

This fact sheet provides a snapshot of the state of the forestry and wood processing industries in Waikato. It will help you understand the forestry and wood processing industries profile in the region.

The Waikato region stretches from the Coromandel Peninsula in the north to the northeastern slopes of Mount Ruapehu in the south. It extends over the North Island from the west coast to the Coromandel Peninsula on the east coast.

The region is contiguous to Auckland to the north, Bay of Plenty to the east, Hawke's Bay to the southeast, and Manawatū-Whanganui and Taranaki to the south.

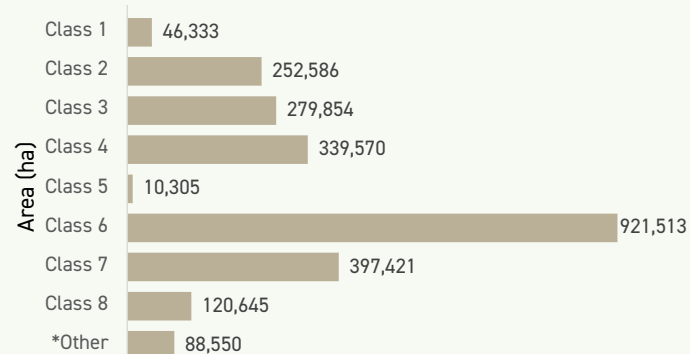
<p>32 billion</p> <p>Regional GDP for year ended March 2022 (9% of National GDP)</p>	<p>1 billion</p> <p>GDP in Forestry, fisheries and mining for year ended March 2021 (4% of the GDP for the region)</p>
<p>3,548</p> <p>Number of new dwelling consents for all construction for the year ended December 2023 (-25.2% annual percentage change)</p>	<p>522,600</p> <p>Estimated regional population year ended June 2023 (10% of New Zealand's total)</p>
<p>63,713</p> <p>GDP per capita for year ended March 2022</p>	<p>14.1%</p> <p>Population that identifies as Māori – 2018 Census (15% nationally)</p>

Source: Stats NZ.

Land use capability

The Land Use Capability (LUC) system classifies land into 8 categories based on its ability to support various productive uses over time. It considers the physical constraints of the land and its specific management requirements.

Figure 1. Area in hectares by LUC class. Source: LUC database



23.6% of the land area in the region is classified as LUC 1 to 3 (Highly Productive Land – HPL). 21.1% of land area in the region is classified as LUC 7 and 8, land with slight to severe limitations for productive land uses.

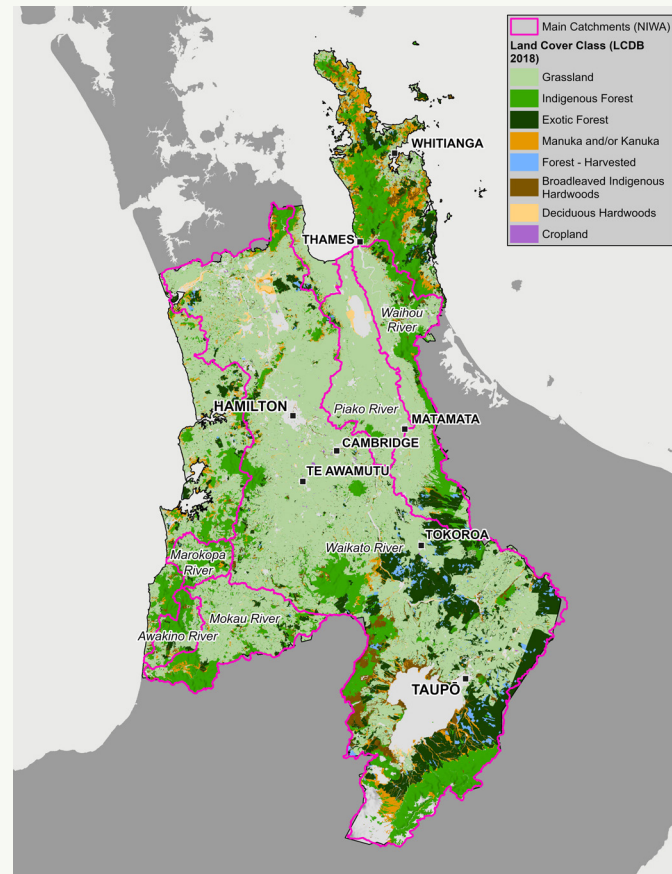
*Other: estuaries, lakes, quarries, rivers, towns.

