

# OUR ANNUAL DELIVERY REPORT



## WE WANT TO SHARE OUR PROGRESS AND UPDATE YOU ON OUR FUTURE WORK PLANS

The Annual Delivery Report (ADR) focuses on the progress Aurora Energy has made towards completing our five-year, \$563 million investment programme during the last regulatory year across Ōtepoti Dunedin, Central Otago, Wānaka and Tāhuna Queenstown.

The report is an important way for us to communicate how we are progressing with customers, and it is also one of the regulatory disclosures we are required to publish each year under our five-year customised price-quality path (CPP).

### IT INCLUDES WHAT WE'VE DONE TO:

- ⚡ Upgrade the electricity network
- ⚡ Focus on safety
- ⚡ Improve our systems and processes
- ⚡ Engage with customers

## OUR ADRs REPORT AGAINST THREE PLANS WE DISCLOSED IN MARCH 2022:

### 1 → DEVELOPMENT PLAN

SEVEN KEY AREAS WE'RE IMPROVING TO BENEFIT CUSTOMERS

- ⚡ Power quality
- ⚡ Customer charter and compensation
- ⚡ Outage management
- ⚡ Quality data
- ⚡ Asset management and safety risk
- ⚡ Cost estimation
- ⚡ Quality assurance

### 2 → PROJECT AND PROGRAMME DELIVERY PLAN

OUR PROJECTS FROM 2021 UNTIL 2026

### 3 → SAFETY DELIVERY PLAN

HOW OUR PROJECTS AND PROGRAMMES WILL REDUCE OUR NETWORK SAFETY RISKS



Copies of our reports and information on our CPP application are available on our website: [www.auroraenergy.co.nz](http://www.auroraenergy.co.nz)

2023 REGULATORY YEAR AT A GLANCE\*

# OUR NETWORK



We are pleased with the continued progress we made on asset renewal and maintenance work across the network, to reduce the level of safety risk.

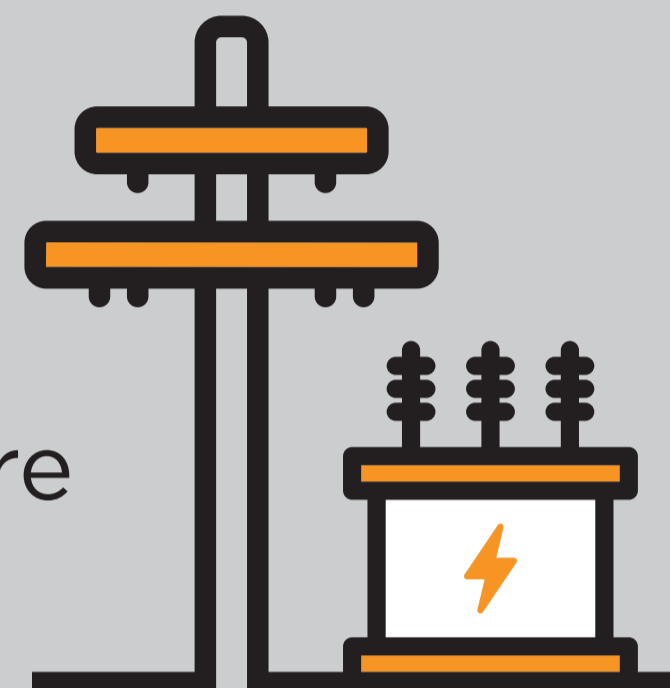
**\$97M**

spent on capital expenditure



**\$48M**

spent on operational expenditure



Replaced

**1,378  
POWER  
POLES**

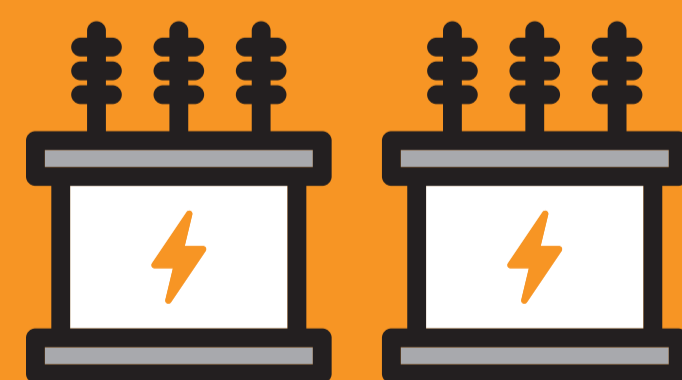


**109**

different types of switchgear assets replaced or renewed

Replaced

**1,960  
CROSSARMS**



Replaced

**21  
DISTRIBUTION  
TRANSFORMERS**

## ENGAGING WITH CUSTOMERS

### CUSTOMER AND STAKEHOLDER ENGAGEMENT

- ✓ Extensive stakeholder engagement plan
- ✓ Positive feedback from customers about improved communication
- ✓ Using learning and insights gained from complaints

