



# Distribution Pricing Roadmap

April 2026

# Our view of the future



# Who this roadmap is for (and key terms used)

- Our pricing roadmap is intended for a wide audience. When you are reading it, we want to ensure you understand the terms used throughout this roadmap and how they relate to you.
- Please note that you could fall into more than one of the categories listed.

**Consumer (end user):** An end user connected to Vector's electricity network (households and businesses) who uses electricity and does not resell it. Note: Vector's AMP and website often refer to end users as "customers"

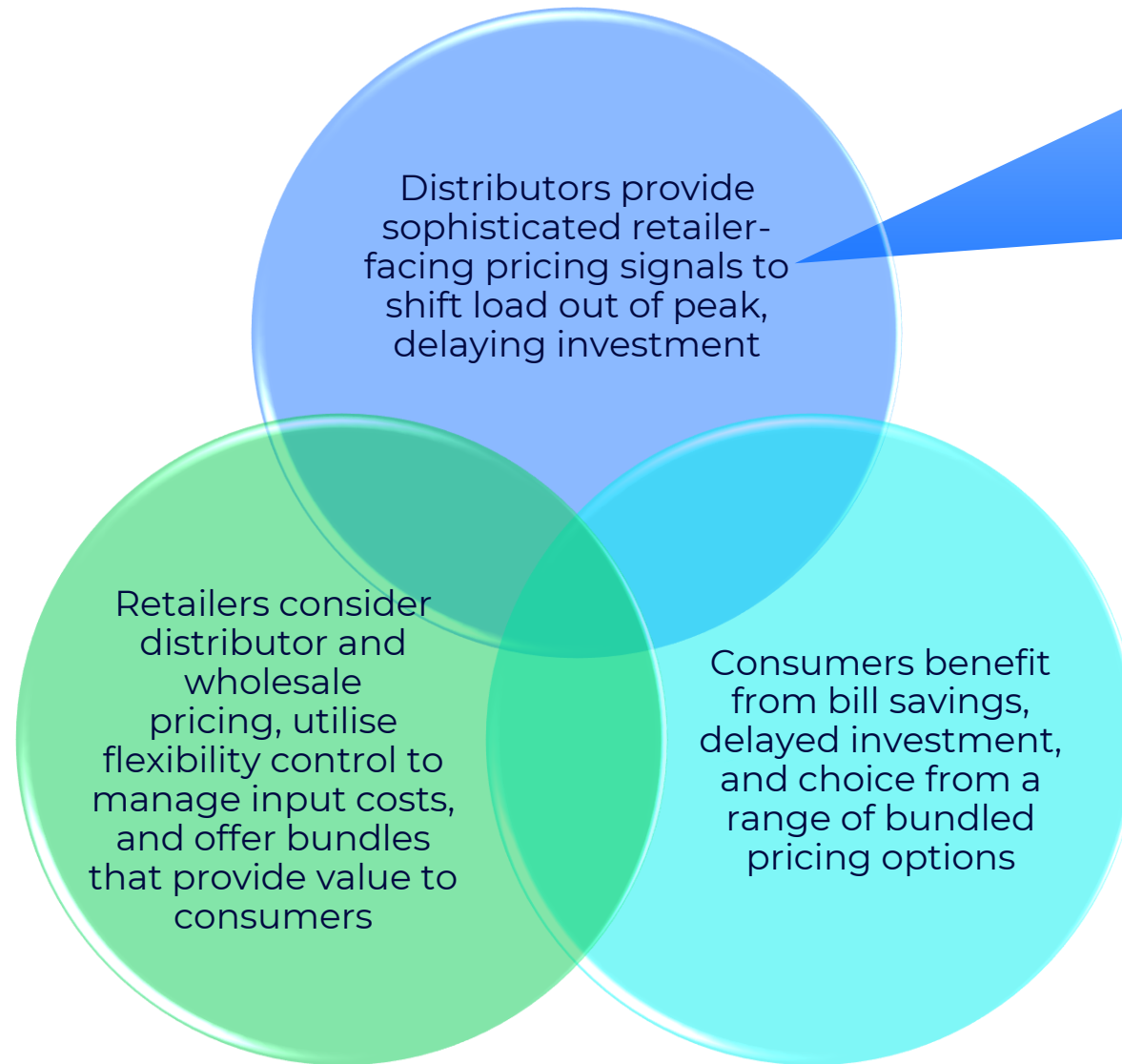
**Retailer (distribution customer):** The EA has determined the retailer as the customer when it comes to distribution pricing. Retailers are the counterparty charged under Vector's published distribution tariffs. They buy electricity in the wholesale market and on-sell it to consumers, and they pay distributors for the transportation/delivery service.

**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 consumer who pays Vector directly.

# Win-Win-Win – Our view of the future



Retailer-facing pricing signals are distribution network charges/discounts structured so retailers (who receive the charges) and energy service providers are motivated to manage load/export and then package the benefit into offers / products for consumers.

# About this roadmap

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 connection prices<sup>2</sup> as well as distribution prices.

Our electricity pricing roadmap sets out how we are evolving our prices to retailers to enable and deliver better outcomes for consumers. Our published distribution prices are retailer-facing; consumer outcomes depend on how retailers' package those signals into products and managed-device services. The roadmap is an evolving document, updated periodically no less than 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.

