



# YOUR SAY ON THE PRICES YOU PAY

OUR FUTURE DISTRIBUTION PRICING STRATEGY AND PROPOSAL EXPLAINED



# INTRODUCTION

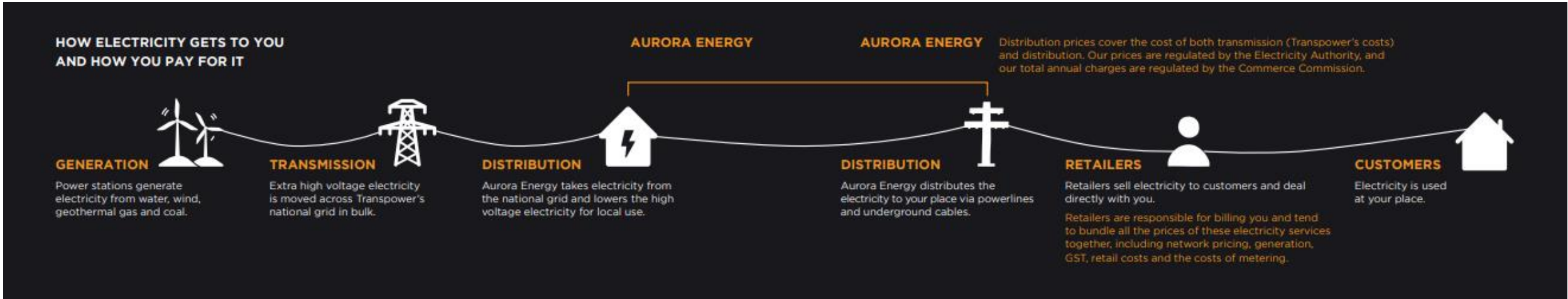




# PRICING 101

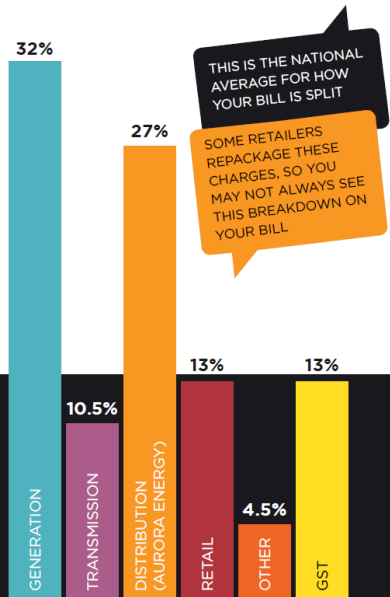




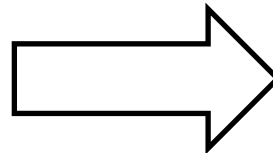


## ELECTRICITY PRICING AND HOW YOU'RE BILLED

The distribution component of your bill makes up around 27% of the **national average** household bill.



SOURCE: [www.ea.govt.nz/consumers/my-electricity-bill/](http://www.ea.govt.nz/consumers/my-electricity-bill/)



### Most retailers bundle all these costs into your bill...

Charges	Period	Rate (incl GST)	Quantity	Total
SIMPLE FLEXI				
211139900:1 Economy 24	29 Mar - 31 Mar	23.29 c/kWh	42 kWh	\$9.78
	1 Apr - 28 Apr	24.52 c/kWh	498 kWh	\$122.11
Daily charge (86.04 c/day x 31 days)				\$26.67
<b>Property charges for this period</b>			<b>540 kWh</b>	<b>\$158.56</b>

MOST RESIDENTIAL DISTRIBUTION PRICING IS CURRENTLY BASED ON HOW MUCH ENERGY YOU USE, REGARDLESS OF WHEN YOU USE IT. BUT, OUR COSTS ARE BASED ON BUILDING OUR NETWORK TO MEET PEAK DEMAND TIMES.



“Promoting competition in markets for the long term benefit of consumers.”

Approves annual revenue we can recover as part of our lines charges – and sets quality outputs

Sets the rules on the information we need to provide every year

Sets and administers the penalty / reward and enforcement framework

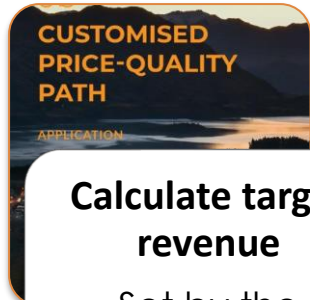


“Promoting competition, reliable supply and efficient operation in the electricity sector.”

Oversees distribution and transmission pricing methodologies (how the revenue pie is divided up).