*We rate ourselves 5 out of 5 for this initiative.\**

### INVESTMENT REPRIORITISATION

- ✓ Engaged with councils across our region
- ✓ Information about reprioritisation was included in the May 2023 issue of our community newsletter 'Your Network, Your News'

*We rate ourselves 3 out of 5 for this initiative.\**

### CUSTOMER CHARTER AND COMPENSATION

- ✓ Developed a plan to consult with customers on our new 'Customer Commitments', to replace our current Customer Charter

\*The 2023 regulatory year (RY23) runs from 1 April 2022 – 31 March 2023. All of the numbers for RY23 can be found in Section 8 of our full report.

\*You can find more detail in the full Annual Delivery Report at [www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp](http://www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp)

2023 REGULATORY YEAR AT A GLANCE\*

# ŌTEPOTI DUNEDIN



We are pleased with the continued progress we made on asset renewal and maintenance work across the network, to reduce the level of safety risk.

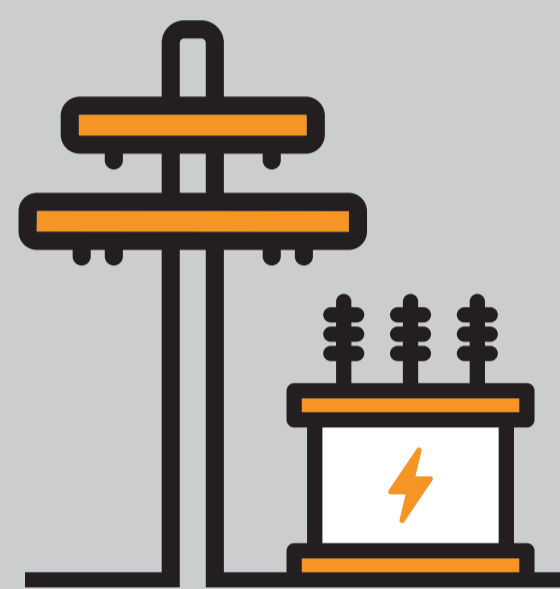
**\$32M**

spent on capital expenditure



**\$27M**

spent on operational expenditure



We undertook vegetation inspections on **31%** of the Ōtepoti Dunedin network and maintained vegetation on **34%** of the network

Replaced over **14 KM** of **HIGH VOLTAGE LINES**



Replaced **411** **POWER POLES**

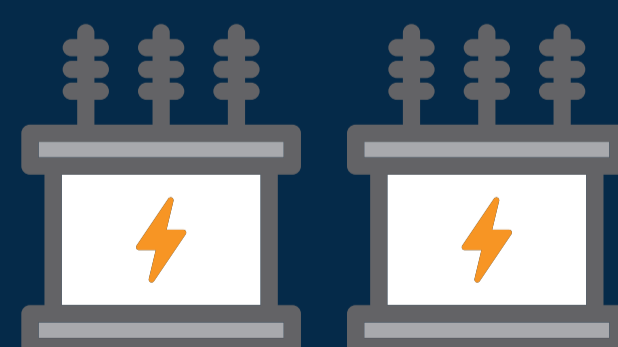


**53** different types of switchgear assets replaced or renewed

Replaced **930** **CROSSARMS**



Replaced **14** types of protection equipment and secondary systems



Replaced **16** **DISTRIBUTION TRANSFORMERS**

\*The 2023 regulatory year (RY23) runs from 1 April 2022 – 31 March 2023. All of the numbers for RY23 can be found in Section 8 of our full report.