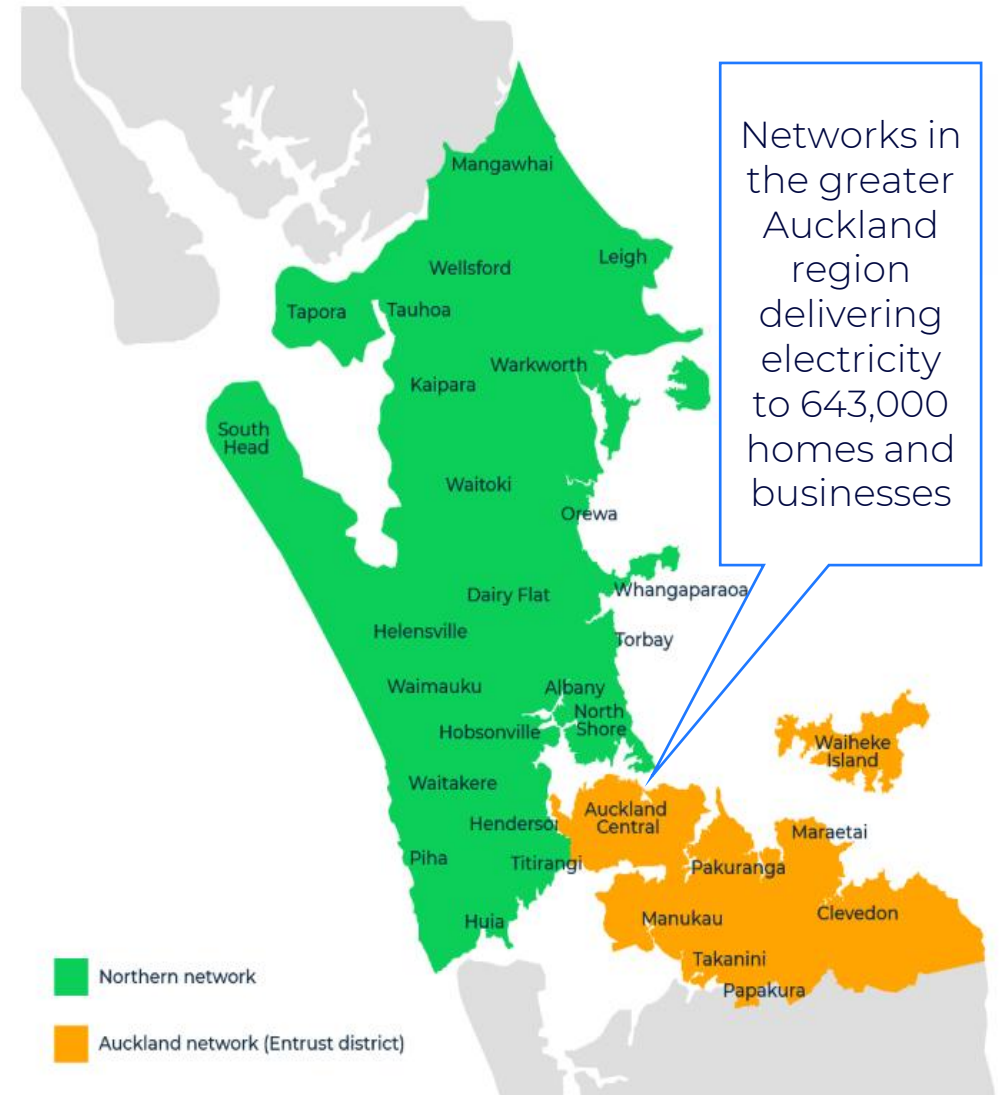
This roadmap sets out, as at the month of publication, our view of the reform we believe will deliver the best distribution pricing outcomes. However, we are not bound to follow the initiatives described here, as we update our views regularly on how to reform our distribution prices to best deliver our Symphony strategy.



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

<sup>2</sup> Connection policy (previously known as 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 historical context



# Approach to our pricing setting



Entrust, retailer consultation and ICP bill impact assessments (co-design price- and/or contract-led pricing initiatives with retailers)



Meet regulatory requirements including ComCom default price quality path and EA Pricing Principles



Ensure prices appropriately reflect network costs



Assessment of evolving opportunities to shift load to defer future investment (e.g. price- or contract-activated flexibility)



Consumer insights (e.g. collect feedback via retailers, consumer surveys to understand load shifting behaviour)



Leverage international best practice and expert advice



Data-led network analysis to target congestion (Appendix 1 - peak demand periods re-aligned)



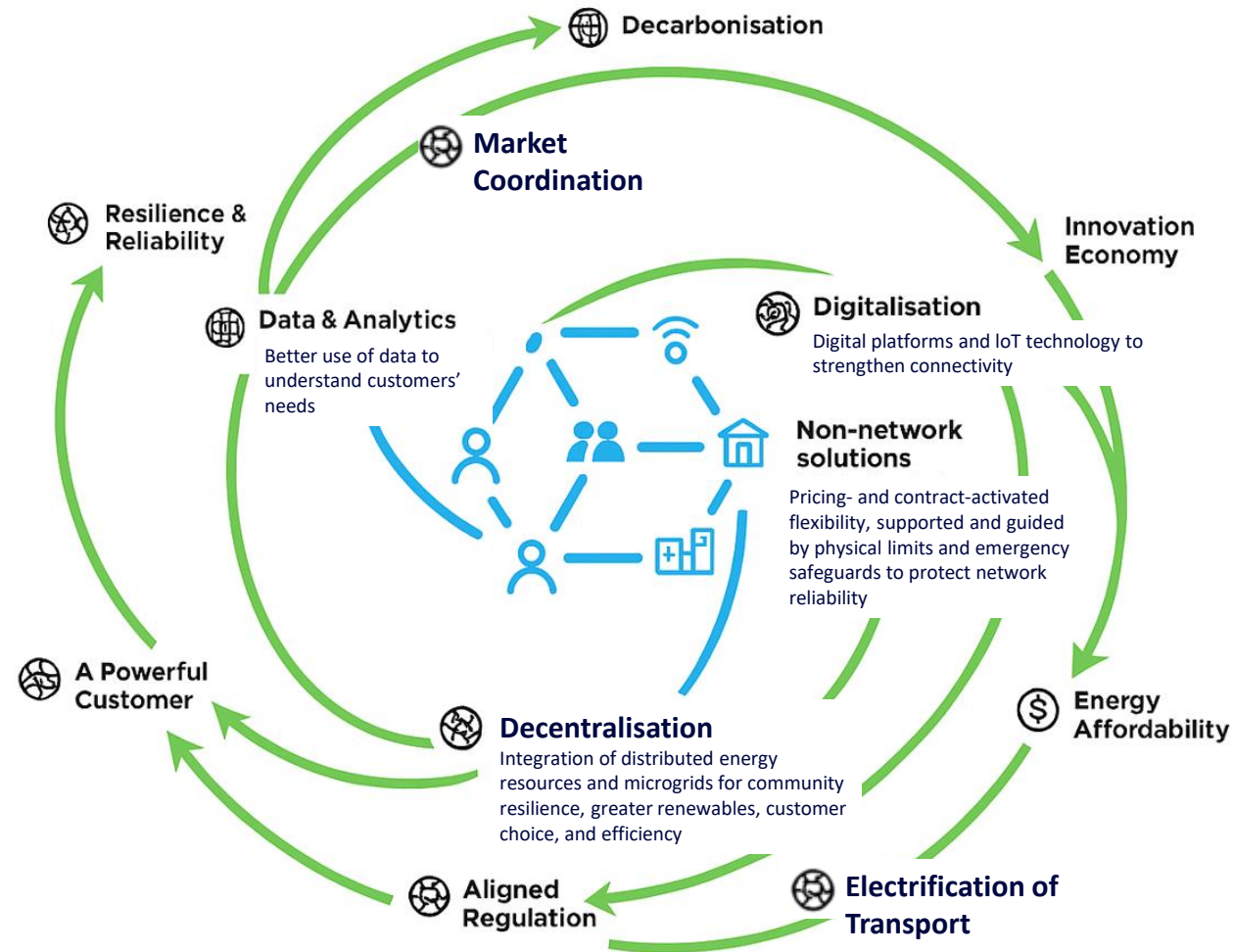
Regulatory engagement to update on our pricing developments (EA, ComCom, EECA, MBIE)



For further details of our approach to pricing reform please see progress against road map described later in the document.

