vector

CLIMATE-RELATED DISCLOSURES 2025

About this report

This report is the Vector Limited group's (Vector or the group) second mandatory climate statement prepared under New Zealand's climate-related disclosures regime. The Vector group comprises Vector Limited and its subsidiaries. This report relates to the reporting period 1 July 2024 to 30 June 2025 and constitutes Vector's climate statement in respect of that period under the Financial Markets Conduct Act 2013 (FMCA).

Under the FMCA, Vector is required to produce climate statements that comply with the Aotearoa New Zealand Climate Standards (NZCS) 1, 2 and 3 issued by the External Reporting Board (XRB). Accordingly, this document has been prepared in compliance with NZCS 1, 2 and 3, and covers four thematic areas: governance, strategy, risk management, and metrics and targets.

The intended primary users of this report are existing and potential investors, lenders and other creditors.

This report is published as part of a reporting suite, which also includes our FY2025 greenhouse gas emissions inventory report, and annual report. All three reports are available at vector.co.nz/investors/reports.

Given this report relates to the FMCA and NZCS requirements, it necessarily differs from earlier Vector reports prepared voluntarily in response to the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD).

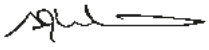
Unless the context otherwise requires, all references in this report to we, us, our and Vector should be interpreted to relate to the Vector group.

This report has been subject to limited assurance* by KPMG; see appendix 1, and legal review by Chapman Tripp.

Doug McKay

Chair

22 August 2025



Anne Urlwin

Chair, audit committee

22 August 2025

Adoption provisions

Vector has elected to use the following NZCS2 adoption provision for this FY2025 report. This means the disclosures in this report do not cover these aspects of the NZCS, though some information is provided to maintain consistency with Vector's wider disclosures.

Adoption provision 2: Anticipated financial impacts

* A limited assurance engagement is less in scope than a reasonable assurance engagement, for a detailed explanation – please see page 38.

Disclaimer

This report is not earnings guidance or financial advice for investors. Rather, this report provides a summary of Vector's current understanding of, and response to, climate-related risks and opportunities, and Vector's current climate-related governance, risk management, strategy, metrics and targets. The report reflects Vector's current understanding as of 22 August 2025, in respect of the 12 months ended 30 June 2025.

Climate-related risk management is an emerging area, and often uses data and methodologies that are developing and uncertain. Vector acknowledges that the understanding of climate risk, and the inputs to assist with this understanding are constantly evolving.

Vector (including its directors, officers and employees) does not:

- Represent that the statements, intentions and/or opinions contained in this report will not change, or will remain correct after publishing this report, or
- Promise to revise or update those statements and opinions if events or circumstances change or unanticipated events happen after publishing this report.

Vector is committed to progressing our response to climate-related risks and opportunities over time but is constrained by the novel and developing nature of this subject matter. In particular, the statements contained in this report involve assumptions, forecasts and projections about Vector's present and future strategies and Vector's future operating environment. Such statements are inherently uncertain and subject to limitations, particularly as inputs, available data and information are likely to change. As such, Vector cautions reliance on climate-related forward-looking statements that are necessarily less reliable than other statements Vector may make in our annual financial reporting.

The risks and opportunities described in this report, and Vector's strategies to achieve our targets, may not eventuate or may be more or less significant than anticipated. There are many factors that could cause Vector's actual results, performance or achievement of climate-related metrics (including targets) to differ materially from that described, including economic and technological viability, climatic, government, customer, and market factors outside of Vector's control. Vector gives no representation, warranty or assurance that actual outcomes or performance will not materially differ from the forward-looking statements.

To the maximum extent possible under New Zealand law, Vector (including its directors, officers and employees) does not accept and expressly disclaims any liability whatsoever for any direct, indirect or consequential loss or damage occasioned from any use or inability to use the information contained in this report, whether directly or indirectly resulting from inaccuracies, defects, errors, omissions, out-of-date information or otherwise.

Vector makes no representation as to the accuracy of any information in this report. We recommend you seek independent advice before acting or relying on any information in this report. Vector reserves the right to revise statements made in, or its strategy or business activities described in, this report, without notice.

This disclaimer should be read along with other methodologies, assumptions and uncertainties and limitations contained in this report, as well as in Vector's greenhouse gas emissions inventory report for FY2025.

Unless the context otherwise requires, all references to amounts in $ in this report are estimates, are in New Zealand dollars and all references to balances or amounts relate to amounts at the end of each financial year, namely 30 June.

This report is not an offer document and does not constitute an offer or invitation or investment recommendation to distribute or purchase securities, shares, or other interests. Nothing in this report should be interpreted as capital growth, earnings or any other legal, financial tax or other advice or guidance. For detailed information on our financial performance, please refer to our annual report, available at vector.co.nz/investors/reports.

