

# Distribution Pricing Roadmap

May 2024



# INTRODUCTION

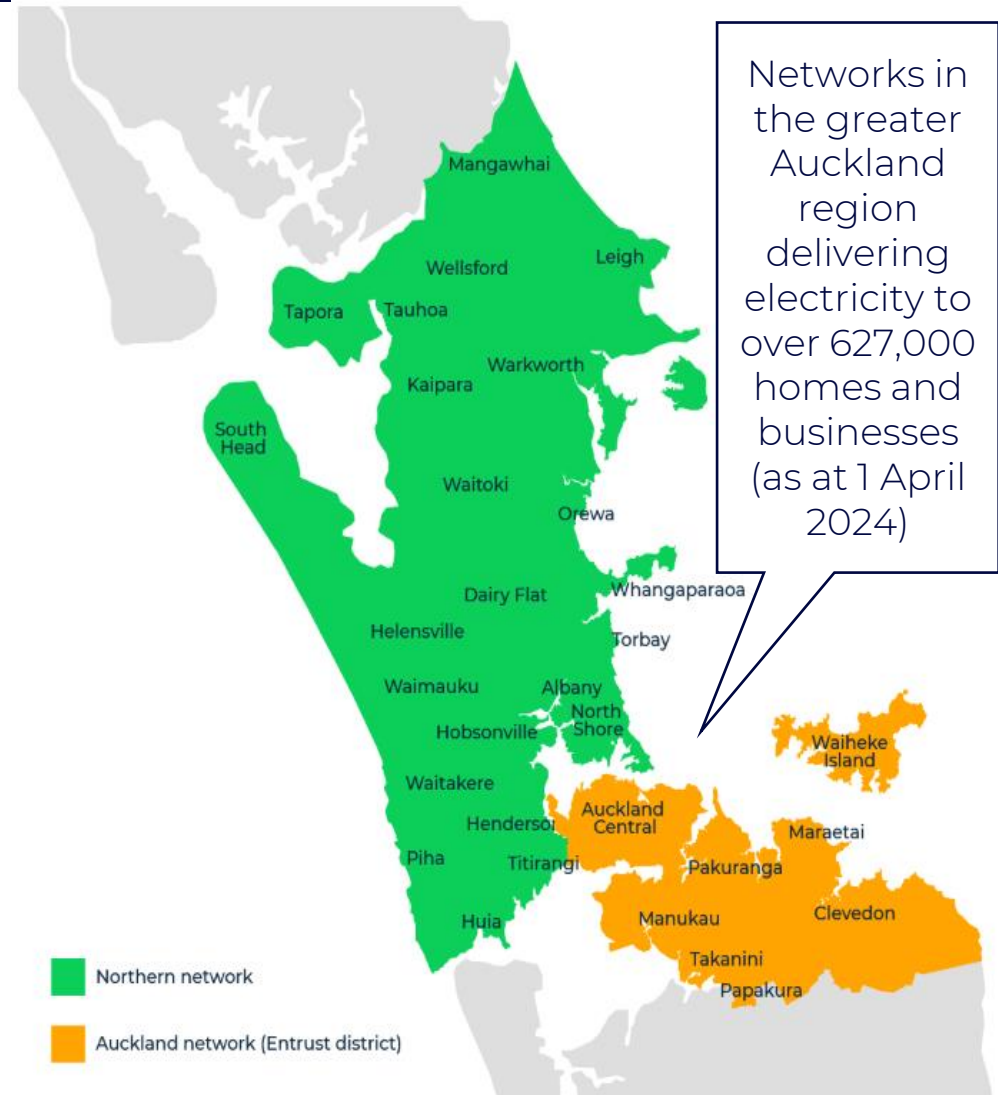
Vector provides electricity lines services to consumers via its electricity distribution network covering the Auckland region. Vector recovers the cost of providing electricity lines services to:

- existing connections through electricity distribution prices (lines charges), including published standard prices<sup>1</sup> and (in a limited number of circumstances) non-standard prices; and
- new or enhanced connections through capital contributions<sup>2</sup> (upfront one-off payment) as well as line charges.