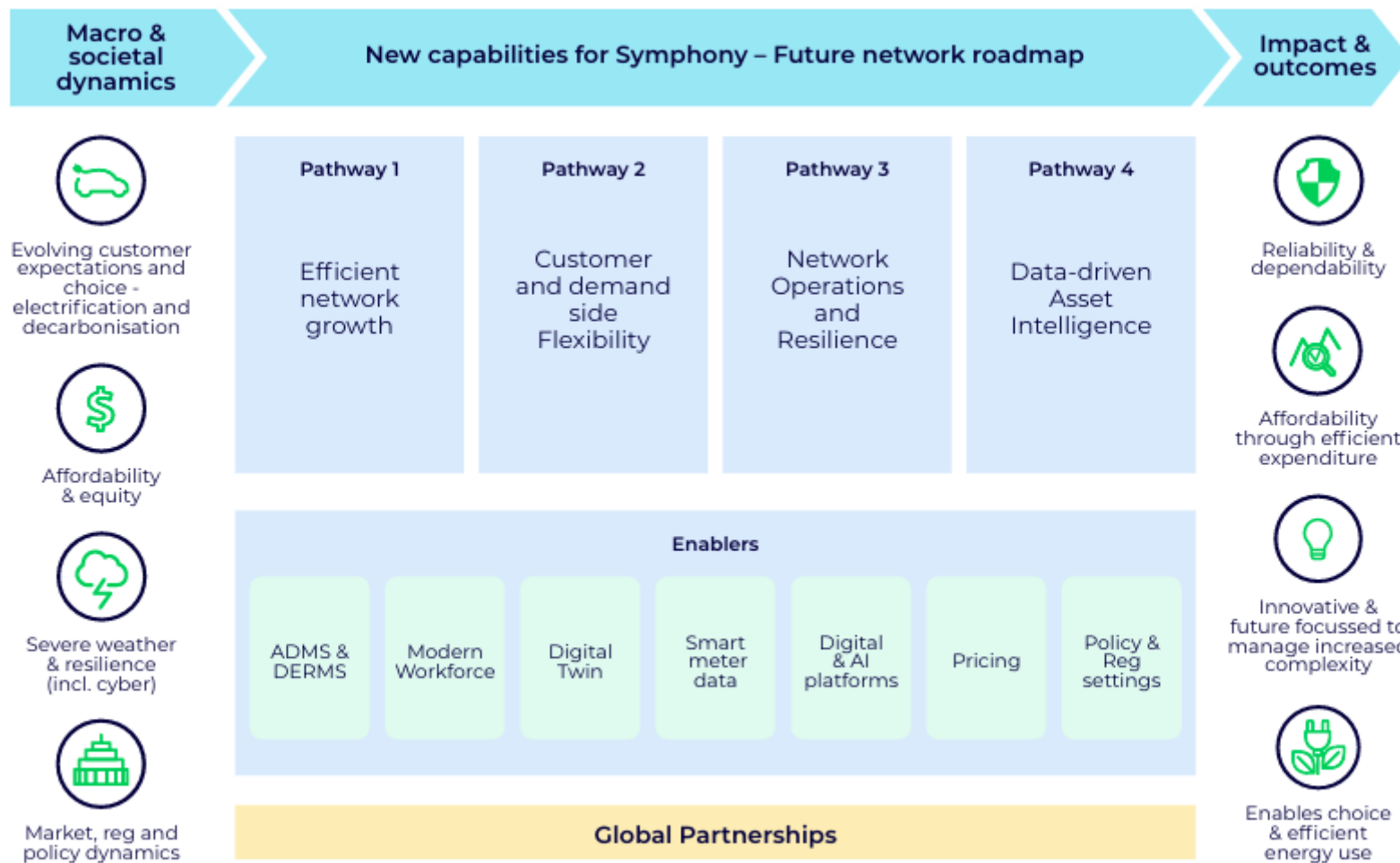
# Vector's symphony strategy

Vector's Symphony Strategy is about creating a system for our consumers that fits the future, delivering safe, cleaner, more reliable and affordable energy solutions that are developed with consumers at the centre, and which helps us navigate future uncertainty.



Symphony is how we intend to transform the traditional poles and wires of the electricity networks serving the Auckland region into an intelligent energy system where consumers have more choice and control.

# Symphony strategy and pricing



Symphony is Vector's strategy to deliver reliable, resilient and affordable outcomes as the system becomes more complex

If large flexible loads are unmanaged, some local peaks could rise sharply — increasing the need for reinforcement.

Pricing helps avoid that outcome by:

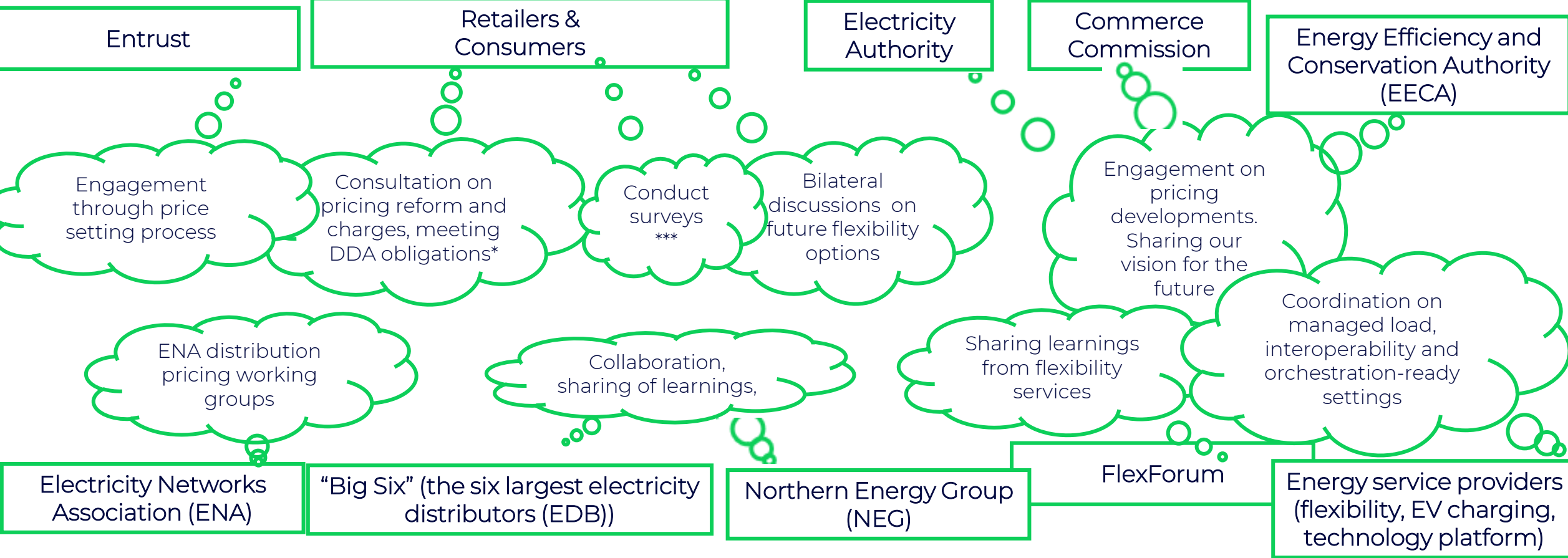
- Sharpening evidence-based peak signals to better target local constraints
- Rewarding flexibility (managed EV charging, hot water, DER) delivered increasingly through retailer/service-provider automation, supported by operating envelopes where needed
- Applying safeguards (operating limits and emergency coordination) so flexibility scales safely as electrification increases