Sources: *Our Environment – Manaaki Whenua Landcare Research* and *Target land and land use capability classes – MPI*

Existing land cover

Figure 2. Map: Land cover in Waikato. Source: *Land Cover Database (LCDB5) – LRIS*

[View a high-resolution version of the land cover in Waikato map](#)



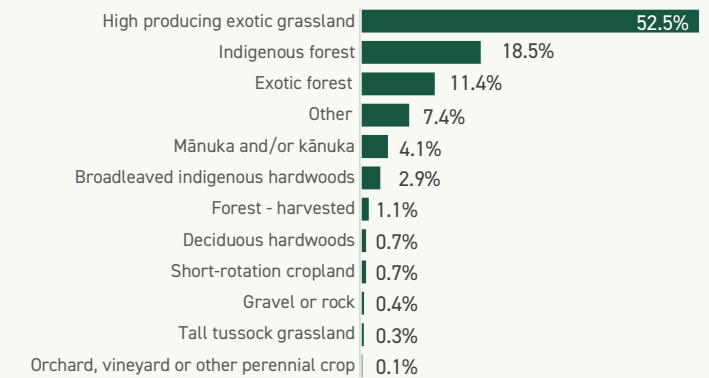
Waikato's total land area is 2,456,777 hectares, making up 9.3% of the total area of New Zealand.

Source: [Geographic boundary viewer – Stats NZ](#)

The largest catchment in the region is the Waikato River catchment at 1,432,335 hectares. The other 3 major catchments are the Waihou River (197,059 hectares), the Piako River (148,129 hectares) and the Mokau River (143,435 hectares). All the other catchments in the region are less than 40,000 hectares.

52.5% (1,290,066 hectares) of the region's land is covered in high producing exotic grassland followed by 18.5% (455,097 hectares) covered by indigenous forest and 11.4% (279,113 hectares) covered by exotic forest.

Figure 3. Percentage of different land covers in Waikato. Source: *Land Cover Database (LCDB5)*



Breakdown of existing forest cover using LCDB¹

Exotic forest covers 11.4% (279,113 hectares) of the region's land.

Deciduous hardwood such as willows, poplars, oaks, elms and ashes, cover 0.7% (16,468 hectares) of the region's land.

Indigenous forest covers 18.5% (455,097 hectares) of the region's land.

Mānuka and kānuka, which can act as a nursery crop in a reversion towards forest, covers 4.1% (100,427 hectares) of the region's land.

Broadleaved indigenous hardwoods such as wineberry, mahoe, *Pittosporum spp*, fuchsia, tutu, titoki and tree ferns, cover 2.9% (71,177 hectares) of the region's land.

Forest – harvested includes bare ground where exotic forest was harvested or, less commonly, indigenous forest. It covers 1.1% (27,042 hectares) of the region's land.

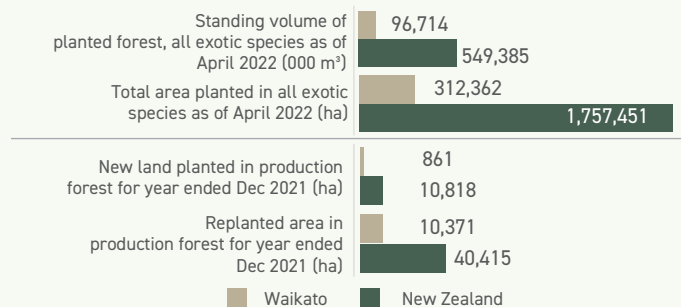
Other includes urban settlements, lakes, rivers, sand, among others. It covers 7.4% (181,826 hectares) of the region's land.

Source and forest type definitions: *Land Cover Database (LCDB5)*

¹ Land Cover Database (LCDB5) – 2018

National Exotic Forest Description (NEFD 2022)² for the Waikato region³

Figure 4. Comparing the Waikato region and New Zealand on important exotic forestry facts. Source: NEFD 2022



The average age of exotic forest in the region is 16.4 years compared to 18.6 years nationally.