Our electricity pricing roadmap sets out how we are evolving our prices to enable and deliver better outcomes for consumers, though recognising for most connections we price / bill the end user's retailer not the end user themselves. The roadmap is an evolving document and is updated periodically, but at least once a year.

Please note that this document does not contain our Pricing Methodology<sup>3</sup> which is published every year alongside our pricing schedules.

This roadmap sets out, as at the month of publication, our view of the reform we believe will deliver the best outcomes, however we note that, we are not bound to follow the initiatives described here as we update our views on how to best deliver for our customers.



<sup>1</sup> Pricing schedule available at <https://www.vector.co.nz/personal/electricity/about-our-network/pricing>

<sup>2</sup> Capital contribution policy available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/capital-contributions>

<sup>3</sup> Pricing methodology available at <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/pricing-methodology>



# REGULATORY CONTEXT

Distribution pricing stakeholder forums (Sep 2023)

NZCC's Input Methodology final decision (Dec 2023)

NZCC's DPP4 reset draft determination (May 2024)

Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024
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Targeted reform of distribution pricing consultation (July 2023)

Distribution pricing scorecards 2023 (Oct 2023)

Distribution pricing update (May 2024)

- Targeted Reform of Distribution Pricing is a key focus of the Electricity Authority (EA). The regulator has paused their pricing scorecards for 2024 as it has provided an update in May 2024 on its four focus areas:
  - Connection charging
  - Peak/ off-peak pricing
  - Retailer response
  - Target revenue allocation
- Vector looks forward to engaging with the EA on the proposed next steps in each of these categories. We have also provided further details on slide 7 on our recent progress.
- The Commerce Commission is also in the thick of its default price-quality path (DPP) reset for the regulatory period 2026- 2030.



# APPROACH TO OUR ANNUAL PRICE REVIEW



Data-driven analysis



Meet regulatory requirements including Electricity Authority's Pricing Principles



Ensure prices appropriately reflect costs to the system



Assessment of evolving technologies (i.e. distributed energy resources (DERs))



Consumer insights including affordability



Leverage international best practice and expert advice



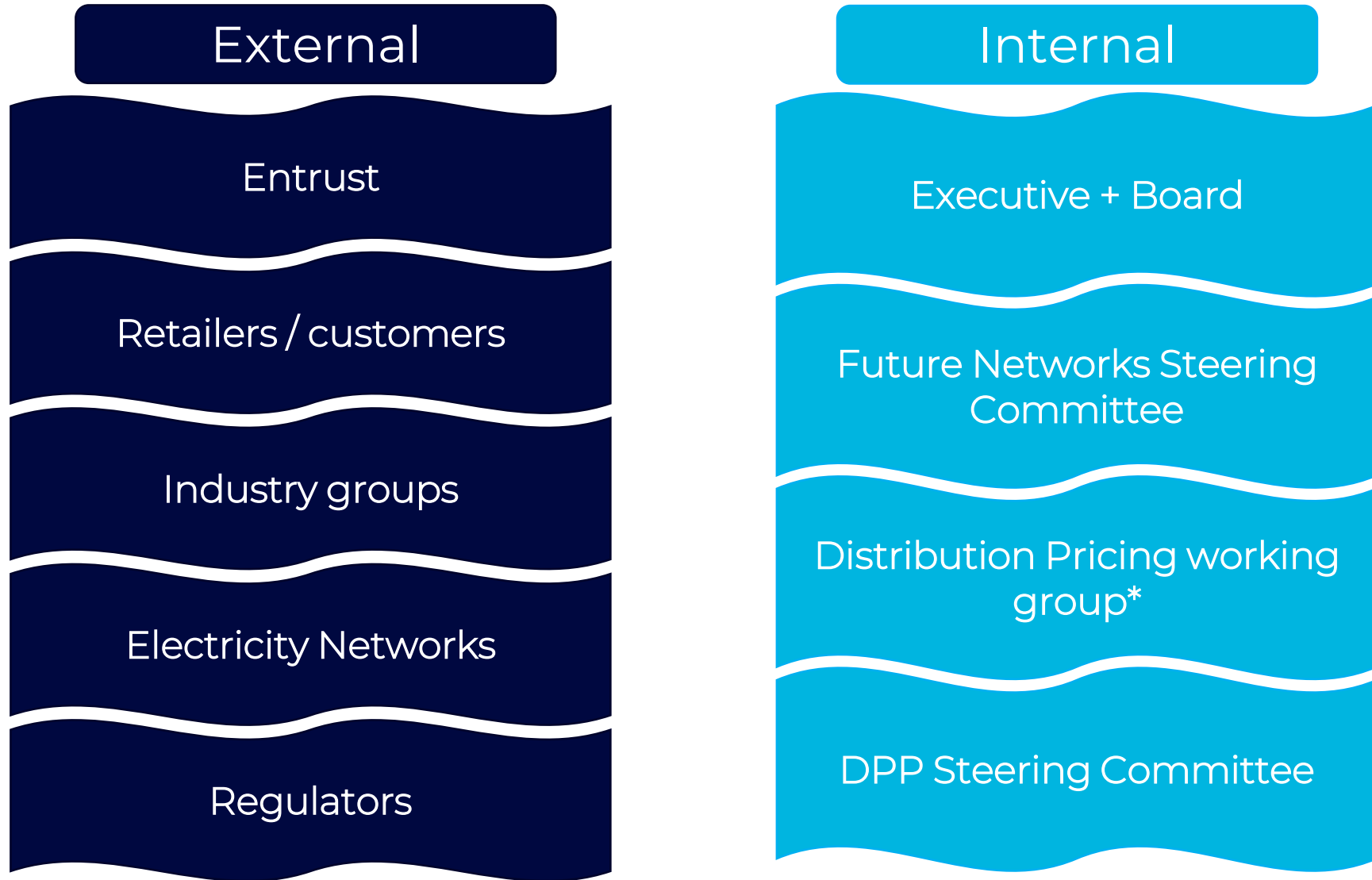
Industry engagement (e.g. customers and direct bill end users)