## ENGAGING WITH CUSTOMERS

### CUSTOMER AND STAKEHOLDER ENGAGEMENT

- ✔ Extensive stakeholder engagement plan
- ✔ Positive feedback from customers about improved communication
- ✔ Using learning and insights gained from complaints

*We rate ourselves 5 out of 5 for this initiative.\**

### INVESTMENT REPRIORITISATION

- ✔ Engaged with councils across our region
- ✔ Information about reprioritisation was included in the May 2023 issue of our community newsletter 'Your Network, Your News'

*We rate ourselves 3 out of 5 for this initiative.\**

### CUSTOMER CHARTER AND COMPENSATION

- ✔ Developed a plan to consult with customers on our new 'Customer Commitments', to replace our current Customer Charter

\*You can find more detail in the full Annual Delivery Report at [www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp](http://www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp)

# 2023 REGULATORY YEAR AT A GLANCE\*

## CENTRAL OTAGO/WĀNAKA



We are pleased with the continued progress we made on asset renewal and maintenance work across the network, to reduce the level of safety risk.

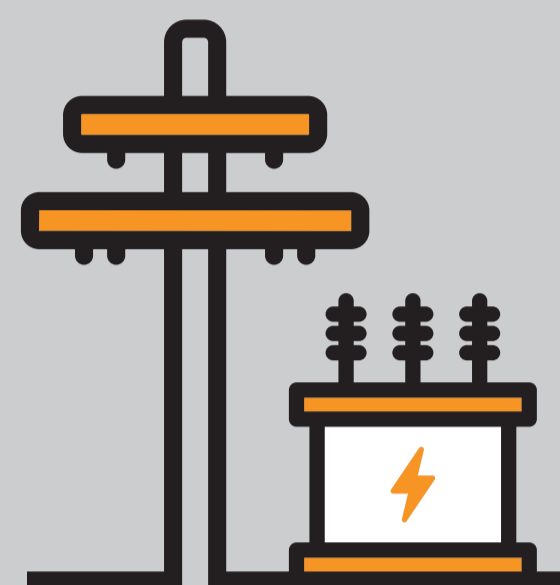
### \$44M

spent on capital expenditure



### \$14M

spent on operational expenditure



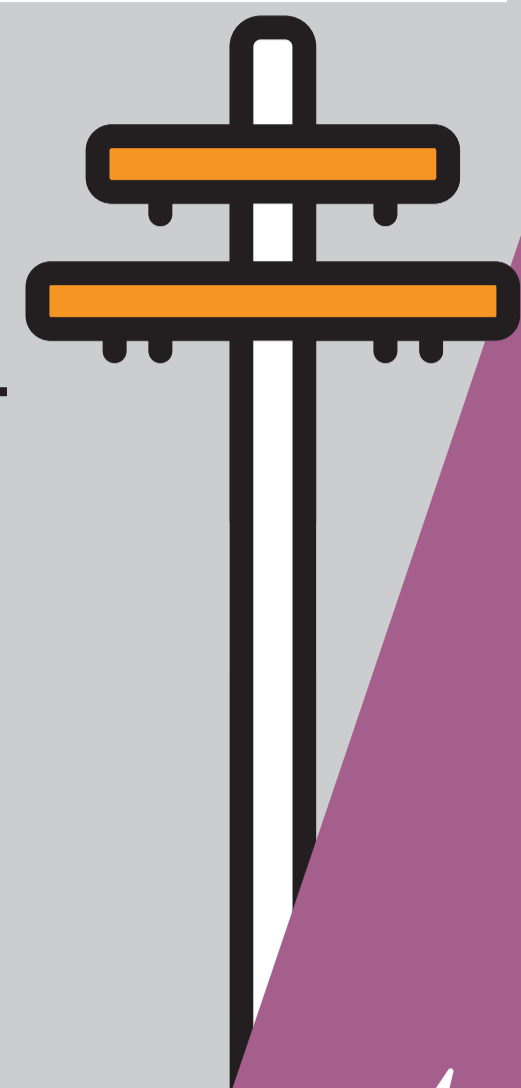
We undertook vegetation inspections on **45%**