Figure 5. Proportion of exotic forest species in Waikato. Source NEFD 2022



The area of radiata pine forest in the region is 295,752 hectares, equivalent to 95% of the exotic forest species in the region. Other exotic forestry species are: 2.4% Douglas-fir (7,466 hectares), 0.2% cypress (532 hectares), 1.9% eucalyptus (6,019 hectares), 0.4% other softwoods such as redwoods (1,292 hectares) and 0.4% other hardwoods such as acacia and blackwood (1,300 hectares).

13.7% (40,507 hectares) of the total planted area of radiata pine forest in Waikato is at harvestable age (26-30 years). This compares to 21.2% of the national total planted area in the same age range.

Table 1. Central North Island – CNI⁴ wood supply region total net stocked area in hectares per forest ownership type. Source: NEFD 2022

Ownership type	Total net stocked area (ha)
Central government	5,672
Local government	1,539
Māori trust	1,862
Privately owned	541,768
Registered public company/state owned enterprise	6,134
Other	7,879

² The [2022 National Exotic Forest Description \(NEFD\) – MPI](#) provides a detailed description of New Zealand's planted production forest.

³ Waikato region: Thames-Coromandel District, Hauraki District, Waikato District, Matamata-Piako District, Hamilton City, Waipa District, Otorohanga District, Waitomo District, South Waikato District, Taupo District.

⁴ The Waikato region is part of the Central North Island (CNI) wood region. The information is presented for CNI not just Waikato as the data is available just at this level.

Figure 6. Number of hectares of pruned and unpruned regimes of radiata pine in Waikato. Source: NEFD 2022

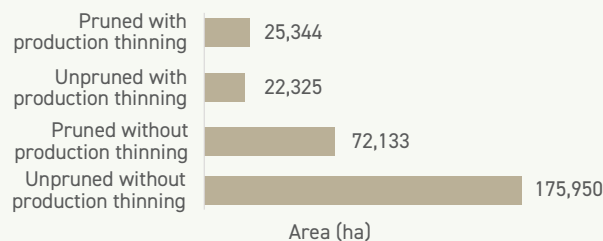


Table 2. Number of forest owners and total forest area by national size class in Waikato. Source: NEFD 2022

	<40 ha	40-99 ha	100-499 ha	500-999 ha	1,000-9,999 ha	10,000+ ha
Number of forest owners	29	63	64	20	22	50
Area (ha)	630	3,654	11,991	9,764	33,352	252,970

Wood Availability Forecast (WAF)

Figure 7. Wood Availability Forecast (WAF) scenario 3 for the CNI⁴ wood supply region, in 000 m³. Source: WAF 2021

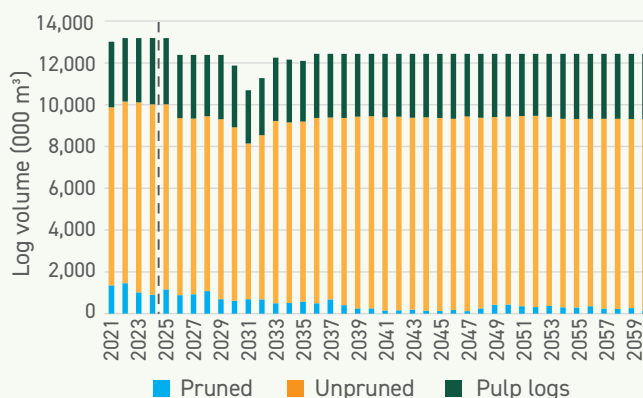


Figure 7 shows the availability of pruned, unpruned and pulp logs between 2021 and 2060, for the Central North Island (CNI)⁴ wood supply region. Wood availability is forecast to be below 12 million cubic metres per annum between 2030 and 2032. From 2033 onwards, the wood availability is forecast to be around 12.4 million cubic metres per year.