Glossary of terms

Table 1: Definition and glossary of terms

TERM	DESCRIPTION
CO_2	Carbon dioxide
CRD	Climate-related disclosures that comply with Aotearoa New Zealand Climate Standards
Demand-side orchestration	Where demand is shaped through signals (like dynamic operating envelopes) on distributed energy resources such as electric cars and hot water load
Distributed energy resources (DER)	Small-scale energy technologies like solar panels, batteries, and electric vehicles that either generate or store energy
Distributed systems operator (DSO)	An emerging concept of how the EDBs operating model may evolve
Dynamic operating envelope	An emerging concept to maintain electricity network security by placing limits on the amount of electricity that can be imported from, or exported to, the network at any time
Emissions	Greenhouse gas emissions
EPD	Environmental product declaration
EV	Electric vehicle
Flexibility	The ability for electrical consumption and injection to be adjusted in response to a price signal, grid frequency or an active signal from the network operator
FSP	Field service provider
FY	Financial year – 1 July to 30 June
GHG	Greenhouse gas For the purposes of this report, GHGs are the seven gases listed in the Kyoto Protocol. These are currently: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3)
GHG Protocol	The Greenhouse Gas Protocol, a partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The GHG Protocol develops standards and guidance, such as the Corporate Standard and the Corporate Value Chain (scope 3) Standard, both used as guidance for this report
IPCC (AR6)	Intergovernmental Panel on Climate Change (Sixth Assessment Report)
LPG	Liquefied petroleum gas – a mixture of hydrocarbons, consisting primarily of propane and butane. The higher density – in contrast to natural gas - allows it to be easily compressed to liquid, and is therefore largely distributed in bottles
MfE	Ministry for the Environment (New Zealand)
Natural gas	Natural gas is a naturally occurring mixture of gaseous hydrocarbons, consisting primarily of methane. The gas is largely distributed through piped infrastructure
NGFS	Network for greening the financial system - an international network of central banks and supervisory authorities including the Reserve Bank of New Zealand
(NWA) Non-wires alternative	Solutions like batteries, demand response, or local generation that reduce the need to build or upgrade traditional electricity infrastructure such as poles and wires
NZCS	New Zealand Climate Standards
RY	Regulatory year: 1 July to 30 June for the gas distribution network; 1 April to 31 March for the electricity business

TERM	DESCRIPTION
SAIDI	System average interruption duration index – average outage duration per customer in a regulatory year. This metric was developed by the Institute of Electrical and Electronics Engineers (IEEE) and used by the Commerce Commission to regulate electricity distribution networks
– Major event SAIDI	A 24 hour period during which the cumulative SAIDI due to unplanned events exceeds a predetermined major event boundary value
SAIFI	System average interruption frequency index – average number of interruptions per customer in a regulatory year. This metric was developed by the Institute of Electrical and Electronics Engineers (IEEE) and used by the Commerce Commission to regulate electricity distribution networks
SBTi	Science Based Targets initiative
SF_6	Sulphur hexafluoride – a gas used to electrically insulate electrical assets. SF_6 has a global warming potential of 23,500 times that of CO_2
tCO_2e	Tonnes of carbon dioxide equivalent
Traditional infrastructure	Physical electrical infrastructure, such as electricity cables, lines, transformers and zone substations. This is in contrast to non-network solutions like demand-side orchestration

About Vector

Vector Limited is NZX listed and 75.1% owned by Entrust, a private community trust which represents 368,000 households and businesses in central, east and south Auckland (as at 2025 roll date).

A breakdown of Vector's businesses and investments as of 30 June 2025 is detailed in the table below.

VECTOR BUSINESS	DESCRIPTION	REVENUE FY2025 ($M)
Electricity distribution network	Owns and operates the electricity distribution network within the wider Auckland region. We deliver power to more than 630,000 homes and businesses via more than 19,000 km of electricity lines (underground and overhead).	960.1
Vector Technology Solutions	A digital solutions business that takes internally developed products to market.	12.3
HRV	Provides energy-efficient solutions across New Zealand covering home ventilation, home heating, and water filtration systems, as well as electric vehicle charging. We announced the sale of HRV after the FY2025 balance date, on 1 August 2025.	35.4
Vector Fibre	Owns and operates a fibre-optic data network within the wider Auckland region. Vector Fibre is the subject of a previously announced strategic review.	28.8
Natural gas distribution network	Owns and operates the gas distribution network within the wider Auckland region, supplying gas to over 120,000 homes and businesses, through some 4,670 km of mains pipelines, distributing around 12 petajoules (PJ) of gas per year.	80.5
VECTOR INVESTMENTS	**DESCRIPTION**	
Bluecurrent (50% investment)	Smart metering business providing smart meter data services for electricity and gas meters throughout New Zealand and Australia. Bluecurrent (formerly known as Vector Metering) is jointly owned by QIC and Vector.	

Changes to Vector's business portfolio

During FY2025 Vector has:

Ceased trading of our Natural Gas Trading business as of 1 July 2024. This business has been on a wind-down since FY2020, whereby contracts for natural gas sales were not renewed. This has led to year-on-year reductions in scope 3 emissions related to use of sold gas product. See our greenhouse gas inventory report [1] for more details. We have also removed references in this climate statement to climate-related risks related to owning a gas trading business.

Sold our Ongas LPG business and Liquigas investment on 31 January 2025. We have recalculated historic greenhouse gas emissions to exclude these businesses in accordance with the Greenhouse Gas Protocol. We have also removed references in this climate statement to climate-related risks with regard to owning LPG businesses.