Stakeholder consultation



# ENGAGEMENT ON DISTRIBUTION PRICING



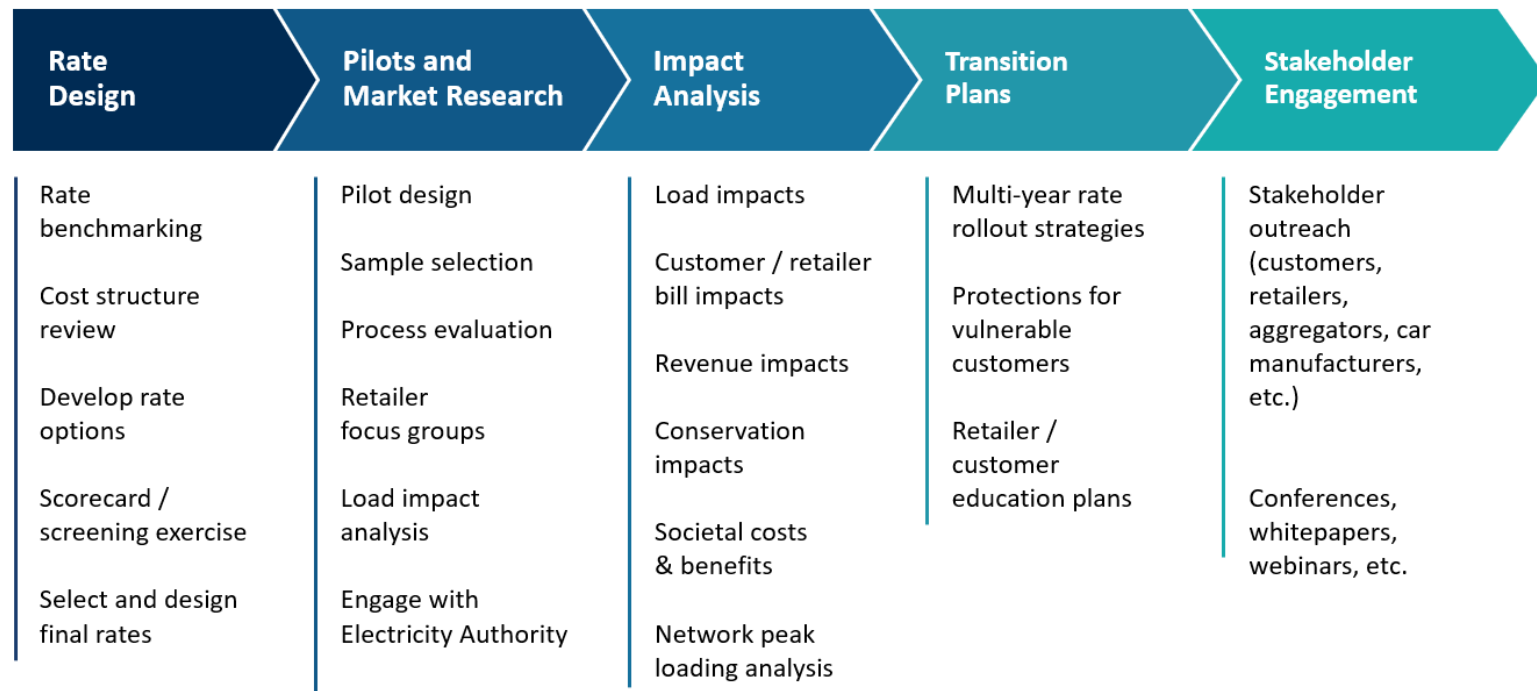
\*Our internal distribution pricing working group was set up in Q2 2024 to drive pricing reform at Vector – we will provide a further update on its objectives and outputs in our next roadmap in 2025