Source: [WAF August 2021 – Scenario 3 – Canopy](#)

Markets for Central North Island – CNI⁴

Figure 8. Percentage of exports vs domestic processing of logs for CNI for the year ended in December 2023. Source: Levy trust data for year ended December 2023



In 2023:

- 6.6 million tonnes of logs were exported from Port of Tauranga. 51,000 tonnes of logs were exported from Port of Auckland.
- Port of Tauranga exported 33.2% of national log exports. Port of Auckland exported 0.3% of national log exports.
- 5.8 million tonnes of logs went to sawmills in the Central North Island wood region contributing to 51.2% of the total log volume processed domestically.

Source: Levy Trust data for year ended December 2023

Forestry and wood processing supply chain

Nurseries

There are more than 20 nurseries in the Waikato region producing exotic and native species.

Wood processing

There are at least 20 sawmills in the region producing sawn timber. At least four of them have a volume output per year greater than 20,000 m³. The others have outputs of less than 20,000 m³. There are at least 12 secondary wood processing plants in the region producing panels, pulp, paper, pallets, chips for hog fuel⁵ and wood pellets⁶ made from radiata pine sawdust.

In 2023 the CNI⁴ wood region produced:

- 2.2 million m³ of **sawn timber**. This is 60.2% of New Zealand's total sawn timber production for the period.
- 251,509.1 m³ of **panels**. This is 19.5% of New Zealand's total panels production for the period.
- 788,926.9 m³ of **pulp**. This is 96.5% of New Zealand's total pulp production for the period.
- 271,548.4 m³ of **paper and paperboard**. This is 83.6% of New Zealand's total paper and paperboard production for the period.

Source: Quarterly production statistics MPI. Statistics for calendar year 2023 (Jan-Dec). This data includes only mills that report data quarterly. Data from mills that report annually is not included.

Indigenous forestry

⁵ Hog fuel: slash and wood residues from harvesting that are used for energy generation, for example, to fuel boilers.

⁶ Wood pellets are compressed sawdust parcels. They are a type of solid fuel that could be used to replace coal.

For the year starting July 2022, tawa was the indigenous species with the most volume delivered to mills in the region.

Table 3. Log volumes in m³ delivered to mills from July 2022 to June 2023 in Waikato.
Source: Indigenous forestry - MPI

	Tawa	Rimu	Kauri	Tōtara	Mangeao	Black mairie	Mataī
m ³	114.8	42.4	38.5	5.1	4.9	4.4	2.9

Workforce

Figure 9. Comparing the numbers of workers within forestry and wood processing for Waikato region.
Source: NZIER 2021

In 2021, the potential workforce in the Waikato was 320,100 people, 66%

Waikato	Forestry, 1,587	Wood processing, 3,824
National	Forestry, 8,500	Wood processing, 29,335

(211,188) of whom were working.

In 2021, an estimate of 37,835 people worked in the forestry and wood processing sectors in New Zealand. There were an estimated 5,411 workers in the forestry and wood processing sectors in the Waikato region. Of these, 1% (1,587 people) worked in forestry and 2% (3,824 people) in the wood processing sector.

Sources: Stats NZ - 2021 data, [Forestry and wood processing labour force survey - NZIER July 2021](#) (PDF, 1418 KB)

Huntly Power Station operating on renewable woody biomass

In February 2023, Genesis Energy successfully completed a week-long trial at the Huntly Power Station, exploring whether they could use only woody biomass (black torrefied wood pellets⁷) as a renewable replacement for coal for their Rankine units⁸. The pellets were imported from Canada for the trial and needed to be ground to a fine powder. They closely simulate the properties of coal and are resistant to moisture. This means that large, covered fuel storage facilities are not needed.

The switch to woody biomass may enable Huntly Power Station to supply energy while also shifting towards more sustainable energy sources. Using torrefied wood pellets generally produces less than 10% of the emissions of coal.

As of April 2024, there is no local New Zealand suppliers for torrefied wood pellets. The Australian company Foresta plan to build New Zealand's first torrefied black wood pellet plant in Kawerau – Bay of Plenty.

⁷ During torrefaction, wood residues are gradually heated in an oxygen-deprived environment to temperatures ranging from 200°C to 300°C. This method transforms the wood into a consistent, solid product with reduced moisture content and approximately 30% higher energy yield compared to raw biomass. Additionally, the utilisation of torrefied biomass results in emissions that are less than 10% of those produced by coal.