Sold our 8.1% shareholding in mPrest Systems (2023) Limited on 22 August 2024. The impact of mPrest on Vector's climate-related disclosures was below materiality thresholds for the purposes of climate-reporting and therefore excluded from previous analysis. As a result, sale of this investment has no impact.

Governance

Vector's board oversight

Vector Limited's board of directors is the governance body ultimately responsible for overseeing Vector's strategic direction and its climate-related risks and opportunities. Key climate-related risks and opportunities are considered as part of Vector's 16 group-level material risks that are monitored with priority by Vector's board risk and assurance committee. These 16 risks were reviewed four times in FY2025 at the group material risk review. In FY2025 four of these 16 risks relate to climate change. Refer to the governance report within Vector's annual report for a list of these group material risks [1].

The board's role in relation to climate-related issues is supported by two board committees: the audit committee, and the risk and assurance committee. These committees have delegated responsibility for managing Vector's risks, including its climate-related risks and opportunities.

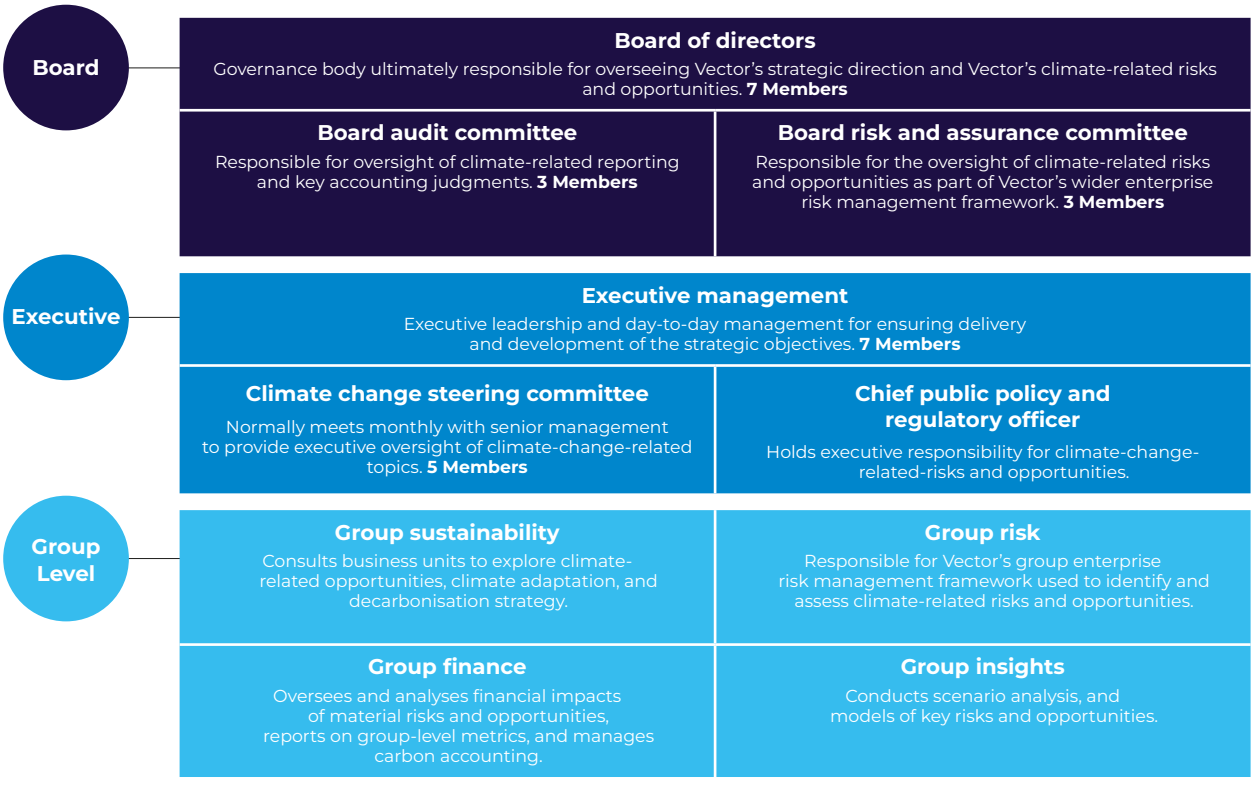
The audit committee is responsible for oversight of climate-related reporting. This committee meets to review key accounting decisions which include those regarding climate-related scenarios, materiality thresholds, consolidated risks and opportunities, as well as greenhouse gas emissions quantification and targets. The audit committee is responsible for reviewing and recommending the climate-related reports, under the Financial Markets Conduct Act (FMCA), for board approval. The audit committee is responsible for ensuring Vector's climate-related disclosures comply with the New Zealand Climate Standards (NZCS) and is responsible for external reviews and assurance in relation to the climate-related disclosures. KPMG has provided independent limited assurance* over Vector's CRD, as detailed in appendix 1. Vector's greenhouse gas emissions inventory has also been subject to limited assurance by KPMG, as outlined in the greenhouse gas emissions inventory report [1]. Additionally, our CRD has been legally reviewed by Chapman Tripp.

The risk and assurance committee is responsible for the oversight of climate-related risks and opportunities as part of the committee's oversight of Vector's enterprise risk management framework.