# BRATTLE GUIDANCE ON PRICING VISION

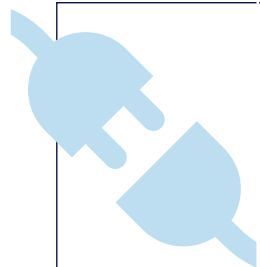
Vector engaged the Brattle Group from July to October 2023 to develop a “pricing vision document” that presents unconstrained recommendations for designing Vector’s distribution tariffs to support its Symphony strategy.



- Brattle has provided guidance to Vector on how to transition its suite of tariffs over the next 5-10 years
- The figure to the right demonstrates Brattle’s view of the different processes within this transition
- Brattle's insights from internationally used tariffs will be valuable for Vector's future tariff development
- Vector is considering Brattle’s recommendations being mindful the uptake of DERs being the main driver recommended for more granular pricing

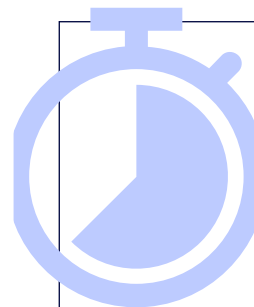


# THE AUTHORITY'S FOUR FOCUS AREAS



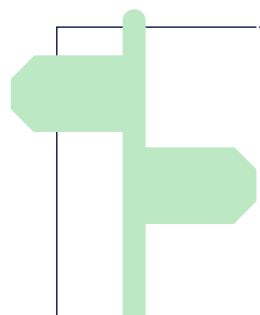
## Connection charging

- In December 2023 Vector removed our standard prices for new electricity connections to increase cost reflectivity
- We will wait for the consultation on any code amendments before any further changes on connection charging



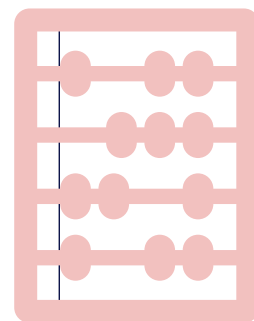
## Peak / off peak charging

- Exploring the effective calculation and use of the long-run marginal cost (LRMC) to send price signals and develop new orchestration tariffs to potentially encourage and educate the non-traditional usage patterns



## Retailer response

- In 2023 Vector introduced incentives to encourage retailers towards time-of-use billing
- Vector is currently working with the ENA on their information request around retailer response with details of the above



## Target revenue allocation

- Concurrently with the investigation of LRMC, exploring the suitable non-distortionary allocation methods for the residual costs



# PROGRESS AGAINST 2023 ROADMAP

The table below picks up all the activities due for action in the calendar year 2023 from our last published Roadmap in April 2023\*.