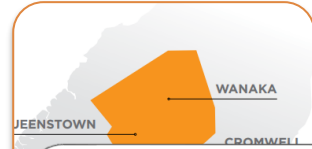
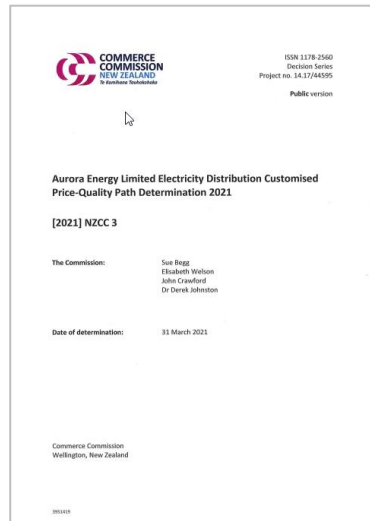
Oversees market design and market operations

monitoring and enforcing compliance with market rules.



## Calculate target revenue

Set by the Commerce Commission



## Allocate to pricing areas

- Queenstown
- Central Otago
- Dunedin



## Allocate to customer load groups

- Residential
- General (LG1 to LG5)

	Prices effective
CONNECTIONS	DISTRIBUTION
10,647	15.00
106	4.30

## Calculate customer price components

based on forecast usage & control discounts



# PART A OUR FUTURE PRICING STRATEGY

THE SHAPE OF ENERGY IS CHANGING



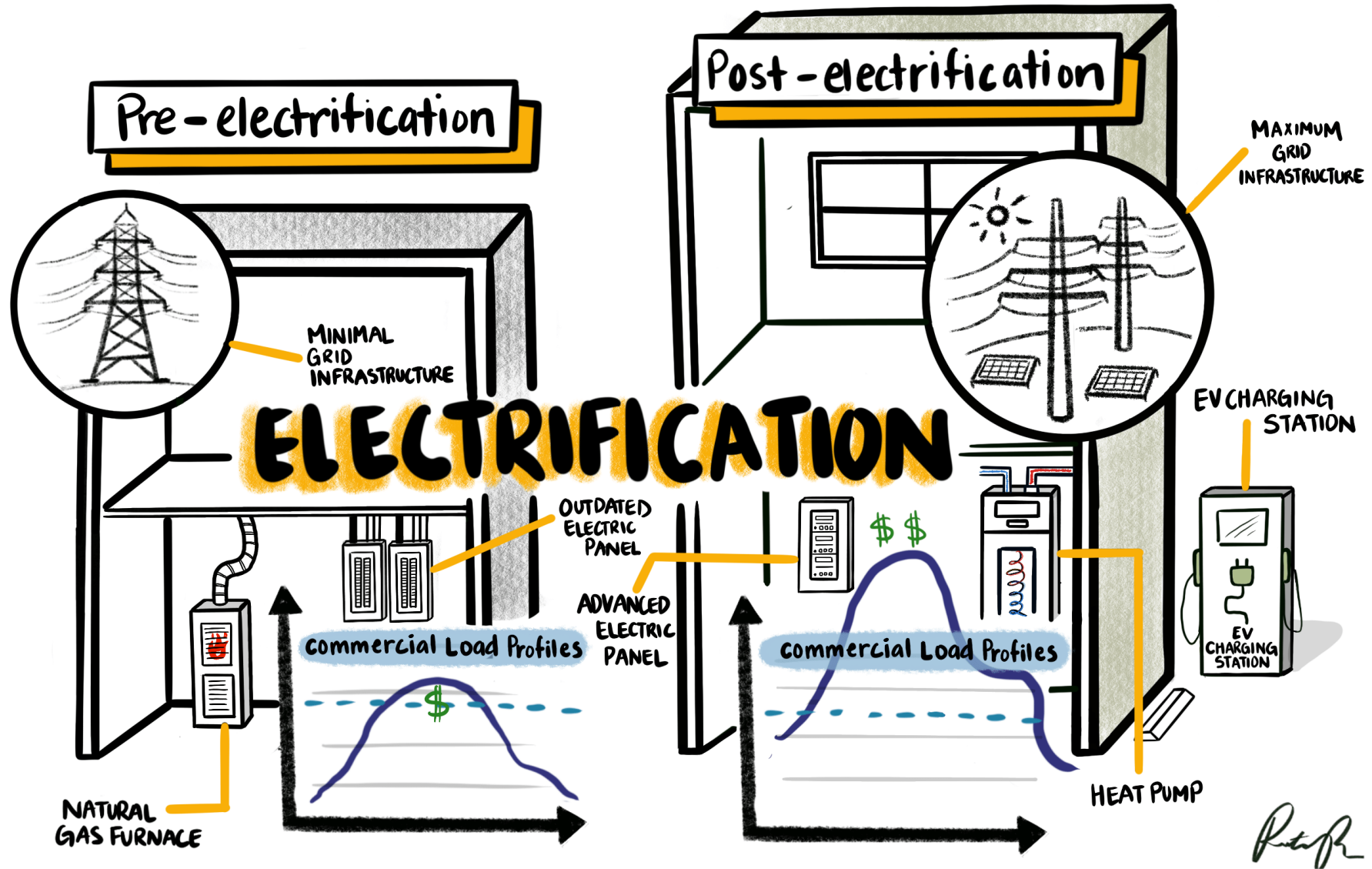
# We are expecting a step change increase in electricity demand



New Zealand has committed to achieving net-zero emissions by 2050, with key enablers being electrification of transport and process heat.

