

### **Overview**

The western Bay of Plenty region has become a popular place to live, work and play. Its good weather, landscape and coastal location has seen its population grow rapidly, along with economic growth from large-scale housing, commercial and industrial developments. This growth is expected to continue – and with it a major lift in electricity use.

Estimates are that by 2035 demand for electricity across Tauranga, Mount Maunganui, Te Puke and Ōmokoroa will increase by up to 75 percent. By 2050, electricity use could be more than double what it is today. We need to strengthen the electricity infrastructure to support this regional growth and maintain a reliable electricity supply.

As well as the region growing in popularity as a place to live and work, local commercial and industrial businesses are increasingly exploring the switch to electricity as they transition from carbon emitting energy sources to electricity.

In 2023 and 2024, Transpower worked with Powerco and consulted on options for how best to meet the region's growing electricity needs. Feedback from the region's leaders said that we need to ensure our plans support a high level of long-term growth and consider the changing future electricity needs of industry, businesses and communities. Our goal was to find solutions that meet the region's future electricity needs at a reasonable cost. This is important given the cost is passed back to customers through their electricity bill.

In late 2024 Transpower submitted a proposal to the Commerce Commission seeking to invest in the electricity infrastructure in the western Bay of Plenty. In mid 2025 the Commerce Commission announced that they support Transpower's proposal, giving the green light for Transpower's proposed work to proceed.



### Who are Transpower and Powerco?

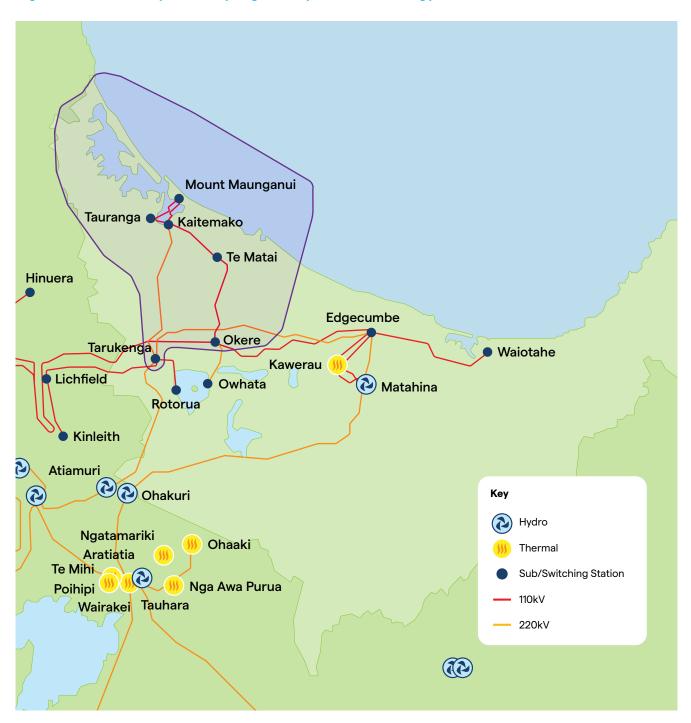
Transpower is the owner and operator of New Zealand's national electricity grid – the network of high voltage transmission lines that transport power from areas of generation (like the hydro stations on the Waikato River) to towns and cities across the motu. In western Bay of Plenty, Transpower's network interconnects with that of Powerco, which owns and maintains the lower-voltage power lines and cables that connect to homes and businesses throughout the region.



## **Western Bay of Plenty region**

We have defined the western Bay of Plenty region as the pale purple shaded area in Figure 1. This area includes our existing infrastructure which comprises four substations, where we supply electricity to Powerco – Mount Maunganui, Tauranga, Kaitemako and Te Matai – and our electricity transmission lines between them, as well as the lines from Tarukenga to Kaitemako and Okere to Te Matai.