These two committees are accountable to the board and each generally meets at least four times per year. Following each meeting the relevant committee updates the board in relation to matters within its scope that significantly affect Vector, as well as noting decisions of the committee and recommendations to the board. The board notes or approves the findings or recommendations of the committees as appropriate.

All committee papers are available to the full board and all directors have the opportunity to submit questions and/or attend committee meetings.

Members of Vector's management attend the meetings of the committees also, where relevant, to provide a two-way engagement between the board and management. Charters of the board and relevant committees can be found in the governance section of Vector's website [2].



* A limited assurance engagement is less in scope than a reasonable assurance engagement, for a detailed explanation – please see page 38.

Governance (continued)

The board ensures that it has the appropriate skills and competencies by accessing expertise from within the group as well as external advice where needed. For example, the group sustainability team has expertise in physical and transitional climate change trends, while the group insights team has skills to produce and update transitional scenario models for the electricity and gas distribution networks. The board also holds sessions that assist in upskilling the directors on topics relevant to Vector's businesses. For example, in FY2025 the board held a session with the group chief executive and the chief operating officer of electricity, gas and fibre on the status of the gas distribution network about uncertain gas volumes and the incoming regulatory reset. Vector's board charter requires that all directors continuously educate themselves to ensure that they can perform their duties appropriately and effectively. A summary of key board and board committee meetings in FY2025 is found in figure 1 below.

Vector's executive management oversight

The group chief executive is responsible for the day-to-day leadership and management of Vector's businesses to ensure the business strategy and objectives are successfully developed and delivered. The climate change steering committee is a subcommittee of the executive, consisting of five members, to provide executive oversight of climate-related topics including climate change risks and opportunities. Meetings are typically held monthly[1]; however, when the agenda consists only of updates, an email summary may be provided in place of a formal meeting. The climate change steering committee is chaired by the chief public policy and regulatory officer, who holds overall executive responsibility for climate-related risks and opportunities. The climate change steering committee reports to the chief executive periodically via the chief public policy and regulatory officer.

Figure 1: Key board and board committee meetings that occurred during FY2025 related to climate-related risks and opportunities

September 2024
- (R) Reviewed group material risks which includes climate-related risks - this occurs quarterly

November 2024
- (A) Update on scenarios, methods, and judgments influencing Vector's FY2025 climate-related disclosures
- (R) Reviewed group material risks

December 2024
- (B) Update on Vector Technology Solutions - this is related to the energy platforms opportunity

February 2025
- (B) Reviewed Vector's greenhouse gas commitments

March 2025
- (R) Reviewed group material risks
- (R) Approved climate-related risks and opportunities identified through the business unit risk review
- (B) Approved the electricity asset management plan which contains 10-year investment and maintenance programmes over the period 1 April 2025 to 31 March 2035
- (B) Deep dive on gas distribution

May 2025
- (B) Approved short-term incentive measures for the following financial year

June 2025
- (A) Reviewed key judgments made during modelling, carbon emission calculation, and a draft of the climate-related disclosures
- (B) Approved the gas asset management plan which contains 10-year investment and maintenance programmes over the period 1 July 2025 to 30 June 2035
- (R) Reviewed group material risks.
- (B) Update on Vector Technology Solutions

August 2025
- (A) Recommended climate-related disclosures to the board
- (A) Recommended the greenhouse gas emissions inventory report to the board
- (B) Approved climate-related disclosures
- (B) Approved greenhouse gas emissions inventory report
- (B) Update on Vector Technology Solutions
- (B) Approved staff incentive target for the following financial year

(A) Board audit committee
(R) Board risk and assurance committee
(B) Board

1. In FY2025 there were eight climate change steering committee meetings

Governance (continued)

Tracking climate-related metrics and targets

The climate-related metrics set out in this report are prepared by Vector's management and discussed with the Vector board audit committee. The metrics are monitored by management and integrated into performance dashboards. Any noteworthy changes in Vector's performance against metrics can be reported to the group chief executive via a chief public policy and regulatory officer report. Relevant contents from the monthly report are then reported to the board in the group chief executive's report.

As noted on page 26, Vector's greenhouse gas emissions reduction target was developed by thinkstep-anz, and approved by the board in FY2021. In addition, Vector has targets for customer outages which are set by Vector's economic regulator, the Commerce Commission.

Progress against Vector's targets is monitored by Vector's management and integrated into performance dashboards. Also, Vector's management is responsible for updating the board on performance against these targets. For example, customer outage performance is presented to the board in an electricity distribution networks operational board paper.

In FY2025 short-term incentive payments for Vector's executive and their direct reports included a component linked to Vector's performance against its emissions reduction, customer outage targets, and a climate resilience target. These incentive targets are designed and agreed by the executive team and approved by the board at its discretion. Specific details can be found in the metrics and targets section on page 34.