This has the potential to place demands that are beyond the capacity of electricity networks to deliver, resulting in the need for significant investments in growth that could exacerbate energy affordability issues, if not carefully managed









## THE FUTURE OF DISTRIBUTION PRICING AND THE PRICES WE CHARGE

1 FOR OVER 100 YEARS OUR RESIDENTIAL PRICES HAVE LARGELY BEEN BASED ON THE AMOUNT OF ELECTRICITY YOU CONSUME, REGARDLESS OF WHEN YOU USE IT

2 BUT, WE NEED TO BUILD OUR NETWORK TO MEET THOSE TIMES OF DAY WHEN EVERYONE NEEDS ELECTRICITY THE MOST

3 TYPICALLY, THOSE TIMES WHEN YOU'RE COOKING YOUR BREAKFAST IN THE MORNING, OR HEATING YOUR HOME IN THE EVENINGS

4 BUT, THE FUTURE OF ENERGY IS CHANGING...

I WANT TO HELP CREATE A ZERO-CARBON FUTURE...

5 EMERGING TECHNOLOGIES AND THE CHOICES CUSTOMERS MAKE WILL HAVE AN IMPACT ON THE WAY WE MANAGE OUR NETWORK & THE INVESTMENT DECISIONS WE MAKE

6 SO RATHER THAN JUST BUILD MORE POLES AND WIRES TO MEET DEMAND, WE'RE PROPOSING PRICING INCENTIVES FOR YOU BASED ON THE TIME OF DAY YOU USE ELECTRICITY. BECAUSE LOWERING PEAK DEMAND WILL DELAY NETWORK INVESTMENT!

MY HOT WATER IS ALREADY ON A CONTROLLED PRICE, SO IF I CHARGE MY EV WHILE I SLEEP & SET THE DISHWASHER FOR 11PM, I'LL SAVE MORE...

7 THERE WILL BE OPTIONS TO PAY LESS IF YOU USE POWER AT OFF-PEAK TIMES, OR PAY MORE WHEN YOU USE IT DURING PEAK TIMES

8 AND BECAUSE WE STILL HAVE TO OPERATE AND MAINTAIN THE ASSETS WE HAVE NOW, WE'LL RECOVER THE REST OF OUR COSTS THROUGH FIXED CHARGES. THAT WILL MEAN EVERYONE PAYS THEIR FAIR SHARE



# PART A OUR FUTURE PRICING STRATEGY

OVERVIEW





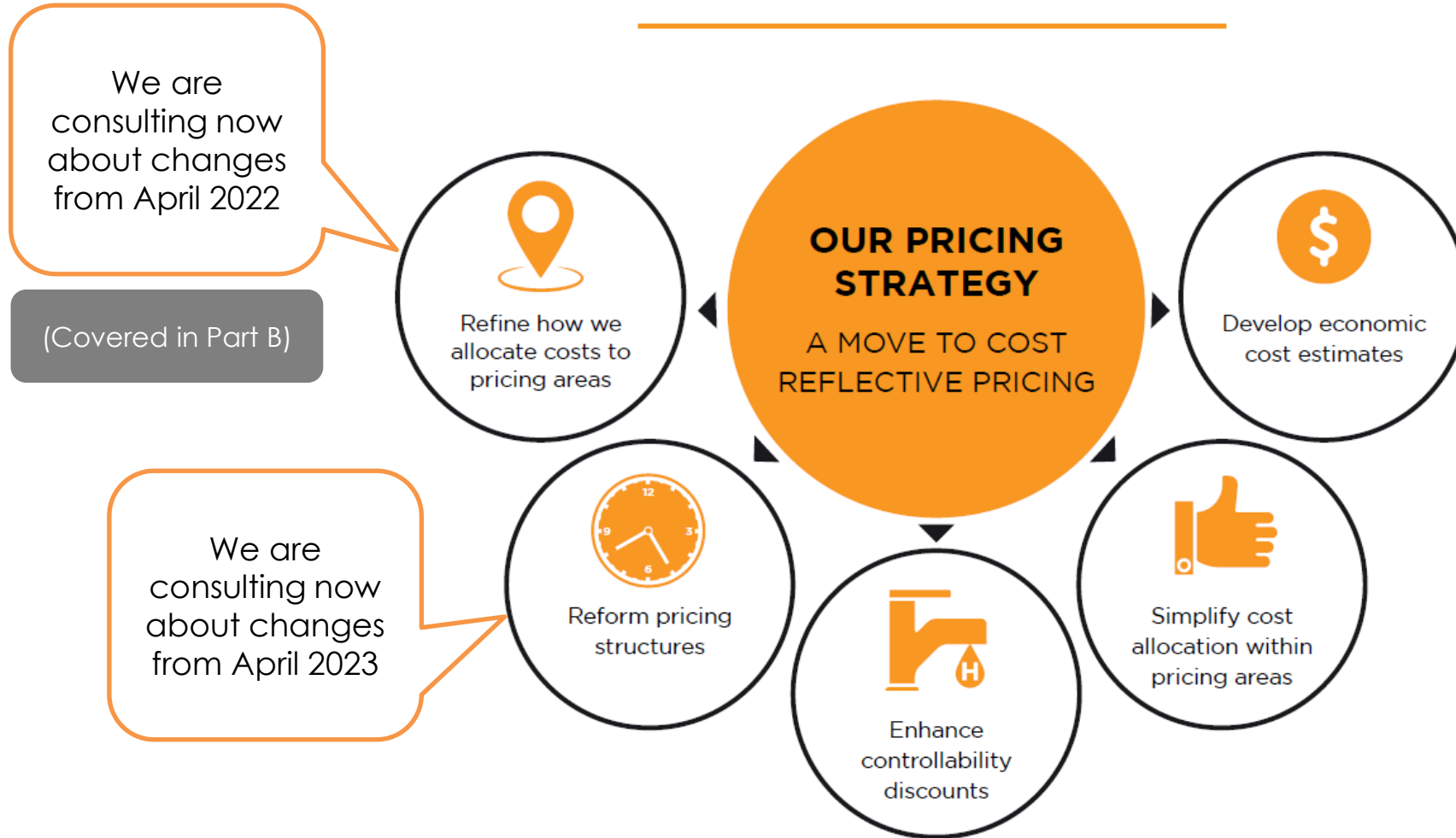
We need to be clear about a couple of things before we get into the detail of our future pricing strategy.

