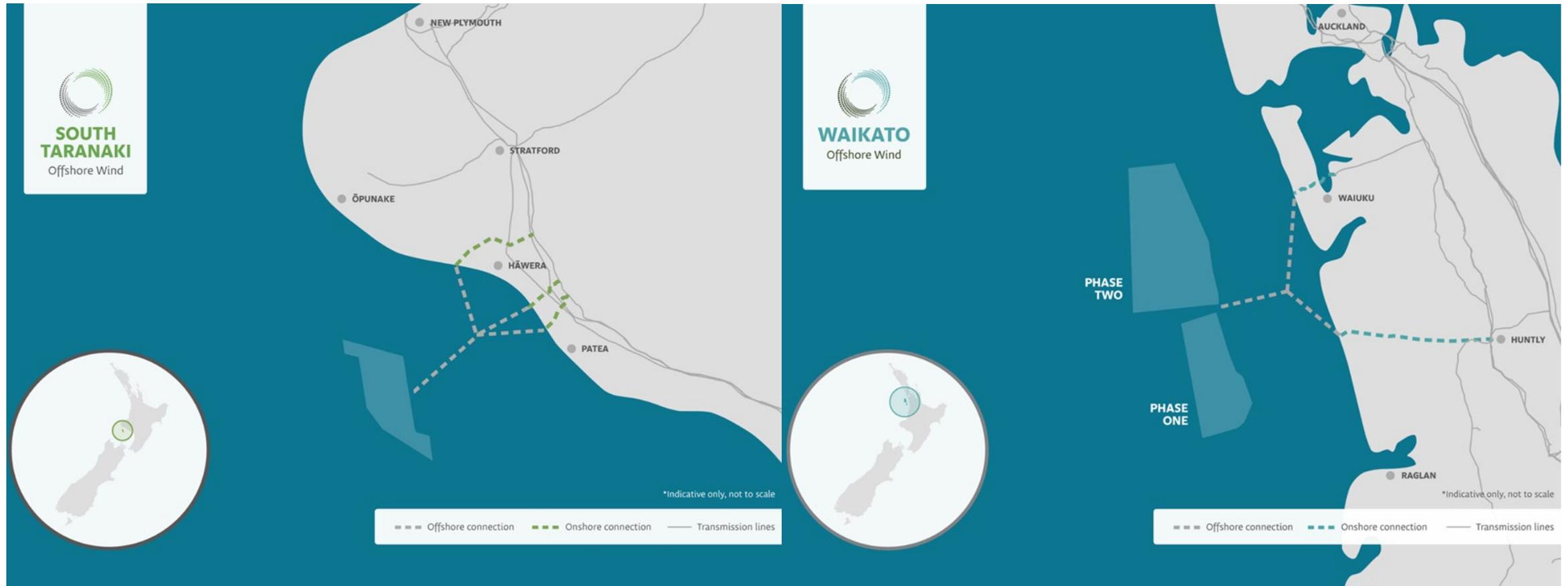


# What that looks like compared to history

## Installed Capacity



# A look to the future



# Tēnā koutou