Vector's group oversight

The Vector group risk team is responsible for Vector's enterprise risk management framework. Risks, including climate-related risks and opportunities, are identified, assessed and managed across the group in line with the enterprise risk management framework and the group risk assessment criteria. This approach to risk management is designed to ensure that there is appropriate and regular board and management oversight of material risks identified to drive informed decision-making. Vector's group sustainability team consults with Vector's business units to drive Vector's climate change strategy. The group sustainability team reports to the chief public policy and regulatory officer and sets the agenda for the climate change steering committee. Greenhouse gas emissions are accounted for by group finance, with transitional scenario modelling conducted by the group insights team or external consultants, as needed.

Governance (continued)

Integrating climate-related disclosures with wider disclosures

Vector's climate-related disclosures are informed by and informs a suite of inter-related disclosures.

DISCLOSURE	INTEGRATION
Electricity asset management plan	The electricity asset management plan, as required by regulation, discloses Vector's electricity asset management policy, objectives, information, 10-year expenditure plans, and the context in which expenditure decisions are made. Expenditure forecasts in the asset management plan are not commitments as they are also scrutinised through appropriate internal governance processes, and are subject to periodic regulatory approval of capital allowances before decisions are made. Integration with climate-related disclosures: Information relevant to the risks – inability to efficiently manage load to avoid network congestion, increase in extreme weather events, and the distributed energy resources opportunity – is discussed in the electricity asset management plan in the context of the electricity network managed by Vector. While scenario analysis informs the asset management plan, the expenditure decisions disclosed do not necessarily relate to a specific scenario. This is explained in further detail in figure 2 on page 14. Climate-related risks are not the sole driver of asset management investment decisions.
Gas asset management plan	The gas asset management plan, as required by regulation, discloses Vector's gas asset management policy, objectives, 10-year expenditure plans, and the context in which expenditure decisions are made. Expenditure forecasts in the asset management plan are not commitments as they are also scrutinised through appropriate internal governance processes, and are subject to periodic regulatory approval of capital allowances before decisions are made. Integration with climate-related disclosures: Gas transition risk is discussed in the gas asset management plan. While scenario analysis informs the asset management plan, the investment decisions disclosed do not relate to a specific scenario - rather, they are investments tested against those scenarios to deliver a prudent asset management strategy. This is explained in further detail in figure 2 on page 14. Climate-related risks are not the sole driver of asset management investment decisions.
Greenhouse gas emissions inventory report	Discloses Vector's greenhouse gas emissions, methodology, assumptions, and emissions reduction initiatives. Integration with climate-related disclosures: The greenhouse gas emissions accounting and target are expressed in the greenhouse gas emissions inventory report and feed into the metrics and targets section of the climate-related disclosures.
Vector annual report, interim report, and operational performance updates	Discloses financial and operational information at a group level. Integration with climate-related disclosures: Operational statistics disclosed in the operational performance update inform the metrics and targets section of the climate-related disclosures. Some information from the climate-related disclosures, and greenhouse gas emissions inventory report is repeated in the annual report so that fair and accurate information is available to readers of the annual report.
Electricity and gas distribution information disclosures	Annual disclosures of historical financial and non-financial performance, in accordance with regulatory information disclosure requirements. Integration with climate-related disclosures: Metrics disclosed here inform the metrics and targets section of the climate-related disclosures.
Electricity and gas distribution price quality statements	Annual assessment of performance against price path and quality standards, in accordance with distribution services regulatory price/quality path requirements. Integration with climate-related disclosures: Metrics disclosed here inform the metrics and targets section of the climate-related disclosures.

Strategy

Vector's transition plan

Transition planning has been a key aspect of Vector's Symphony strategy. Symphony aims to use digital technologies, and tools such as demand-side orchestration, to more efficiently manage the electrification during the low-carbon transition. Our strategic response to climate-related risks and opportunities has evolved alongside our understanding of those risks and how they are likely to impact Vector. The table below contains a summary of the transition plan aspects of Vector's strategy, describing how we plan to respond to our material climate-related risks and opportunities and position Vector as the economy transitions towards a low-emissions, climate-resilient future state. Further details of Vector's business strategy, including key assumptions and barriers, can be found under each disclosed risk and opportunity.

STRATEGIC PRIORITY	CURRENT ACTIONS	LINK TO RISK/ OPPORTUNITY
Enabling the electrification of Auckland	Orchestrating distributed energy resources such as electric bus charging to reduce the need for additional infrastructure spending. Developing and deploying digital systems, integration protocols, cyber security, and data platforms that support the development and operation of demand-side orchestration. Enhancing monitoring of the low voltage network to optimise infrastructure utilisation. Actively engaging to influence regulatory and policy settings and standards such as regulated standards for smart electric vehicle chargers. Actively engaging with customers to build our understanding of preferences and behaviours, and working with retailers to evolve their offerings that influence how and when customers use the network.	**RISK 1:** inability to efficiently manage load to avoid network congestion **OPPORTUNITY 2:** distributed energy resources
Mitigating stranding risk of gas distribution network	Actively engaging with government and regulators for a managed gas transition to recover potential stranded value. Reviewing and replacing some capital expenditure (such as pipe replacement at end of life) with operational expenditure (like active pipe monitoring). Understanding customer needs, cost concerns and attitudes related to natural gas.	**RISK 2:** gas transition
Improving climate resilience	Modelling weather impacts on Vector assets from floods, wind, landslip, fire and cyclones. Analysing weather models over current assets to understand asset-specific risk. Developing projects to mitigate risk with allocated capital expenditure. Establishing a resilience cost curve framework to prioritise resilience projects. Surveying customers to understand their priorities and solutions to strengthen resilience.	**RISK 3:** increase in extreme weather events
Enabling the digitalisation of energy	Further developing Diverge, an energy data management software platform for the collection, processing, storage and delivery of smart meter and related energy data insights. Developing strategic partnerships, such as our partnership with Tapestry, the energy moonshot at X (Google's innovation lab) to enable smart electricity networks to benefit customers.	**OPPORTUNITY 1:** energy platforms
Decarbonising our operations	Setting a target to reduce Scope 1 and 2 emissions by 53.5% from our FY2020 base year (excluding electricity distribution losses). Developing a marginal carbon cost abatement curve to prioritise decarbonisation projects.	Not linked to a material risk or opportunity, but is consistent with Vector's Symphony strategy to help navigate and shape the energy transition[2]
UNDERPINNED BY VECTOR'S GROUP-LEVEL SYMPHONY STRATEGY		