OUR PROPOSAL PRESUMES THAT OUR FUTURE DISTRIBUTION CHARGES WILL BE TRANSPARENTLY PASSED THROUGH TO YOU BY YOUR ELECTRICITY RETAILER.

THE PROPOSED WAY OF PRICING OUR SERVICES WILL NOT REVERSE THE PRICE INCREASES THAT ARE TO COME OVER THE NEXT FEW YEARS AS PART OF OUR CPP WORK PROGRAMME.



## OUR FIVE-POINT PLAN



- We are focussing on residential prices first. General prices will follow, but they are currently more cost reflective and residential prices, and can wait
- Changes will be made gradually over the next five years, in order to manage bill shock and allow customers to become used to how the new pricing structures will work.



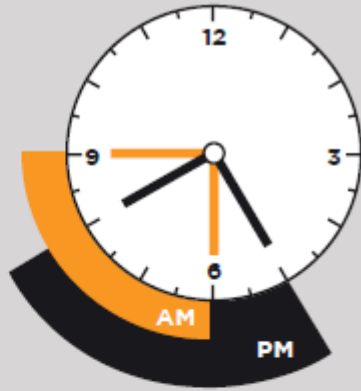
# PART A OUR FUTURE PRICING STRATEGY

TIME OF USE PRICES





FOR OVER A CENTURY MOST RESIDENTIAL DISTRIBUTION PRICES HAVE BEEN BASED ON ELECTRICITY CONSUMPTION, REGARDLESS OF THE TIME OF DAY IT IS USED. YET, OUR COSTS ARE BASED ON MANAGING THE NETWORK AROUND PEAK AND OFF-PEAK DEMAND NEEDS.



- ▶ We have an early morning peak on our network as people wake up, turn on heating, have showers and cook breakfast
- ▶ We have an early evening peak on our network when people return from work, heat their homes, cook meals, and watch television.

IF THE GROWTH IN PEAK DEMAND CAN BE EFFECTIVELY MANAGED WE MAY BE ABLE TO MINIMISE COSTLY INFRASTRUCTURE UPGRADES, AND THEREFORE, THE PRICES YOU PAY.



## WE PROPOSE NEW TIME-BASED CHARGES TO SIGNAL PEAK PERIODS

WE INTEND PHASING IN TIME-OF-USE CHARGES OVER A FIVE-YEAR PERIOD FROM 1 APRIL 2023.

TIME-OF-USE IS THE 'SWEET SPOT' FOR RESIDENTIAL CUSTOMERS FOR NOW. OTHER PRICING OPTIONS ARE TOO SOPHISTICATED FOR RETAILERS TO IMPLEMENT OR FOR CUSTOMERS TO OPERATIONALISE.

- ✘ We intend to implement time of use pricing with relatively weak price signals initially (the difference between peak and off-peak prices).
- ✘ Over the following five years, we will progressively increase the strength of the price signal until it is at an optimal level.
- ✘ This gives customers time to understand the implications of time of use pricing and to progressively adapt their consumption behaviour (small steps).
- ✘ We don't want to make sudden and severe changes that customers can't cope with.