# Key current network tariff design considerations

When designing our symphony-driven pricing initiatives, we also share the view that tariffs should be practical, fair, and easy to understand, minimising disruption during changes. They must also be adaptable to evolving grid use, ensuring cost reflectivity and effective recovery.



# External engagement



\* Our Default Distributor Agreement (DDA) with retailers sets out the terms by which we need to consult when setting prices. Vector ensures reasonable time is given to ensure retailers can update systems and processes.

\*\* The Northern Energy Group (NEG) was formed in 2019 and consists of Counties Energy, Northpower, The Lines Company, Top Energy, Waipa Networks and Vector. One of its workstreams is distribution pricing.

\*\*\* Vector has increased stakeholder engagement in recent years, including multiple discussions with retailers and updates with EECA, EA and ComCom. We have also conducted surveys directly with consumers e.g. time of use response to understand the load shifting behaviours in response to TOU price plans that have helped shape our price designs



# Internal engagement



**Executive + Board:** Our Board of Directors and executives are involved in the price setting process and are instrumental in shaping the vision for our pricing reform



**Vector internal distribution pricing working group:** Our distribution pricing working group considers the pricing initiatives within the ComCom regulatory framework, EA distribution pricing principles and ensures prices support our symphony strategy. For example, how we can design time-varying pricing that can achieve load shifting strategy) and send price signals using LRMC.



**AMP Steering Committee:** Our Asset Management Plan (AMP) Steering Committee looks actively at how changes to forecasts and network configuration could impact our pricing reform. policy. Central customer experience function and consumer insights capability inform priorities and communications.

# Vector future pricing initiatives

Here are the current future pricing initiatives. For the initiatives we have completed, please see progress against road map described later in the document.

Low fixed charge (LFC) tariff transition

GXP transmission pricing approach review

Mandatory TOU pricing & ongoing refinement to target observed constraints and reduce unnecessary signaling (see Appendix 1)

LRMC based peak signals with scope for targeted SRMC scarcity adders where local constraints emerge (pricing layers)

Price-activated flexibility (see Appendices 2 and 5)

Targeted contract-activated flexibility, e.g. Price- and contract-led (see Appendix 2)

Emergency orchestration capability (see Appendix 2)

# Non-network solutions (NNS)

NNS sit at the heart of Vector's Symphony to deliver safe, reliable and affordable outcomes by orchestrating DER and flexibility. NNS includes two distinctive flex activation models. Price-activated flexibility and contract-activated flexibility.

## Price-activated flexibility ("Price-led")



Distributors publish cost-reflective network prices



Retailers/agents digest distribution, dynamic, location and wholesale prices and repackage



Automation manages consumer energy resources (CER) assets (e.g. EV chargers, hot water system)

See our case studies in Appendix 1 to see how cost-reflective network plays out in reality

- Congestion is managed through economic co-ordination, NOT directly controlled by electricity distribution businesses (EDB).
- Retailers/agents optimise portfolios in response to network and wholesale signals
- Flexibility delivered through automated response by devices managed by retailers/consumer agents, or consumers themselves
- Operating limits (e.g. dynamic operating envelopes) provide the limits/safety rails. Pricing manages behaviour within that rail.
- Layered coordination model: LRMC-aligned structures provide durable investment signals, with targeted SRMC scarcity adders where local constraints emerge, operating within transparent operating envelopes

In a CER rich system, with hyper-responsive and elastic resources, pricing becomes a highly effective, localised, SRMC\*-based coordination tool



\*SRMC is a local scarcity signal: the incremental cost/value of supplying one more unit of demand (or injection) at a specific time and location on the existing network. We use SRMC as a targeted "adder" where constraints emerge, layered on top of LRMC-anchored structures, within operating envelopes

# Non-network solutions (NNS)

## Contract-activated flexibility (“Contract-led”)



Constraint is severe and localised



Long-term investment deferral requires defined assurance



Market participation is limited or immature

- Contract-activated flexibility occurs when a distributor procures defined response at a specific location, within specified timing, response requirements and performance obligations and can include flexible connections.
- More transaction intensive and less scalable.
- Pricing first, contracts second: contract value reflects only the **incremental value** of certainty/availability/duration beyond what prevailing price signals already deliver (“contracts buy reliability, not the behaviour”)
- Emergency safeguards as rare safety rail (not routine congestion management)

See our case studies in Appendix 3 to see how DOE plays out in reality and examples in Appendix 5

## Consumer choice and retailer model

The NNS will lead to a consumer-centric flexibility framework that provides choices. The consumer may choose from:

- Full exposure to dynamic wholesale and/or network price signals (e.g. pass-through products)
- Complex or simplified static TOU tariffs that bundle all upstream signals
- Very simple fixed price products (e.g. constant c/kWh, or fixed bill per month)
- Direct optimisation of devices via home energy management system (HEMS) that optimises against TOU pricing
- Device management “as a service” from a retailer or aggregator, optimising on consumer’s behalf based on their preferences.

# Electricity Authority pricing principles

EA set out distribution [pricing principles](#) to guide EDBs in designing fair, efficient, and forward-looking pricing structures. Below is how Vector has applied the principles in our pricing development

## Signal economic costs

- Cost-of-Service Model (COSM) allocates avoidable and residual costs across consumer groups, ensuring prices are subsidy-free and reflect actual network usage.
- Time-of-Use (TOU) tariffs introduced since April 2020 (mandatory where interval metering exists) signal peak demand costs. We introduced zero off-peak pricing in April 2023. With better low voltage data, in April 2026 we updated our peak periods to better target peak usage patterns. We avoid unnecessary signalling and remove signals when not needed.

## Minimise distortions

- Vector applies shortfall recovery mainly via fixed charges and avoid using variable charges to recover fixed costs where not needed, to minimise distortion.
- Transmission costs are passed through at GXP-level using fixed allocations, to reflect the locational cost consistent with the transmission pricing methodology, and reducing distortion in usage signals.