Information regarding the extent to which transition plan aspects of Vector's strategy are aligned with internal capital deployment and funding decision-making processes can be found in each risk/opportunity section later in this document. With respect to 'decarbonising our operations', please refer to the marginal carbon cost abatement curve on page 29.

2. Decarbonising our operations is strategically important as it aligns with global efforts to limit warming to 1.5C. However there is no risk or opportunity linked to this priority as it does not meet our materiality thresholds.

Strategy (continued)

Our approach to asset management

As a regulated entity, Vector publishes detailed 10-year electricity and gas asset management plans, available here [3,4]. These plans detail our prudent asset management strategy, and are informed by asset management specific scenario modelling – see figure 2 on page 14. While climate-related risks are an input into asset management planning, these are collectively one of the many risks that are considered.

Our approach to using climate scenarios

Vector developed three group climate scenarios, as outlined in the adjacent table, which adapt data from the Intergovernmental Panel on Climate Change (IPCC) Assessment Report Six [5] for physical analysis, and the Network for Greening the Financial System (NGFS) [6] (an international network of central banks and supervisory authorities including the Reserve Bank of New Zealand) for transitional analysis. We consider that the IPCC scenarios [5] are best suited for New Zealand physical risk impact analysis because of their data availability. Likewise, we consider that the NGFS scenarios are relevant to Vector's assessments as they capture the customer burden on an unmanaged transition.

These group scenarios were initially developed by Vector's management, informed by existing scenario modelling for asset management, globally recognised scenarios, and engagement with the wider electricity distribution and transmission sector in New Zealand. The scenarios were revisited in FY2025 and were considered to remain plausible and appropriate future pathways that are fit for purpose. However, we note that, from a global context, both the SSP5-8.5 'hothouse scenario' and SSP1-1.9 'orderly 1.5°C scenario' are being re-examined and these may be updated in future disclosures with oversight from our climate change steering committee and board audit committee. Because these updates are related to physical impacts, they will affect physical climate change modelling, but they are not expected to have impact on the underlying process to identify material climate-related risks and opportunities. Vector does not include carbon removals/sequestration in its underlying scenario assumptions.

Vector worked with the wider New Zealand energy sector to align on scenarios. This work was finalised in June 2024 and we may consider this in our scenarios and scenario modelling in the future. This may result in changes to our strategy, and risk and opportunity assessments. We have not yet integrated the wider energy sector scenarios as it will take some time to update our numerous models.

Select assumptions of the group scenario narratives are used in scenario modelling as relevant to the appropriate Vector business unit. For example, when modelling future electricity load we consider inputs such as electric vehicle uptake, demand-side control, energy efficiency, and gas to electricity switching, but do not include others, like temperature forecasts. Similarly when modelling the future gas network we include assumptions such as the regulatory settings around gas networks, but do not include physical climate change impacts or the transitional impacts of the electricity network. The relationship between scenarios and modelling is detailed in figure 2. There is no model that combines all assumptions presented in the scenarios narratives.

ORDERLY DECARBONISATION

Orderly decarbonisation

- Limits global average temperature to 1.5°C warmer by 2100 (RCP 1.9)
- Net zero by 2050 in New Zealand and globally
- Transition includes uptake of digital platforms for demand-side management
- Rapid electrification managed through demand response
- Regulations aligned with decarbonisation, and pricing models that manage whole-of-system costs
- Ongoing efforts with energy efficiency to reduce demand
- Managed transition away from fossil fuel gas
- SSP 1-1.9

DISORDERLY DECARBONISATION

Disorderly decarbonisation

- Global average temperature 2.7°C warmer by 2100 (RCP 4.5)
- New Zealand still achieves net zero by 2050 but via a disorderly transition
- World maintains current emissions until 2050 and net zero by 2100
- Transition focuses on large-scale renewable supply with no demand side or digitalisation
- Rapid unmanaged electrification
- Regulations lag decarbonisation efforts and create barriers to efficient decarbonisation
- Customers bear the cost of an expensive unmanaged transition
- Unmanaged transition from fossil fuel gas
- SSP 2-4.5