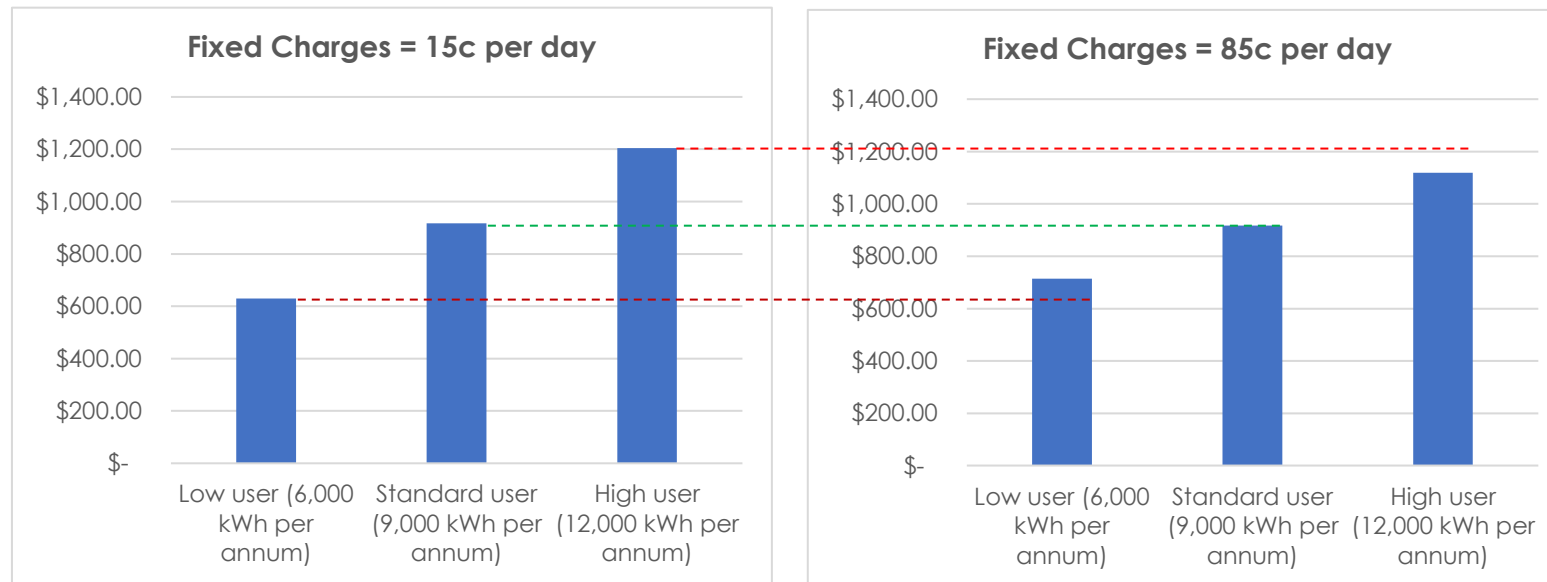
# PART A OUR FUTURE PRICING STRATEGY

FIXED PRICES



Aurora  
ENERGY

# Lower fixed charges phased out





# The proportion of fixed charges will vary



- ✗ Because time of use charges are designed to signal future network costs, areas where growth is forecast to be low will see:
  - ✗ A relatively smaller proportion of their annual charge from time of use prices, and a greater proportion of their annual charge from fixed prices.
    - ✗ A weaker (smaller) differential between peak and off-peak prices.
    - ✗ Because growth (and therefore network congestion) varies across the network, the proportions of fixed and time of use charges will vary from region-to-region.
- ✗ This **does not** mean that more revenue will be recovered from a congested area under our future pricing approach, compared to existing pricing. It does mean that individual incentives to adjust energy consumption behaviour will be different, however



# PART A OUR FUTURE PRICING STRATEGY

CONTROLLED SERVICE DISCOUNTS



Aurora  
ENERGY



# We will be retaining our controlled services



- ✧ We intend to retain our discounted pricing for controlled services, including:
  - ✧ Hot water
  - ✧ Night-store heating
  - ✧ Night-only service
- ✧ These services help us to manage peak demand, and already receive discounted pricing; however, we need to review those discounts to make sure that they are consistent with the peak / off-peak pricing signal.
- ✧ Controlled services could be extended in the future if customers want that. Additional services might include off-peak charging of electric vehicles and other batteries.



# PART A OUR FUTURE PRICING STRATEGY

INCENTIVES ON NEW TECHNOLOGIES







## Solar installations without battery storage

- ✘ Generation highest in the middle of the day when demand is lowest.
- ✘ Export of excess generation can create voltage issues.
- ✘ Users still require the use of the grid during peak times.

## Solar installations with battery storage

- ✘ Users can store excess generation from the middle of the day and then discharge to power their home during peak times.
- ✘ Reduces the overall demand on the network during peak times.
- ✘ Customers will minimise their time of use charges.