## Responsive and negotiable prices

- Vector offers non-standard pricing for larger or flexible consumers, enabling negotiation of price-quality trade-offs.
- Retailer consultation on material pricing changes and pricing evolution ensures responsiveness to customers.

## Transparent development process

- Published annual Pricing Methodology with full explanations of allocation methods, and charges.
- Roadmap signals future pricing direction — outlining upcoming tariff reforms which enhances transparency.
- Engagement in consultations and industry forums to adapt pricing to meet regulatory direction and evolving with best practice.
- Presentations of our current pricing and future pricing vision to wide range of stakeholders

## Encourage efficient alternatives and clarity on trade-offs

- Implemented flexible connections with NZ Bus in selective bus depots to enable off-peak electric bus charging, to incentivise solutions that reduce peak loading and defer capex (Appendix 3).
- Conduct an INTSA project that explores different pricing designs and incentives that utilise residential demand flexibility as a non-traditional network solution to manage network constraints. (Appendix 2).
- Collaborated with third party energy software provider to develop a long-term tariff vision that supports billing system, to enhance flexibility, DER integration, and alternatives to network investment. (Appendix 2).
- Revising DER pricing based on retailers' feedback, reveals and grows price-responsive flexibility over time.
- Assesses demographic impacts (e.g., deprivation index, energy poverty) to balance cost-reflectivity with affordability.



# Electricity Authority open letter

In addition to the EA's pricing principles, Vector has considered the Electricity Authority's open letter to distributors dated 20 May 2024 on distribution pricing reform, which sets out five focus areas

Allocate revenue transparently

- In our Pricing Methodology, we show: allocation methods and subsidy-free range calculations for consumer groups, enabling evidence-based review.

ICPs to time-varying distribution tariffs)

- TOU is the default assignment for metered mass-market ICPs; opt-out is limited to cases where smart metering is not suitable/available, with assignment policy disclosed.

Set peak rates based on a measure of LRMC

- Peak rates are set with reference to LRMC; we explain the LRMC approach used and how it applies to our network constraints and peak windows (see Appendix 1).

Reduce off-peak and controlled rates

- Off-peak rates move toward ~0 where LRMC is zero or near zero. We monitor TOU effects and refine structures (e.g., adding 9-10pm, and weekends, to address secondary peaks and remove unnecessary signalling) (see Appendix 1).

AMP readiness for increased electrification

- Pricing is developed with regard to our AMP and electrification readiness. Our AMP 2026–2036 outlines scenario-based planning for electrification and two-way flows, supported by improving LV visibility and power-quality monitoring (smart meter operational data and transformer monitoring). Pricing reform reinforces this by using evidence-based TOU peak signals and refining settings over time to target constraints and avoid unintended secondary peaks (see Appendix 1), alongside managed flexibility (flexible connections and operating envelopes/DERMS) to support least-cost outcomes.

# Progress against the previous roadmap – reform & research

Progress against May 2024 roadmap (calendar year (CY) 2024–25)\*.

Reform and research	We did...
Cost of service model (COSM) (allocation of revenues)	Developed Vector360 to support COSM refresh by assigning regulated asset base to network hierarchy levels and improving cost attribution (e.g., reactive maintenance to fault location).
Interaction between connection charges and line charges	Paused during the development of the new connection pricing policy. To be reviewed post-implementation.
Financial impact modelling extended to industry & commercial ICPs	Continued development of an I&C billing tool to assess bill impacts. Completed augmentation of the non-standard I&C consumer pricing model.
Tariff alignment	Realigned TOU peak periods to better reflect peak congestion using improved low voltage data. (see Appendix 1). Other pricing realignment (including Auckland and Northern) is presently paused.
Consideration and implementation of locational pricing beyond Transmission	Completed offshore island pricing design analysis and did not progress further after bill impact testing. Currently progressing “multi-retailer orchestration pilot” (see Appendix 2) to explore other locational options.
Review of Transmission GXP pricing post implementation	Implemented a wash-up approach from 1 April 2025, enabling recalculation of each retailer’s share based on usage attributed to retailer ICP shares during the pricing year.
Interaction between power factor & injection	Introduced negative injection charges from 1 April 2026 consistent with EA guidance (referencing LRMC and TOU peak periods). Introduced commercial solar tariff that exempts power factor charges where those costs do not reflect inefficient network use.



\*Please see <https://blob-static.vector.co.nz/blob/vector/media/vector-2024/pricing-roadmap-may-2024-final.pdf>

# Progress against the previous roadmap – tariff design initiatives

What we implemented and refined from the prior roadmap — focused on practical, scalable tariff changes.

Tariff design initiatives	We did...
Pricing for DER orchestration - load management and injection	<p>In April 2025 we introduced our commercial DER tariff – see our Pricing Methodology for more information. In April 2026 we further refined our commercial DER tariff by removing demand component to encourage uptake after retailers’ feedback.</p> <p>We also broadened eligibility for our Residential DER Price Categories so households can qualify where retailers can reliably manage flexible load off or down. This explicitly includes EV charging and hot-water load (alongside other manageable devices). The change better aligns our pricing settings with how flexibility is increasingly delivered in practice—through retailer-managed device control. Over time, increasing participation supports peak demand management and can help reduce peak pressure and defer network investment. (Detail on eligibility and devices is set out in our Pricing Schedule*). Please see Appendix 4.</p>
Embedded generation/ injection tariffs (distribution only)	<p>From 1 April 2026 we introduced negative injection charges consistent with EA guidance (referring to LRMC and TOU peak periods) and introduced commercial solar tariffs to exempt power factor costs.</p>
Capacity constraint tariffs and commercial arrangements for network alternatives	<p>Targeted price-activated and contract-activated flexibility pilots to test arrangements that can manage local constraints and defer reinforcement.</p>
Exploration of more targeted peak/ off-peak differential and time periods for mass market tariffs	<p>Using improved LV insights, updated TOU peak periods from 1 April 2026 to better target peak usage (Appendix 1). Peak rates reference LRMC inputs; off-peak settings remain very low/zero to encourage flexible load and better reflect costs.</p>
The allocation of residual revenue in response to COSM review	<p>Confirmed residual (sunk/shared) costs are recovered through fixed charges to minimise distortions, supported by COSM allocation transparency and revenue-vs-cost testing.</p>



# 2026 pricing timeline/work programme - reform and research

- Initiate (identify and review)  Completed
- Develop (test, analyse, consult)
- Manage (rollout, implement)