HOTHOUSE

Hothouse

- Global average temperature 4.4°C warmer by 2100 (RCP 8.5)
- Emissions triple by 2075
- Policies revert New Zealand to the fossil fuel era
- Customers bear the cost of expensive fossil fuel energy
- Regulations block decarbonisation spending
- SSP 5-8.5

Strategy (continued)

ORDERLY DECARBONISATION

Under the orderly decarbonisation scenario, the world shifts gradually but pervasively towards decarbonisation. This scenario describes a future where global net-zero emissions are reached by 2050, and global temperatures peak around 1.6°C by 2050 and then decline to 1.4°C by 2100. This prevents the most extreme predicted impacts of climate change (which are described in the hothouse scenario below). However, this scenario will still result in an increase in extreme weather impacts including flooding, increased heavy wind events, land erosion and increased sustained hot and dry weather.

For New Zealand, the orderly decarbonisation scenario describes a future where domestic actions and policies are consistently aimed at achieving net-zero domestic emissions by 2050. This scenario sees actions and policies providing for clear and early decarbonisation actions that integrate a whole-of-system approach, including both the supply side and demand side of the energy system.

In relation to the electricity sector, the orderly decarbonisation scenario's future provides for the New Zealand electricity grid supplying near to 100% renewable electricity by 2050. It also assumes regulatory settings that incentivise and prioritise demand-side energy management solutions, distributed generation, and energy-efficiency measures, which allow the energy sector to manage electrification and renewable generation while avoiding substantial increases in network congestion. In particular, this demand-side participation by energy customers optimises the use of the existing physical electricity distribution network to reduce inefficient capital expenditure and assumes regulatory settings that optimise the wholesale market to leverage the low cost of renewable power. The combined effect keeps electricity prices low, and therefore enables an easier transition from fossil fuels to electricity.

Globally the need for higher-quality energy data, digital platforms, and energy analytics increases as more electric vehicles and distributed renewable generation enter the electricity system.

With respect to the natural gas sector, the orderly decarbonisation scenario describes a future where gas supply networks undergo a managed transition from fossil gas in response to reduced gas usage. This means that capital asset costs associated with existing gas transmission and distribution assets are recovered through early regulatory and policy changes, thereby minimising future customer impacts as costs are recovered over a larger current customer base.

DISORDERLY DECARBONISATION

Under the disorderly decarbonisation scenario, the world follows a decarbonisation pathway whereby emission trends do not shift markedly from historical patterns, with some countries making relatively good progress while others fall short. CO_2 emissions are expected to remain at current levels until approximately 2050 and then fall by 2100 causing global temperatures to reach 2.0°C by 2050, and 2.7°C by 2100.

Consequently, with respect to physical risks of climate change, the increased temperatures that are assumed to occur under the disorderly decarbonisation scenario (when compared to the orderly decarbonisation scenario) would cause more significant weather impacts to be felt in New Zealand. These weather impacts include physical risks to Vector's physical assets, including our electricity assets in particular.

In regards to transition risks, under the disorderly decarbonisation scenario New Zealand achieves its net-zero emissions target by 2050. However, policy measures in the lead up to 2030 lack cohesion and the failure to coordinate policy stringency across sectors results in inefficient capital investments.

In the electricity sector, this delay and incoherent policy approach results in a high cost burden on energy customers (because of inefficient investment in physical electricity assets to respond to higher peak energy demands), and creates energy reliability issues.

Under the disorderly decarbonisation scenario, decarbonisation policies focus on supply-side policies which enable new large-scale renewable electricity generation and support the rapid electrification of transportation. The absence of demand-side management of electric vehicle charging and industry electricity demands results in high network congestion, needing large infrastructural upgrades with costs largely passed on to customers. This could result in intervention by regulators and/ or government - therefore impacting the approval of capital allowances.

The absence of demand-side management also limits customers' abilities to leverage technology to reduce consumption at peak periods, increasing the strain on the wholesale market and dependence on large-scale backup generation. This failure to realise opportunities to reduce overall energy costs through system efficiencies results in high electricity prices. Such high electricity prices not only intensify energy affordability issues but also create dependency on government subsidies and high carbon prices to achieve the 2050 targets.

In relation to the natural gas sector, the disorderly decarbonisation scenario presumes that gas customers take and act on the view that the long term (between 2040 - 2050) operation of piped gas is not viable. This leads to a wind-down without regulatory or policy intervention to preserve cost recovery leading to an increase in cost recovery risks. In addition, gas customers face their own stranded asset risk.

HOTHOUSE

The hothouse scenario describes a future where minimal and fragmented efforts towards climate change mitigation have resulted in severely increased physical impacts.

Under this scenario, the rest of the world prioritises economic and social development over decarbonisation efforts leading to the exploitation of fossil fuel resources. As a result, under the hothouse scenario GHG emissions triple by 2075 and global temperatures reach 2.4°C by 2050 and 4.4°C by 2100.

With respect to physical risks, there would be a significant increase in extreme weather events leading to expensive climate change adaptation measures and low grid reliability.