of the Central Otago/Wānaka network and

**maintained vegetation on 42%**

of the network

Replaced over **20 KM** of **HIGH VOLTAGE LINES**

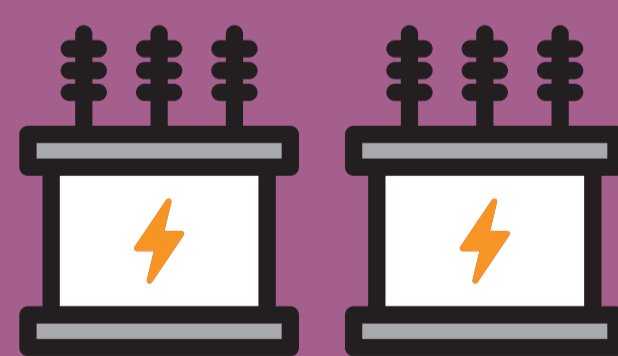
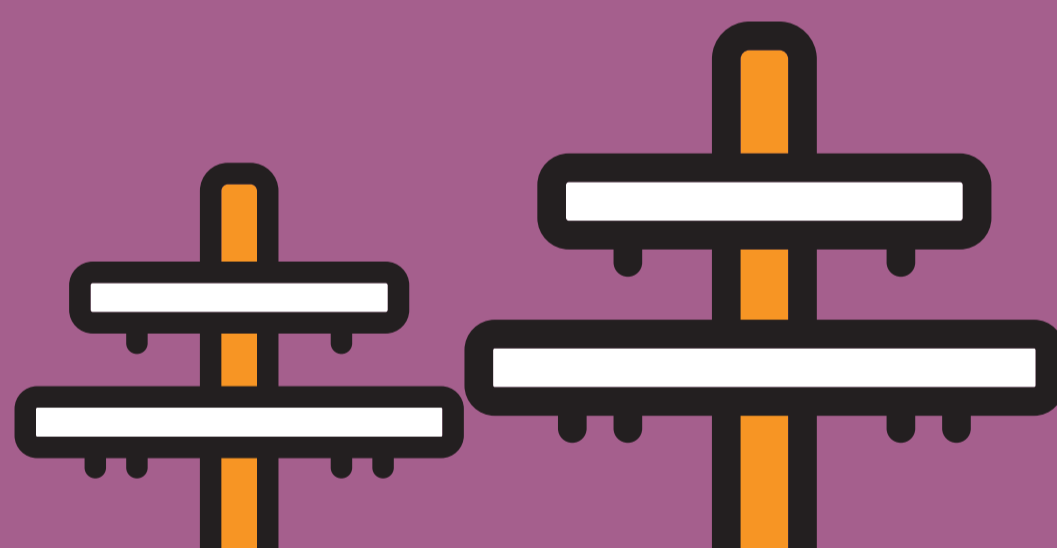


Replaced **724 POWER POLES**



**36** different types of switchgear assets replaced or renewed

Replaced **798 CROSSARMS**



Replaced **3 DISTRIBUTION TRANSFORMERS**

\*The 2023 regulatory year (RY23) runs from 1 April 2022 – 31 March 2023. All of the numbers for RY23 can be found in Section 8 of our full report.

## ENGAGING WITH CUSTOMERS

### CUSTOMER AND STAKEHOLDER ENGAGEMENT

- ✔ Extensive stakeholder engagement plan
- ✔ Positive feedback from customers about improved communication
- ✔ Using learning and insights gained from complaints

*We rate ourselves 5 out of 5 for this initiative.\**

### INVESTMENT REPRIORITISATION

- ✔ Engaged with councils across our region
- ✔ Information about reprioritisation was included in the May 2023 issue of our community newsletter 'Your Network, Your News'

*We rate ourselves 3 out of 5 for this initiative.\**

### CUSTOMER CHARTER AND COMPENSATION

- ✔ Developed a plan to consult with customers on our new 'Customer Commitments', to replace our current Customer Charter

\*You can find more detail in the full Annual Delivery Report at [www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp](http://www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp)

# 2023 REGULATORY YEAR AT A GLANCE\*

## TĀHUNA QUEENSTOWN



We are pleased with the continued progress we made on asset renewal and maintenance work across the network, to reduce the level of safety risk.