⁸ Heat engine that converts heat into usable energy.

Sources: [Genesis' biomass trial successful – Genesis Energy](#), [Planned plant to produce low emissions fuel to replace coal a step closer with agreement to lease Kawerau site - Foresta](#)

Te Awamutu boiler conversion from coal to renewable wood pellets

In 2020, 43-megawatt Fonterra's coal boiler at Te Awamutu milk processing plant was converted from using coal to using wood pellets. This switch was supported by the Energy Efficiency and Conservation Authority's Technology Demonstration Fund. It achieved a 98.4% reduction in carbon emissions and a reduction of air particle emissions to less than 10% of consented levels. Sulphur dioxide emissions have also been reduced.

Fuel transport became more efficient as the plant now requires only 5 to 6 truck movements of wood pellets, down from 7 or 8 of coal. The project cost \$12 million.

Source: [Fonterra coal boilers conversion - Energy Efficiency and Conservation Authority - EECA](#)

Windthrown salvage operation after Cyclone Gabrielle

In 2023, 6.5 thousand hectares of forest estate around Lake Taupō and Lake Rotoaira were damaged by wind during Cyclone Gabrielle. The forest management company⁹ looking after these forests directed salvage operations that aimed to recover a total of 3.4 million tonnes of windthrown trees by June 2024. Just a few hundred hectares are unlikely to be harvested as they are on steep hills, or small isolated areas or the wood is too young to be sold. By December 2023, an average of 300 thousand m³ of logs per month, had been removed adding up to a total of 2.2 to 2.4 million m³ of logs recovered by the end of 2023. Most of the affected trees were aged 18 years and older.

Before 2023, most of the production coming from these forests went to the domestic market. In contrast, around 80% of the windthrown salvaged logs have been exported. These logs couldn't be sold domestically due to their specifications. The domestic market was taking pruned and pulp logs until November last year and it is currently taking just pulp logs, while the export market has been taking the industrial logs and from December 2023 also the pruned logs.

The salvage harvest response needed more resources than usual. By the peak of the operations, 40 harvesting crews were working on site and 500 logging truck movements were happening per day. Some of the crews and trucking workforce came from Hawke's Bay and Gisborne regions, where they couldn't get access to forests due to the impacts of the cyclone on roads. Others came from regions where work wasn't available due to the decline in the log market.

The damaged forest area represents 0.4% of the New Zealand's forest estate, 1.1% of the Central North Island forest estate and 2% of the Waikato region forest estate.

Source: [When it all falls down – A Cyclone Gabrielle Response Story – NZ Forest Managers](#)

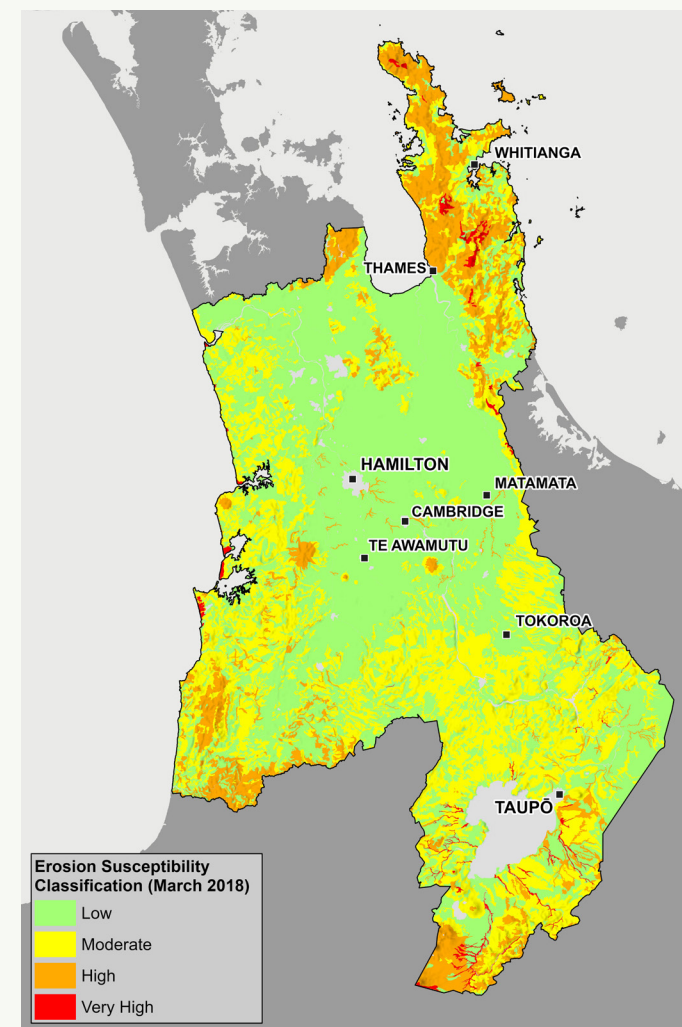
⁹ N.Z. Forest Managers.