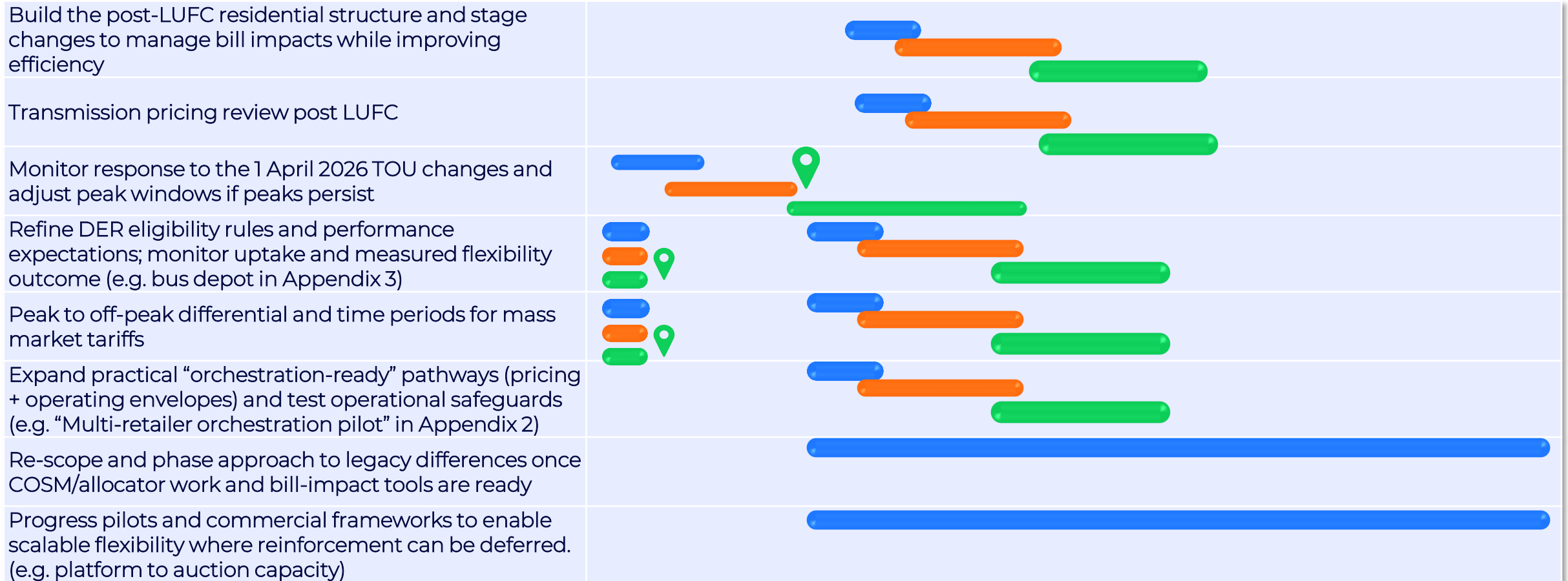
\* Timeline is shown by calendar year

Ongoing monitoring to assess if changes are required

# 2026 pricing timeline – price led and contract-led design initiatives

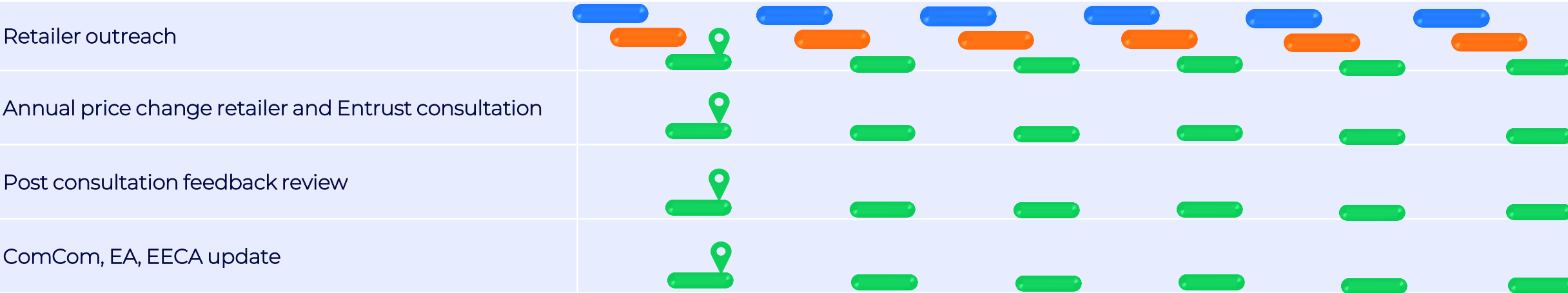
Stage-gated delivery: pricing signals first, contracts where assurance is required

- Initiate (identify and review) 📍 Completed
- Develop (test, analyse, consult)
- Manage (rollout, implement)