Reform and allocations	We did...
Cost of service model (COSM) - lines prices	Review delayed until Q2/ Q3 2024
Capital contributions policy annual review	Vector updated its capital contributions policy in December 2023 to remove standard prices for new electricity connections to increase cost reflectivity
Interaction between connection charges and line charges	We will wait for the EA's consultation on Code amendments for connection charging but are pursuing flexible connections with larger consumers
Financial impact modelling extended to industrial & commercial	Modelling completed – we will continue to run the model to inform our gradual transition to commercial tariff alignment between our regions
Tariff alignment between Auckland & Northern for commercial customers	The above modelling results show we must transition slowly to avoid price shocks to certain I&C consumers – we started in April 2024 will continue over a number of years (subject to future price re-design plans)
Consideration and implementation of locational pricing beyond Transmission	Brattle recommends that a transition to locationally-varying pricing happen gradually and takes into account a comparison of the costs associated with providing that granularity relative to the benefits it provides.
Review of Transmission GXP pricing post implementation	The Authority has provided us with feedback which we are considering for our PY25 price change. We will engage with the Authority once we have developed our position.
Interaction between power factor & injection	Introduction of Solar tariff for commercial ICPs to address power factor from 1 <sup>st</sup> April 2024

\*Please see Appendix 1 for our 2023 disclosed timelines





# PROGRESS AGAINST 2023 ROADMAP (cont.)

Tariffs	We did...
Pass through rates and structures (SRAM)	Vector published our methodology for allocating settlement residue effective 1 <sup>st</sup> April 2023 and available <a href="#">here</a> .
Capacity constraint tariffs	Vector is exploring LRMC calculations/ proposals within our internal Distribution Pricing working group alongside the future use of flexible connections, non-wire alternatives for signposted investments, and operating envelopes
Embedded generation tariffs (distribution only)	Considering post-Brattle feedback
DER residential tariff	Implemented 1 <sup>st</sup> April 2023 – continue to monitor and evolve in response to technology, customer and industry evolution
Peak to off-peak differential and time periods for mass market tariffs	Considering post-Brattle feedback and investigating timing of network congestion now and in future
Pricing for private and public electric vehicles charging	We continue to monitor the efficacy of our DER tariff in relation to EV uptake
Additional commercial tariffs for HV connections	Implemented 1 <sup>st</sup> April 2023 – continue to monitor

# PRICING TIMELINE - REFORM & ALLOCATIONS

● Reform ongoing
 📍 Completed
 ✗ Cancelled






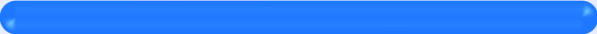

CY2024
2025
2026
2027
2028

	CY2024	2025	2026	2027	2028
Cost of service model (COSM) (allocation of revenues)	<div style="display: flex; align-items: center;"> <div style="width: 100px; height: 15px; background-color: blue; border-radius: 5px; margin-right: 10px;"></div> <div style="border: 1px solid black; background-color: black; color: white; padding: 5px; font-size: 0.9em;">                     Start of review delayed until Q2/ Q3 2024                 </div> </div>				
Capital contributions policy annual review	●	●	●	●	●
Interaction between connection charges and line charges	<div style="border: 1px solid black; background-color: black; color: white; padding: 5px; font-size: 0.9em;">                     Progress dependent on the outcome of the code amendment consultation. We will continue development of flexible connections                 </div>				
Financial impact modelling extended to industrial & commercial	📍				
Tariff alignment between Auckland & Northern for commercial customers	●	●	●	●	●
Consideration and implementation of locational pricing beyond Transmission	<div style="width: 100%; height: 15px; background-color: blue; border-radius: 5px;"></div>				
Review of Transmission GXP pricing post implementation	<div style="display: flex; align-items: center;"> <div style="width: 100px; height: 15px; background-color: blue; border-radius: 5px; margin-right: 10px;"></div> <div style="border: 1px solid black; background-color: black; color: white; padding: 5px; font-size: 0.9em;">                     We will engage with the EA on their feedback                 </div> </div>				
Interaction between power factor & injection	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; background-color: black; color: white; padding: 5px; font-size: 0.9em; margin-right: 10px;">                     Ongoing monitoring to assess if changes are required                 </div> <div style="width: 100%; height: 15px; background-color: blue; border-radius: 5px;"></div> </div>				