## Stand alone battery storage

- ✘ Allows customers to shift their electricity demand to off-peak times and reduce their time of use charges.
- ✘ Stand-alone isn't as beneficial to customers as when paired with solar panels, because customer still have to purchase their energy (albeit at lower, night rates).

## Electric vehicles

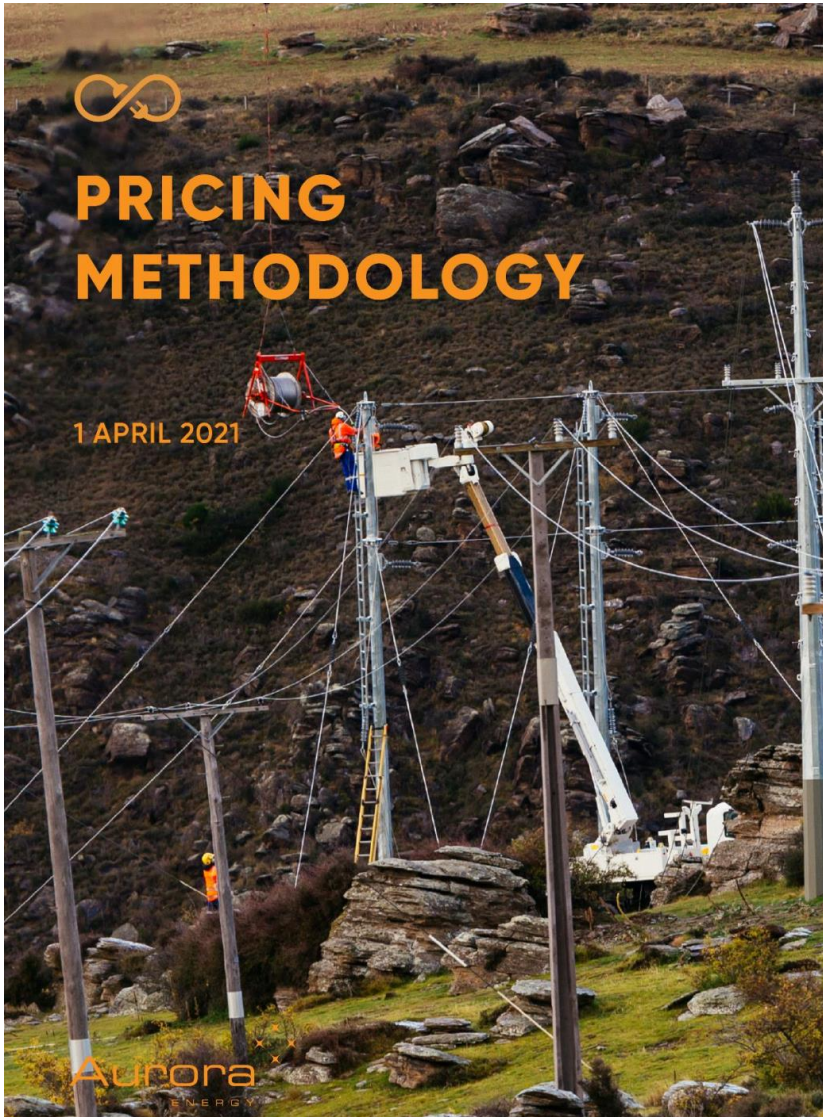
- ✘ Time of use charges will provide incentives for electric vehicle owners to charge at off-peak times.
- ✘ As technology evolves customers may be able to use their vehicle's battery to power their household during peak times and recharge at off-peak times.