# 2026 pricing timeline – Stakeholder consultation & engagement

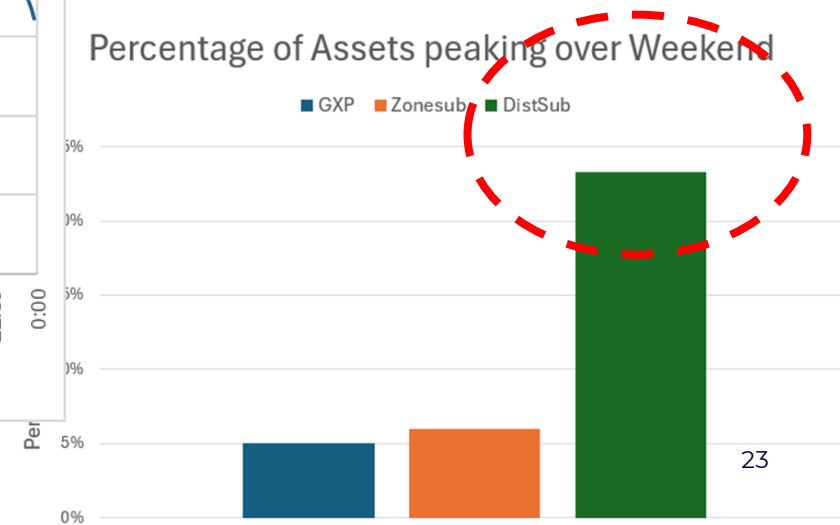
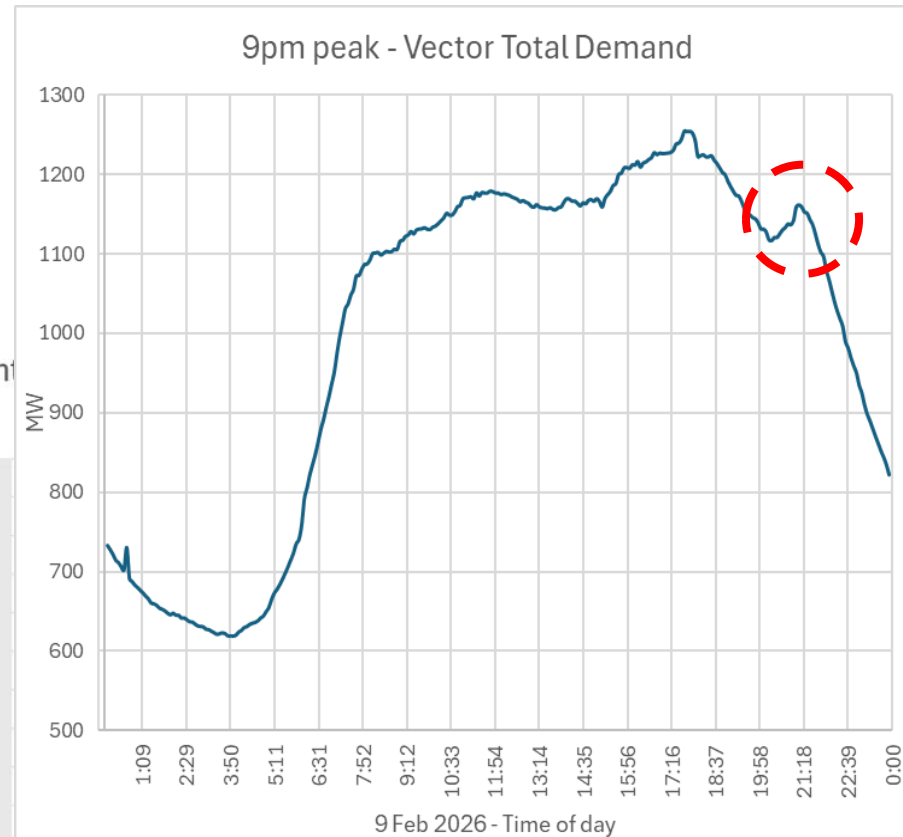
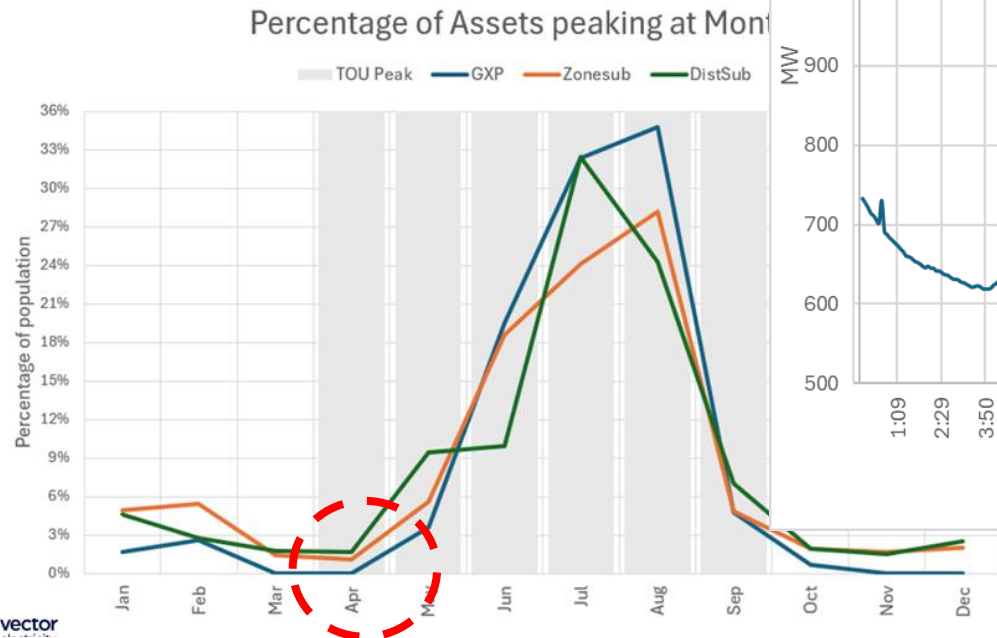
- Initiate (identify and review)
  - Develop (test, analyse, consult)
  - Manage (rollout, implement)
- 📍 Completed



Process recurs annually

# Appendix 1 - peak demand re-aligned

We reviewed the peak demand in response to our TOU pricing and realigned our peak periods to better target constraints. From 1 April 2026, we removed peak charges from April, added peak charging to weekends and added peak charging to 9-10pm to ensure peak signals are sent to reflect constraints.



# Appendix 1 – peak demand re-aligned

Our AMP presented a case study showing how time-varying price signals can change load shapes (including an emerging secondary 9pm peak). This summarises what changed in our TOU design and why.

## CASE STUDY: CUSTOMER RESPONSE TO PRICING SIGNALS

In 2024 and 2025, our smart meter data analysis identified a new trend: a new secondary 9pm peak which coincides with retailer pricing signals. The retailer's price periods were mirroring (passing through) the timing of the peak periods in the major EDBs' pricing, including Vector's. The intent of the pricing signal is to move demand away from traditional peak periods. At a system-wide level, this objective is being achieved as the high volume of customers provides sufficient demand diversity to smooth aggregate demand. However, our analysis found that as demand is examined progressively down the network hierarchy levels, particularly at LV level, diversity is lost and a new artificial demand peak appears at 9pm. This new peak tends to be bigger than the historic 6pm peak, when behaviour remains diversified. Figure 10-1 captures the results of the investigation and illustrates two primary themes:

- Flat Rate Plan Stability: Customers on flat rate plans have shown little change in their winter weekday load profiles over time. This is agnostic of EV presence
- TOU Plan Load Shifting: Customers on TOU tariffs have increasingly shifted their energy use away from daytime and peak periods to nighttime (after 9pm), as more customers have adopted TOU plans. The 9pm peak among TOU customers has grown consistently, reflecting the impact of synchronized load and reduced diversity in usage patterns (a concept referred to as "herding"). This is also largely agnostic to EV presence

The new secondary peak has not caused any network security issues yet, however an investigation was undertaken to assess the impact at all network levels. To develop future-fit solutions that maintain network security.

Flexibility providers and retailers are expected to increasingly optimise customer behaviour and devices based on price signals – those provided both by EDBs and from the wholesale market. In the future, automatic algorithmic control decisions based on price signals take the human behaviour further out of the loop. The natural diversity of customer behaviour is therefore at risk of being eroded. Unmanaged synchronization of demand will create localised stress that becomes increasingly acute as you move from sub-transmission and distribution HV levels down to the LV network, where diversity is lowest. Maintaining security across all voltage levels, will require us to avoid and manage these 'artificial' peaks. Because our pricing signals are a key driver of this new behaviour, Vector has ongoing engagement with retailers to understand how we can evolve our pricing and put extra controls in place to influence retail products in the market, and therefore customer behaviour. We have made changes to our pricing from 1 April 2026 to address these issues and will continue to refine our prices as system behaviour evolves.

# Appendix 1 – peak demand periods re-aligned



As indicated in the case study previously, smart meter analysis indicates TOU signals can create synchronised behaviour, including a growing secondary 9pm peak (“herding”), which becomes more pronounced at LV where demand diversity is lower.