Erosion

Around 1.0% (23,545 hectares) of the region's land is classified as very highly susceptible to erosion and 11.9% (291,484 hectares) are classified as highly susceptible to erosion using the ESC (Erosion Susceptibility Classification) (See Figure 10). This compares to around 13.1% (3,472,477 hectares) and 19.2% (5,083,013 hectares), respectively, for New Zealand.

Figure 10. Erosion Susceptibility Classification (ESC) for Waikato. Source: MPI

[View a high-resolution version of the Erosion Susceptibility Classification map](#)



Government funding

One Billion Trees: As of January 2024, \$10.7 million in funding has been approved for direct landowner and partnership grants in the region.

A total of 776 hectares had been planted in the region using the One Billion Trees Fund.

The One Billion Tree Fund, part of the One Billion Trees Programme, is now closed to new applications. The programme's goal is to plant a billion trees by 2028. [One Billion Trees Programme – MPI](#)

Hill Country Erosion (HCE) Programme: Since 2015, \$7.2 million in funding has been approved for projects in Waikato.

Between 2019 and 2023 alone, the HCE Programme helped protect over 4,300 hectares of erosion-prone land in Waikato. The funding supported native (indigenous) reversion projects, exotic forestry and the strategic planting of poplar and willow trees.

The HCE Programme is a partnership between MPI, councils and landowners to support regional erosion-control projects. [Hill Country Erosion Programme for councils – MPI](#)

Infrastructure

Roads

The Waikato region is connected to:

- The south of Auckland through State Highway 1 (SH1).
- The Taranaki region by State Highway 3 (SH3).
- The Manawatū-Wanganui by SH1 and SH4, SH41, SH46 and SH47.
- The Bay of Plenty by SH2, SH5, SH28, SH29 and SH38.

Electricity

Transpower owns the transmission lines in the region, which consist of one 400kV double circuit and multiple 220kV double circuit, 220kV single circuit, 110kV double circuit and 110kV single circuit lines.

Power is generated in the region by hydro, wind, geothermal and wood and gas sources. The Huntly Power Station (12,000 MW) is the largest power station in the region and in New Zealand, it uses coal and gas for energy generation. Kinleith Power Station cogenerates 40 MW of power using wood and gas. There is one wind power generation station in the region, Te Uku, generating 64.4 MW.

Other hydro and geothermal power stations in the region generating at least 90MW are Karapiro hydro (90 MW), Arapuni (196.7 MW), Maraetai I and II (360 MW), Whakamaru (124 MW), Ōhakuri (112 MW), Tongariro Power Scheme (Rangipō 120 MW, Tokaanu 240 MW and Mangaio 1.8 MW), Wairakei (132 MW), Te Mihi (166 MW), Ngā Awa Pūrua (132 MW) and Mōkai (100 MW).

Rail

The rail lines in the region connect the south and centre of the region to Auckland, Bay of Plenty and Manawatū-Whanganui regions. The rail lines also connect the region to Port of Auckland, Port of Tauranga which are the closest ports to the region.

Ports

The Waikato region doesn't have its own commercial port. The railway connects forest in the region with Port of Tauranga and Port of Auckland.

The well-connected roading infrastructure also connects forests in the region to these ports.