Figure 1: Western Bay of Plenty region map - current energy infrastructure



### What do the solutions look like?

The regional solutions require both a national and local lens. Transpower provides the national connection and Powerco provides the local one. Transpower needs to ensure that access to high voltage electricity is available to meet regional growth and Powerco needs to ensure that the local network of lines, cables and other electricity equipment are where they need to be to support homes and businesses within the region.

Because of the interrelated nature of Transpower's and Powerco's networks, it has been important that we work together to determine a development plan that suits the region.

Accordingly, our solutions are those that we can each do in our respective networks, with Transpower's projects needing completion first to enable Powerco's upgrades, but fitting together to provide a long-term solution.

The table below shows the projects that will form our combined programme of work, showing the location and respective responsibility between Transpower and Powerco for each.

Initiative	Map reference	Responsibility	Expected
New transformer at Kaitemako	1	Transpower	2030
Replace conductor on the line connecting Kaitemako and Tauranga substations	4	Transpower	2031
Replace conductor on the line between Okere and Te Matai	2	Transpower	2031
Conductor replacement on the line between Okere and Tarukenga	2	Transpower	2031
Conductor replacement on the line between Kaitemako and Te Matai	2	Transpower	2032
Substation upgrades to accommodate new capacities at Kaitemako, Tarukenga, Okere, Te Matai	NA	Transpower	2032
New 110 kV distribution supply from Te Matai to Powerco's Wairakei substation	3	Powerco	2031-35
New substation and connecting transmission line	5	Transpower	2035
Upgrade the distribution network out of the Tauranga substation	4	Transpower/ Powerco	2035



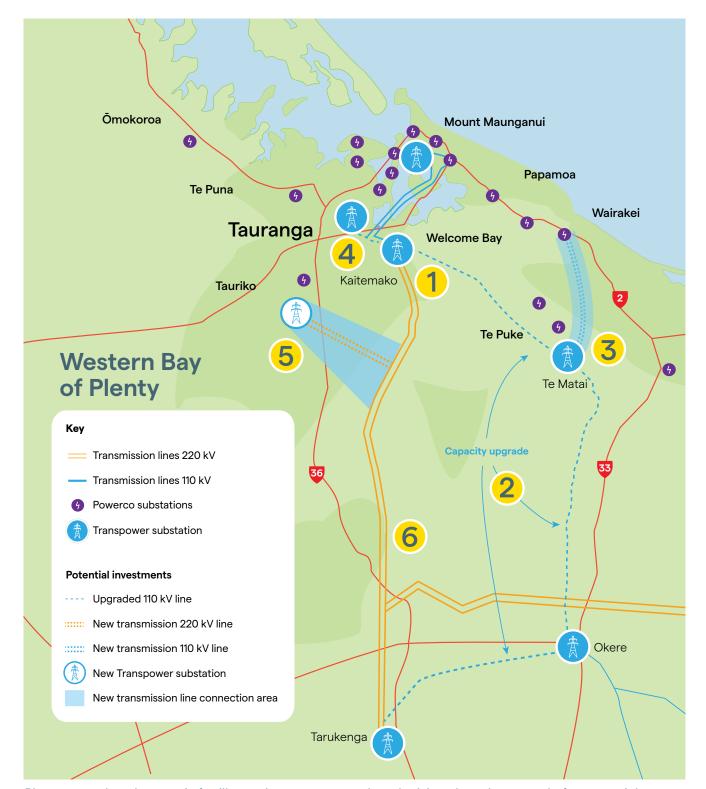


Figure 2: Western Bay of Plenty region map - new energy infrastructure

Please note that the map is for illustrative purposes and no decisions have been made for potential new asset locations.