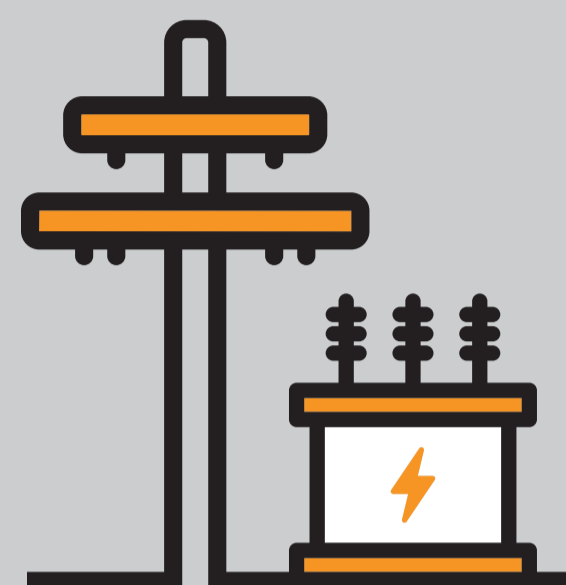
**\$19M**

spent on capital expenditure



**\$8M**

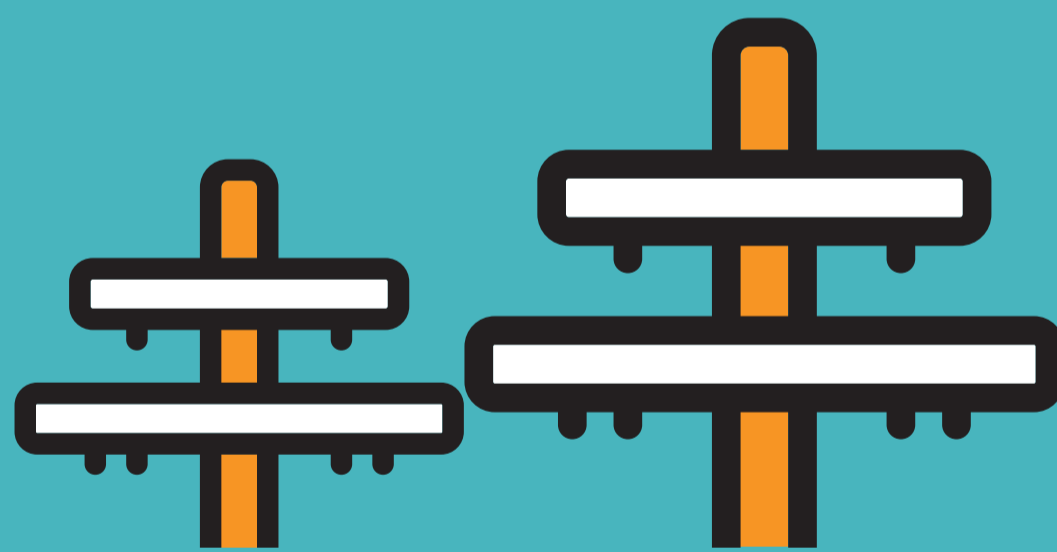
spent on operational expenditure



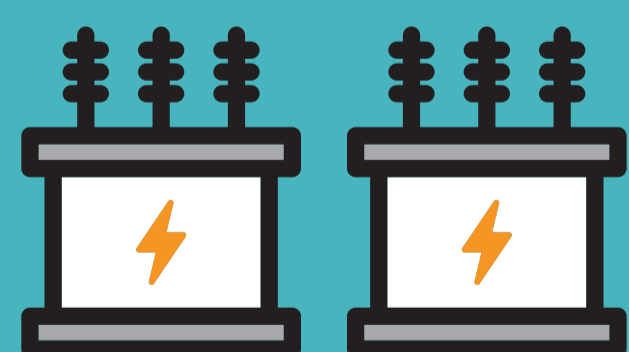
Replaced  
**243**  
**POWER**  
**POLES**



**20**  
different types  
of switchgear  
assets replaced  
or renewed



Replaced  
**232**  
**CROSSARMS**



Replaced **2**  
**DISTRIBUTION**  
**TRANSFORMERS**

We undertook vegetation  
**inspections on 69%**

of the Tāhuna Queenstown  
network and

**maintained**  
**vegetation on 66%**  
of the network

Replaced over

**5 KM** of  
**HIGH**  
**VOLTAGE**  
**LINES**

\*The 2023 regulatory year (RY23) runs from 1 April 2022 – 31 March 2023. All of the numbers for RY23 can be found in Section 8 of our full report.

## ENGAGING WITH CUSTOMERS

### CUSTOMER AND STAKEHOLDER ENGAGEMENT

- ✓ Extensive stakeholder engagement plan
- ✓ Positive feedback from customers about improved communication
- ✓ Using learning and insights gained from complaints

*We rate ourselves 5 out of 5 for this initiative.\**

### INVESTMENT REPRIORITISATION

- ✓ Engaged with councils across our region
- ✓ Information about reprioritisation was included in the May 2023 issue of our community newsletter 'Your Network, Your News'

*We rate ourselves 3 out of 5 for this initiative.\**

### CUSTOMER CHARTER AND COMPENSATION

- ✓ Developed a plan to consult with customers on our new 'Customer Commitments', to replace our current Customer Charter