Port of Tauranga is New Zealand's largest port. It exports the most volume of logs in New Zealand (29.9% in 2022 and 33.2% in 2023). The port has a debarking¹⁰ facility.

Port of Auckland is the second smallest log exporting port in New Zealand. For the years ending December 2022 and December 2023, 0.3% of New Zealand logs were exported through this port. The port doesn't have a debarking¹⁰ facility.

Sources: KiwiRail, Port of Tauranga, Port of Auckland, Transpower, Manawa Energy, Genesis Energy, . New Zealand Transport Agency | Waka Kotahi websites.

¹⁰ Debarking logs will eliminate the need for chemical fumigation for exporting logs to countries allowing debarked logs.

Useful links

Forestry

[Central North Island Wood Council](#)

[The sustainable management of indigenous forests - MPI \(PDF, 3 MB\)](#)

[New Zealand forest data – MPI](#)

[Afforestation and deforestation intentions survey 2022 - MPI \(PDF, 943 KB\)](#)

[Planting guides - Waikato Regional Council](#)

[Resource Management \(National Environmental Standards for Commercial Forestry\) Amendment Regulations 2023](#)

Wood processing

[Invest in New Zealand wood processing \(March 2020\) – New Zealand Trade and Enterprise](#)

[Information releases – Overseas merchandise trade – Stats New Zealand](#)

Regional statistics

[Regional economy, growth and development – Waikato Regional Council](#)

[Waikato region 2018 Census data – Stats NZ](#)

[Regional Economic Activity Web Tool - Waikato – Ministry of Business, Innovation and Employment](#)

[Regional updates – New Zealand Transport Agency](#)

[Waikato - Regional Economic Development & Investment Unit - Kānoa](#)

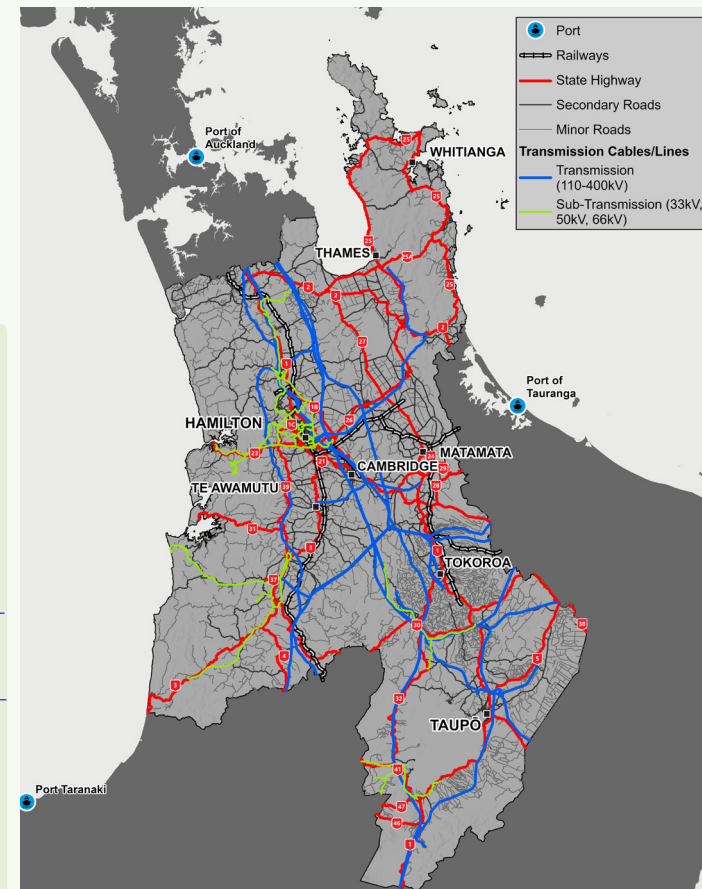
Infrastructure

[Maps and Geospatial data – Kiwirail](#)

[Transmission lines – Transpower](#)

Figure 11. Map of key infrastructure across Waikato.

[View a high-resolution version of the infrastructure map in Waikato](#)



The power lines information on this map may be incomplete. The information that is currently displayed is what MPI had authorised access to at the time of creating this fact sheet.

Feedback

Contact email: info@mpi.govt.nz

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