# PART B PRICING METHODOLOGY REFINEMENT

FUTURE PRICING ROADMAP

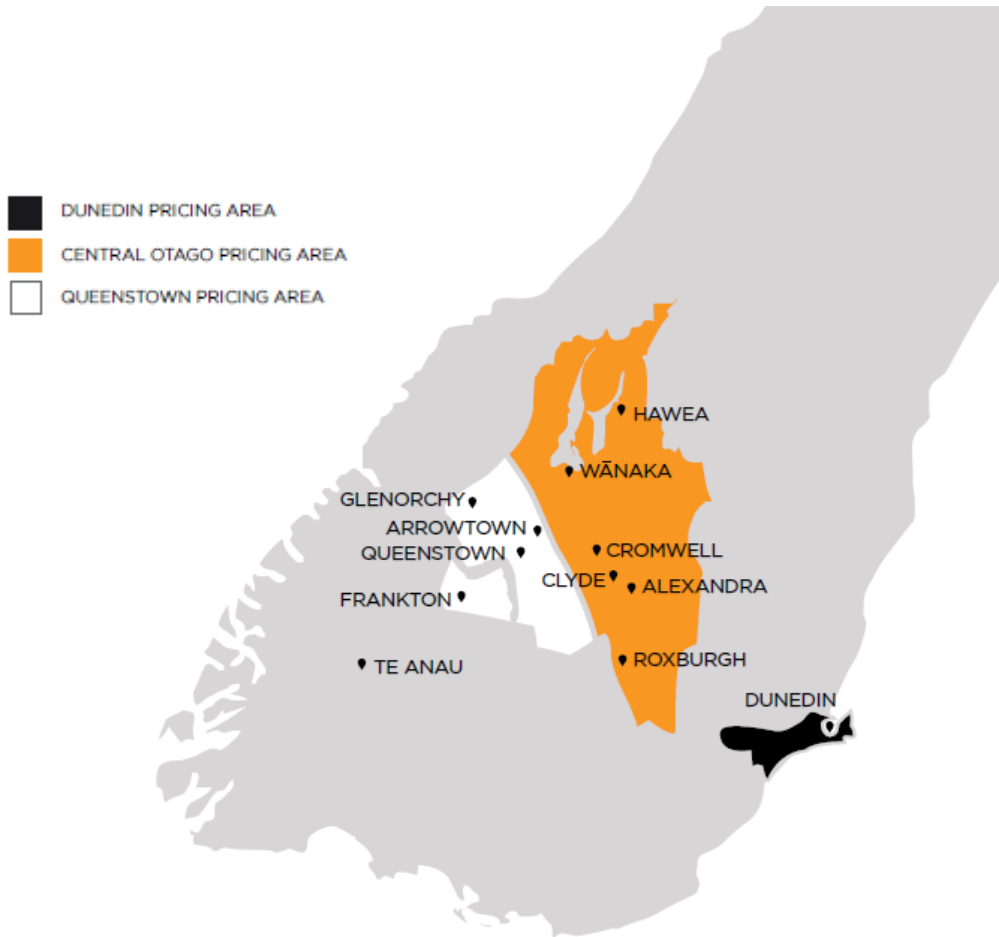






- ✘ Published annually (31 March) on our website
- ✘ Explains:
  - ✘ how costs are allocated to each of our pricing areas;
  - ✘ how costs are allocated to customer load groups in each pricing area;
  - ✘ How price components are calculated;
- ✘ Includes a summary of our pricing strategy and pricing roadmap.
- ✘ Includes some pricing policy information; e.g., seasonal loads.
- ✘ Describes the pricing methodology for large, stand-alone distributed generation connections.

# We propose retaining our existing pricing areas



OUR CURRENT PRICING PHILOSOPHY IS THAT THE COSTS OF PROVIDING NETWORK ASSETS WITHIN A PRICING AREA SHOULD LIE WHERE THEY FALL.

WE CONSIDER THAT OVERHEAD COSTS HOWEVER SHOULD BE SPREAD ACROSS THE ENTIRE CUSTOMER BASE, WHERE SCALE BENEFITS CAN BE REALISED.



# Allocating costs to pricing areas



In response to feedback received during our CPP consultation, we made refinements to the way we allocate operational costs to pricing areas before we set pricing in March this year.

We are proposing further changes to refine the way we allocate capital investment-related costs to pricing areas.

We currently use an estimate of replacement cost to allocate capital investment-related costs.

COMPONENT	% OF TOTAL COSTS	RATIONALE
<b>CAPITAL RELATED COSTS:</b>		
<ul style="list-style-type: none"><li>• Return on capital</li><li>• Depreciation</li><li>• Tax</li><li>• Asset revaluations and other regulatory revenue</li></ul>	47.5%	All capital related costs are allocated to pricing areas in proportion to that pricing area's share of the total estimated network asset replacement cost. This approach reflects the level of network investment required by Aurora Energy to provide services.
<b>PASS THROUGH AND RECOVERABLE COSTS:</b>		
Local authority rates	0.9%	Rates are levied by councils based on Regulated Asset Base (RAB) value. Some rates are directly attributable to pricing areas; however, where allocation is required, we have maintained our allocation to pricing areas based on estimated asset replacement cost.
Commerce Act levies	0.3%	Commerce Act levies are allocated to distributors based on Regulated Asset Base (RAB) value. We have maintained our allocation to pricing areas based on estimated replacement cost.
Fire Emergency New Zealand (FENZ) levies	0.0%	FENZ levies are broadly based on asset values, via insurance premia. We have allocated FENZ levies to pricing areas based on the estimated asset replacement value of each pricing area.
IRIS - Capex	(1.2%)	The capex IRIS incentive in Regulatory Year 2022 (RY22) is a penalty for overspending capital expenditure allowances in the previous regulatory period. We have allocated the capex IRIS incentive (refund) amount based on the estimated asset replacement cost of each pricing area.



THERE ARE TWO ALLOCATORS THAT WOULD BE SUITABLE FOR DETERMINING THE RECOVERY OF INVESTMENT-RELATED COSTS IN EACH REGIONAL PRICING AREA.