\*You can find more detail in the full Annual Delivery Report at [www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp](http://www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp)

# WHAT WE DELIVERED

## DELIVERED ON TIME

- ✔ A new switch for the Roaring Meg generation gives us the ability to change to another circuit during planned and unplanned outages

## UNDERWAY AND ON TRACK

- New Omakau zone substation
- Arrowtown 33 kV ring upgrade
- Feasibility study for new Arrowtown zone substation
- Smith Street to Willowbank inter-tie in Ōtepoti Dunedin
- Design for new Riverbank transformer in Wānaka

## PROGRESSED WITH DELAYS

- Upper Clutha voltage support - due to equipment delays this will be completed in RY24
- Cardrona substation upgrade - completed at the time of writing this report
- Introduction of an asset management software solution - a dedicated team has been set up to help deliver the project

Further information on what we have delivered during RY23 is in Section 3 of our full report.

# FOCUS ON SAFETY

## NETWORK SAFETY RISKS

During RY23, we successfully reduced our reported network risk for a number of safety-sensitive fleets to lower than what we had forecast in our Safety Delivery Plan. We did this by:

- ✔ Improving how we approach our risk practices
- ✔ Refining our methodology to establish asset health information
- ✔ Improving our inspection data with more detail on the health of individual assets
- ✔ Reducing the number of assets above the risk tolerance line

## SAFETY-RELATED INCIDENTS

Safety is our number one priority, and we recognise we need to keep the public and our people safe around our network. We have seen an increase in safety-related incidents reported compared to RY22. We believe this is due to:

- ✔ Creating a system that improves data capture with more user-friendly reporting
- ✔ Refinement of the data we are capturing so we can classify events when they occur
- ✔ Regular reviews of events so that meaningful data is captured and followed up



Further information on how we're focusing on safety is in Section 3 of our full report.

# IMPROVING OUR PRACTICES

You can find more detail in the full Annual Delivery Report at [www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp](http://www.auroraenergy.co.nz/how-we-manage-the-network/delivering-our-cpp)



## HELPING CUSTOMERS UNDERSTAND ELECTRICITY PRICING

RATING 5

Continued to make progress against the pricing strategy and roadmap published in 2021. This year we:

- ✔ Continued to publish our cost of supply model
- ✔ Provided step-by-step examples of a 'standard' customer
- ✔ Simplified our control tariffs into a single tariff for each pricing area (Ōtepoti Dunedin, Central Otago/Wānaka and Tāhuna Queenstown)
- ✔ Removed seasonal tariffs and the difference between summer and winter usage
- ✔ Improved the pricing information on our website
- ✔ Continued to engage with key customers on pricing

## POWER QUALITY

RATING 5

Continued to improve how we keep tabs on the things that have an impact. This year we:

- ✔ Developed a distributed generation congestion policy to understand the available capacity on our low voltage networks
- ✔ Undertook analysis of how electric vehicles will impact our low voltage network
- ✔ Created network growth scenarios with a focus on the impact of decarbonisation through electrification
- ✔ Installed monitoring units on 40 distribution transformers in strategic parts of the network

## CUSTOMER CHARTER AND COMPENSATION

RATING 3

We have progressed our customer charter engagement by:

- ✔ Conducting a thorough internal review of our existing customer charter
- ✔ Completing an internal consultation with Aurora Energy staff on the proposed new charter
- ✔ Surveying other electricity distribution businesses about their charters



## OUTAGE MANAGEMENT

RATING 5

We implemented our outage planning initiatives that were in development in RY22, including:

- ✔ A new planned outage approval process
- ✔ Outage variation process to identify how we can improve when a planned outage either runs significantly over or under time
- ✔ Customer outage guidelines
- ✔ A new Outage Management System (OMS) to help us access real-time updates and a single data source to provide more timely updates for customers

## QUALITY DATA

RATING 5

Having accurate and reliable data about our assets is a necessity to deliver a reliable power supply. This year we:

- ✔ Defined and documented key asset and network data requirements
- ✔ Put in place a range of documentation and processes to protect the integrity of our data
- ✔ Improved the ways we clean up our data and introduced data audits

## ASSET MANAGEMENT AND SAFETY RISK

RATING FOR PRACTICES AND PROCESSES 4

RATING FOR IDENTIFYING AND REDUCING SAFETY RISK 5

We started work on a number of improvement initiatives, including:

- ✔ Our strategic asset management plan (SAMP) to capture our asset management strategy more comprehensively
- ✔ Asset fleet strategies, including training for our engineers
- ✔ A first draft of documented failure modes, including effects and consequence analysis
- ✔ An asset health formula linked to asset inspections. Alongside public safety criticality zones, these will help inform public safety risks

## COST ESTIMATION

RATING 5

We have progressed several cost estimation initiatives by:

- ✔ Improving the management of our unit rates, with a focus on major projects
- ✔ Developing reports to monitor costs by the primary asset type
- ✔ Revising our project scopes to provide more detail
- ✔ Reviewing our field service agreements, which includes agreeing contract unit rates and fixed prices with our contractors for volumetric work
- ✔ Starting development on a cost estimation tool
- ✔ Undertaking a high-level review of our operating expenditure forecasts
- ✔ Reviewing our forecast changes in operating expenditure as part of developing our 2023 Asset Management Plan (AMP)
- ✔ Monitoring and reviewing trends in our network operational expenditure as part of developing our 2023 AMP

## QUALITY ASSURANCE

RATING 5

We progressed our quality assurance improvements. This year we:

- ✔ Continued to implement process improvements for our work management capability
- ✔ Continued to focus on staff development and capabilities
- ✔ Implemented an internal construction works review standard to support our quality assurance staff
- ✔ Identified the maintenance activities performed on the network that would benefit from greater quality assurance
- ✔ Developed quality assurance metrics so we can compare the performance of our field service providers
- ✔ Trained staff on the improvements relating to quality assurance



## WHAT DO OUR RATINGS MEAN?

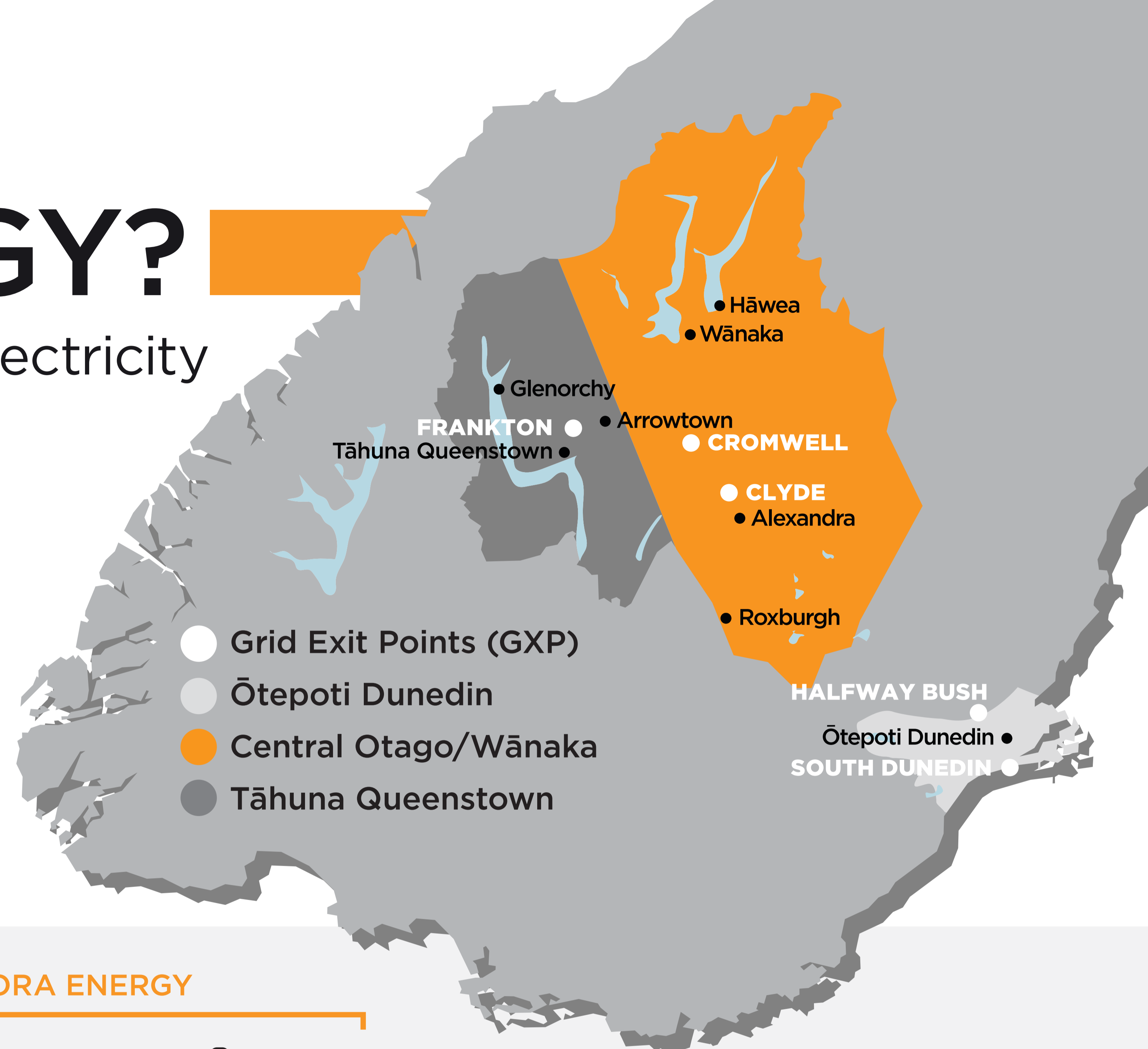
1 Not Started 2 Not Achieved 3 Partially Achieved 4 Largely Achieved 5 Achieved / Exceeded Plan