Our TOU pricing periods are refined using observed data to target actual constraints and avoid unnecessary or counterproductive signaling, while supporting retailer and device-led optimisation. The heatmap shows average winter weekday load profiles by time of day (darker colours indicate higher demand), with the red rectangles highlighting the TOU peak windows used to target observed congestion and emerging secondary peaks. Grey rectangles show the previous TOU pricing periods (winter weekdays only, ~1050 hours). Red rectangles show our realigned TOU pricing periods (~1133 hours).

# Appendix 2: multi-retailer orchestration pilot

## Price-activated flexibility pilot – the plan

- 1 HV feeder with 12-15 LV transformers, ~1200 ICPs
- 3+ collaborating retailers
- 5 other collaborating EDBs (under EECA “scaled flex” programme)
- Multiple, **stage-gated** phases of **increasing complexity**, building on international precedents to determine **world-first solutions** for:
  - ✓ Orchestrating **multiple** competing retailers on **specific** LV assets
  - ✓ Incentivising **CER export** to create more **import headroom**, and vice versa
  - ✓ Exploring headroom **allocation rules** across competing parties
  - ✓ **Interplay** between capacity allocation (**DOEs**) and **dynamic prices** at LV level
  - ✓ Robust **emergency management** (implementing the Load Management Protocol)
- INTSA applications will support several aspects of the pilot

0. Installation & integration

1. Emergencies & headroom signalling

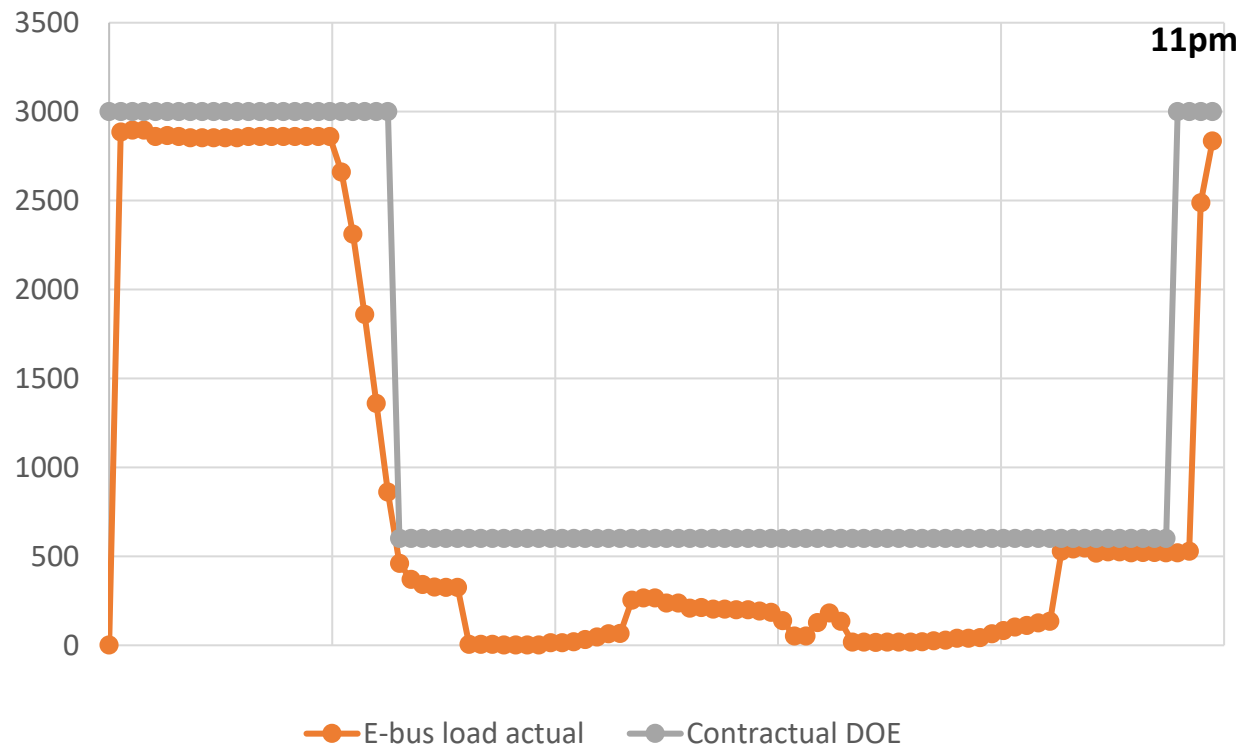
2. Headroom + two-sided dynamic pricing

3. DOEs + dynamic pricing

4. Advanced DOEs + dynamic pricing

# Appendix 3 - FlexConnect

Using dynamic operating envelopes, FlexConnect delivers efficient transition for public transport



- From a few diesel tanks at the depot to installing 44 x 150 kW chargers
- A control system to charge buses between 11pm and 6am connected to Vector's energy platform
- Send the depot an **operating envelope** signal every 15 minutes (for 24h ahead)
- Receive confirmation of compliance to the limits every 15 minutes
- The “flexible connection” reduces demand during network peak times, enabling the electrification of the depot without upstream reinforcement – a much cheaper connection cost

# Appendix 3 - FlexConnect



Launch of New Zealand's first electric bus depot. Charging at this depot occurs within a "dynamic operating envelope", where Vector forecasts optimal charging times each day and provides this through to the depot, reducing peak demand for a more affordable charging solution.

# Appendix 4 - Residential DER tariff / indirect control

Residential DER tariff (indirect control): retailers receive a fixed-charge discount where they can reliably manage flexible load (e.g., EV charging, hot water) during specified control periods.

Eligibility	ICPs where retailers can <b>reliably</b> manage down >1.2kW of load on a <b>multi-hour basis</b> (e.g. hot water, EV charging)
Requirements	Load must be managed down in <b>every control period</b> we specify (90% compliance)
Control periods	Control periods specified at the start of the year, can be updated <b>up to three times per year</b>  Max <b>two control periods per day</b> , max <b>four hours per period</b>  For PY27, periods are aligned with our peak TOU periods. Load Management Protocol governs load return
Consideration	~\$50 <b>discount per year</b> on fixed daily charges. This is akin to a premium for certainty (buying the inability to opt out)
Value-stacking	Retailer also saves by <b>shifting load out of our peak TOU periods</b> (another ~\$50/year). Wholesale savings on top.
Concept	Sometimes referred to as “type of use” tariff. Could also be considered a readily <b>scalable LV flex contract</b>

# Appendix 5 – full suite of orchestration mechanisms

A suite of orchestration mechanisms will be required in a world of retailer-managed and flexible consumer energy resources. Pricing will do most of the heavy-lifting, most of the time, within normal (BAU) operating conditions. Contracted services can offer extra assurance. Dynamic operating limits can provide the physical limits within which the network must be managed.

**Figure 8 |** Range of available measures for managing minimum demand from peak PV exports, and maximum demand event<sup>59</sup>