## How did you get to these solutions?

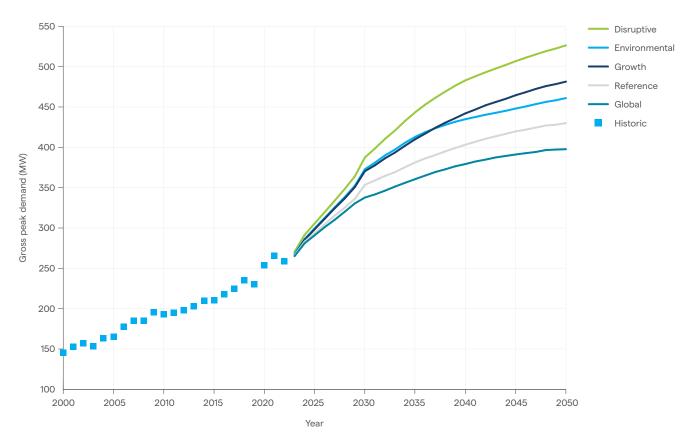
Through Transpower's and Powerco's investigations, we are aware of potential large new developments in the region that will drive step increases in electricity demand. These include:

- large industrial load at Tauriko,
- development at the Port of Tauranga,
- commercial and residential developments in Pyes Pa and Tauriko,
- development of the Rangiuru Business Park near Te Puke,
- development of several industrial coolstores near Te Puke, and
- residential and commercial developments in Wairakei, east of Papamoa.

These have informed the development of a range of scenarios that make different assumptions about various aspects of electricity demand, such as what new developments occur in the future. All new developments we are aware of are included in at least one of these demand scenarios.

Figure 3 summarises the electricity peak demand forecasts that we have considered in our analysis. To inform the timing of investment, we have used the Disruptive forecast. This is our highest forecast, and assumes all new developments we have been informed about proceed. In our view, this is an appropriately prudent approach to our planning. Use of this forecast helps us manage uncertainty and deliver projects in time to meet the increase in electricity demand.

Figure 3: Western Bay of Plenty gross peak demand forecast



# **Timeline**

### 2026 - 2035

This timeline is approximate only. Activities are likely to change due to sequencing of work and work crew availability.

	Map ref in Figure 2	2025	2026	2027	2028	2029	2030	2031	2032	
Detailed design	NA									
Construction	NA									
Kaitemako transformer	1					Transformer installation				
Kaitemako to Tauranga reconductor	4			Enabling works Reconducto		oring works				
Okere to Te Matai reconductor	2			Е	Enabling works Reconduct		oring works			
Tarukenga to Okere reconductor	2			E	nabling work	ks Recondu		uctoring works		
Kaitemako to Te Te Matai reconductor	2			E	Enabling works Recond		luctoring works			
Substation upgrades – Okere, Tarukenga, Te Matai, Kaitemako	NA							Sub upgrades		
New 220 kV substation and transmission line connection near Tauriko	NA		Investigation						Delivery to 2035	
New 110 kV distribution supply from Te Matai to Powerco's Wairakei substation	3			Design and procure			Deliver and commission (to 2035)			
Upgrade the distribution network out of Tauranga substation	4		Design and p		d procure	Deliver and commission (to 2035)				



### Next steps and talking to the community

For existing assets, like Transpower's conductor replacement work, much of the work will occur during the detailed design phase, before crews begin work. This phase looks at the capability of the existing assets (such as the transmission towers) to work out what enabling works (such as strengthening of transmission towers and poles to take the larger conductors) might be needed to take the extra loading required from having a higher capacity conductor. This will involve conversations with landowners hosting Transpower assets about the work we need to complete.

Where we are required to build new assets (such as Transpower's new substation or new higher-capacity power lines) we will need to do much more investigation into where to locate these new assets. We'll be engaging and working with local landowners and communities for these types of projects. Look out for opportunities to talk with us.

## Where to go for more info

Find out more information about this long-term programme of investment in western Bay of Plenty's electricity needs on our website project pages:

#### Transpower's website:

transpower.co.nz/projects/wbop

#### Powerco's website:

powerco.co.nz/wbop or contact the Powerco
engagement team to provide feedback,
ask questions or arrange a meeting:
community@powerco.co.nz