# WHO IS AURORA ENERGY?

Aurora Energy is one of the largest electricity networks in **Aotearoa New Zealand**.

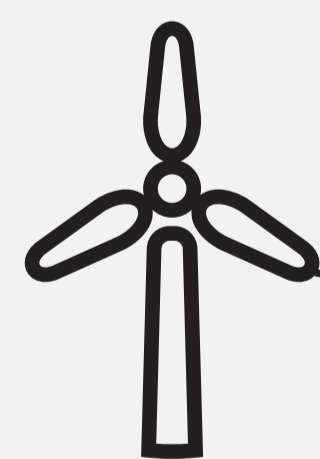
We own and manage the network that delivers electricity to some of the fastest growing areas and over the most diverse terrain in Te Waipounamu, the South Island.

We take the electricity from Transpower's national grid to power your homes, businesses and the wider community. We deliver a safe, reliable and sustainable electricity supply across Ōtākou in Ōtepoti Dunedin, Central Otago, Wānaka and Tāhuna Queenstown to over 200,000 people.



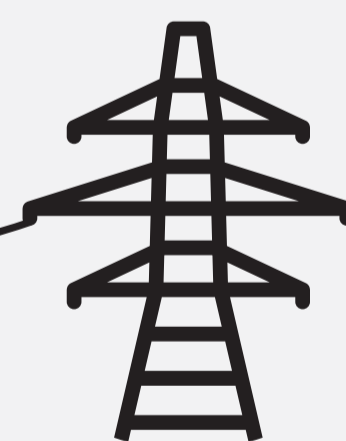
## HOW ELECTRICITY GETS TO YOU

AURORA ENERGY



### GENERATION

Power stations generate electricity from water, wind, geothermal gas and coal



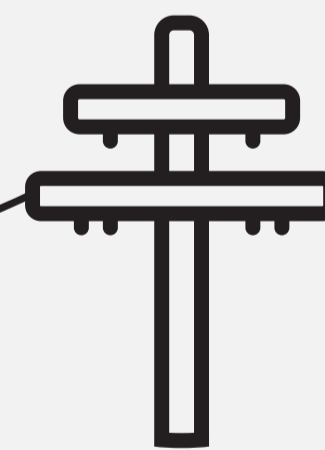
### TRANSMISSION

Extra high voltage electricity is moved across Transpower's national grid in bulk



### DISTRIBUTION

Aurora Energy takes electricity from the national grid and lowers the high voltage electricity for local use



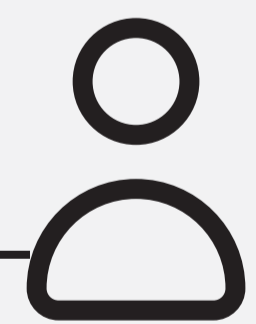
### DISTRIBUTION

Aurora Energy distributes the electricity to your place via power lines and underground cables



### RETAILERS

Retailers sell electricity to customers and deal directly with you



### CUSTOMERS

Electricity is used at your place

Aurora Energy is a wholly owned subsidiary of Dunedin City Holdings Limited, which in turn is owned by the Dunedin City Council.

Our principal regulators are the Commerce Commission and the Electricity Authority.