## 1. REPLACEMENT COST (RC)

Defined as the present-day cost of building an equivalent network that would provide a broadly equivalent level of service. Our calculation of RC is based on standard replacement cost values published in the Commerce Commission's 2004 Optimised Deprival Valuation (ODV) Handbook. The values in the ODV handbook are adjusted for inflationary effects from the date of publication to present day, and then multiplied by the corresponding quantity of assets to determine the total RC in each pricing area. RC delivers a relatively stable network valuation, with annual changes limited to inflation and addition of new assets.

## 2. REGULATED ASSET BASE (RAB)

RAB is the regulatory construct defined in the Commerce Commission's Input Methodologies that is used to value distributors' networks, and upon which they may earn a 'normal' return. Aurora Energy publicly reports its audited RAB as part of its annual regulated information disclosure. The RAB valuation changes each year to reflect asset additions and disposals, depreciation of existing assets, and asset revaluations. This means the RAB valuation is likely to fluctuate more than RC.

We are proposing to use RAB as the allocator from 1 April 2022.

		ASSESSMENT CRITERIA			
		REFLECTS UNDERLYING COST DRIVERS	RELIABLE AND STRAIGHTFORWARD CALCULATION	ALLOCATOR IS TRANSPARENT	ALLOCATOR IS PREDICTABLE AND STABLE
ALLOCATOR OPTIONS	REPLACEMENT COST (RC)	✓	✗	✗	✓
	REGULATED ASSET BASE (RAB)	✓	✓	✓	✗



# Regional impact of moving to RAB allocation...



Changing the allocation basis will result in changes to the allocated costs and associated charges.

ALLOCATION BASIS	REGIONAL PRICING AREA		
	DUNEDIN	CENTRAL OTAGO	QUEENSTOWN
TOTAL REVENUE ALLOCATION USING RC	\$56.6m	\$31.0m	\$19.4m
TOTAL REVENUE ALLOCATION USING RAB VALUES	\$57.0m	\$30.0m	\$20.0m
CHANGE IN REVENUE ALLOCATION	+ \$0.4m	- \$1.0m	+\$0.6m

		AVERAGE MONTHLY CHARGE FOR A STANDARD CONSUMER*		
		DUNEDIN	CENTRAL OTAGO	QUEENSTOWN
ALLOCATION BASIS	INDICATIVE MONTHLY LINE CHARGE (RC)	\$69.80	\$124.10	\$97.00
	INDICATIVE MONTHLY LINE CHARGE (RAB)	\$70.30	\$120.10	\$99.80
	ESTIMATED CHANGE IN MONTHLY LINE CHARGE	+\$0.50	-\$4.00	+\$2.80



## Queenstown Network

C1. Residential Connections	Code	(D) Distribution	(P) Pass-through	(D + P) Delivery	Units
<b>Daily Price Component</b>					
Daily Fixed Price (≤15kVA)	FRSD15	15.00		15.00	¢/day
Daily Fixed Price (≤8kVA)	FRSD8	4.10		4.10	¢/day
<b>Volumetric Price Component</b>					
Uncontrolled - Summer	201	8.80	0.34	9.14	¢/kWh
Uncontrolled - Winter	201	10.71	3.64	14.35	¢/kWh
Controlled (20hr)	209	5.06	1.15	6.21	¢/kWh
Controlled (16hr)	206	2.25	0.52	2.77	¢/kWh
Night Boost (13hr)	203	3.31	0.75	4.06	¢/kWh
Night Boost (11hr)	204	2.02	0.47	2.49	¢/kWh
Night Only	208	1.44		1.44	¢/kWh



## Queenstown Network

C1. Residential Connections	Code	Delivery	Units
<b>Daily Price Component</b>			
Daily Fixed Price (≤15kVA)	FRSD15	15.00	¢/day
Daily Fixed Price (≤8kVA)	FRSD8	4.10	¢/day
<b>Volumetric Price Component</b>			
Uncontrolled - Summer	201	9.14	¢/kWh
Uncontrolled - Winter	201	14.35	¢/kWh
Controlled (20hr)	209	6.21	¢/kWh
Controlled (16hr)	206	2.77	¢/kWh
Night Boost (13hr)	203	4.06	¢/kWh
Night Boost (11hr)	204	2.49	¢/kWh
Night Only	208	1.44	¢/kWh



# THE CONSULTATION PROCESS





## GUIDE TO MAKING A SUBMISSION

We have included a series of feedback questions online to help you develop your submission, and to help us understand your feedback. Our Consultation closes on 3 December 2021. To provide feedback on our proposal go to:

**[YOURSAY.AURORAENERGY.CO.NZ](https://yoursay.auroraenergy.co.nz)**

Alternatively, if you would like to send a hardcopy submission, you can download the form at [yoursay.auroraenergy.co.nz](https://yoursay.auroraenergy.co.nz) or call us on **0800 220 005** to request a copy.

You can post or email your submission to:

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