# PRICING TIMELINE - TARIFFS

 Reform ongoing    Completed    Cancelled

**CY2024**   **2025**   **2026**   **2027**   **2028**

Pass through rates and structures (SRAM)	
Embedded generation/injection tariffs (distribution only)	
Capacity constraint tariffs and commercial arrangements for network alternatives	 
Exploration of more targeted peak/off-peak differential and time periods for mass market tariffs	
Pricing for DER orchestration - load management and injection	
The allocation of residual revenue in response to COSM review	

# APPENDIX 1: 2023 DISCLOSED ROADMAP TIMELINE





# PRICING TIMELINE - REFORM & ALLOCATIONS

Reform ongoing Completed Cancelled

CY2023 2024 2025 2026 2027

Cost of service model (lines prices)	<p>Internal review and automation of model with independent overview</p>				
Capital contributions policy annual review					
Interaction between connection charges and line charges	<p>The timeline of this initiative will depend on output from Brattle work</p>				
Financial impact modelling extended to industrial & commercial	<p>The output of the modelling will inform tariff alignment</p>				
Tariff alignment between Auckland & Northern for commercial customers					
Consideration and implementation of locational pricing beyond Transmission	<p>The timeline of this initiative will depend on output from Brattle work</p>				
Review of Transmission GXP pricing post implementation	<p>We will monitor and refine based on feedback</p>				
Interaction between power factor & injection	<p>Ongoing monitoring to assess if changes are required (incl. engagement with customers &amp; consumers)</p>				





# PRICING TIMELINE - TARIFFS

Reform ongoing Completed Cancelled

CY2023

2024

2025

2026

2027

Pass through rates and structures (SRAM)



Ongoing reform being explored

Capacity constraint tariffs



The timeline of this initiative will depend on output from Brattle work

Embedded generation tariffs (distribution only)



The timeline of this initiative will depend on output from Brattle work

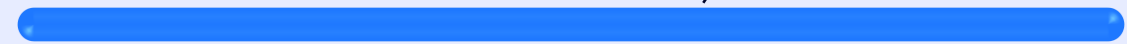
DER residential tariffs



To be monitored post implementation of our DER tariff

Ongoing reform being explored

Peak to off-peak differential and time periods for mass market tariffs

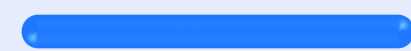


Pricing for private and public electric vehicles charging



The timeline of this initiative will depend on output from Brattle work

The allocation of residual revenue



To be reviewed once COSM review is finalised

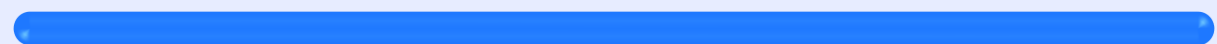
Additional commercial tariffs for HV connections



To be monitored post implementation

Initial work carried out by NERA – but ongoing

Exploration of the evolving DER market and how pricing fits in



# APPENDIX 2: WHO THIS ROADMAP IS FOR



# WHO THIS ROADMAP IS FOR?

- Our pricing roadmap is intended for a wide audience, but we want to ensure you know who you are when reading this document.
- To that end we have provided some useful definitions of terms we use throughout the roadmap.
- Please note that you could fall into more than one of the categories listed.

**Consumer:** end of user of our electricity network, someone who purchases and uses or consumers the electricity but does not resell it (for e.g. mum and dad, local business, commercial factory)

**Customer:** The EA has determined the retailer as the customer when it comes to distribution pricing. They purchase electricity from the wholesale market to sell to residential and business users (consumers) and purchase the transportation/delivery service of this electricity from distributors

**Installation Control Point (ICP):** physical point of connection on a local network or an embedded network that the distributor nominates as the point at which a retailer will be deemed to supply electricity to a consumer

**Stakeholder:** a party or individual that (in this context) has an interest in Vector's pricing reform and can either affect or be affected by the changes. They can be internal or external to the company (for e.g. regulators, flexibility traders)

**Direct bill end user:** the end consumer who pays the retailer's electricity invoice