Regarding transition risks, this scenario represents a future where there is no or minimal action towards domestic and global emissions targets. Regulations form barriers to decarbonisation spending, and policy incentives to facilitate faster carbon reductions are ineffective or absent. Customers continue to bear the cost of fossil fuel energy and ongoing climate change adaptation.

In relation to the natural gas sector, the hothouse scenario assumes a continuation of fossil fuels such as natural gas and LPG beyond 2050. Likewise, the electricity network only sees a low and manageable uptake of electric vehicles through to 2080.

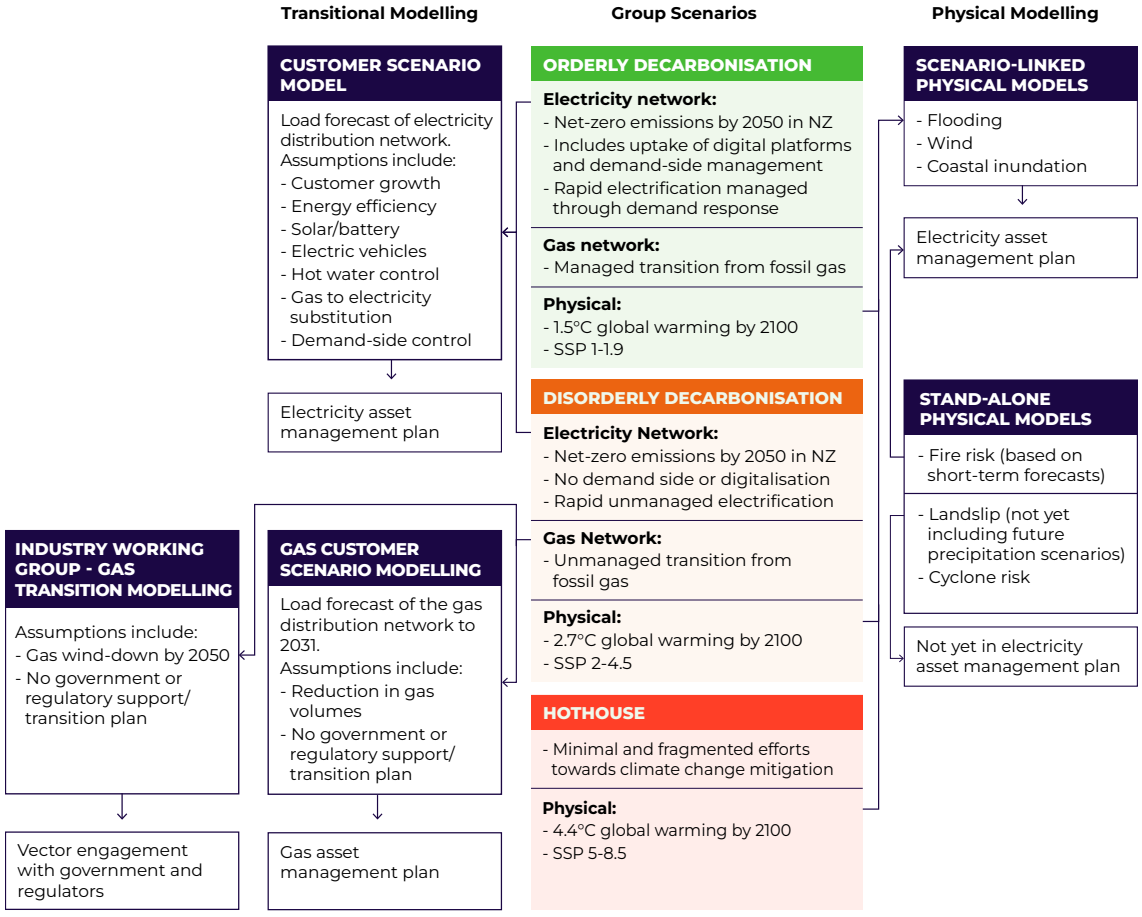
Strategy (continued)

Scenarios represent plausible descriptions of how the future may develop based on a set of assumptions, including both physical and transitional climate-related risks in an integrated manner. Scenarios are used to prepare for uncertain future impacts of climate change and test the resilience of Vector's business model and the Symphony strategy. Scenarios are not intended to be probabilistic or determinative of climate change. Future group scenarios may also change in time, given the significant interconnection with government and regulatory decisions.

Vector's scenario analysis covers the group and all subsidiaries. The chosen scenarios are appropriate to Vector as they allow us to assess the resilience of our business strategy against different potential futures that could emerge as part of the energy transition.

As explained above, Vector's scenario modelling informs our strategy including our gas and electricity asset management.

Figure 2: Interconnection of Vector's modelling with overarching climate scenarios



Strategy (continued)

Physical impacts modelling

Drawing on our group scenarios, Vector conducts detailed physical modelling of both acute and chronic impacts.

Physical climate modelling highlights that electrical assets in the Auckland region are exposed to the various physical impacts of climate change. Assessment and management of physical risks on Vector's electricity distribution network have therefore been a focus.

In FY2022 Vector began assessing specific physical risks on our electrical infrastructure assets. We did so by prioritising those risks with the highest expected impact, being: risks associated with higher wind-speed, flooding, landslip, fire, and ground temperature increases. In FY2022 Vector commissioned ClimSystems to conduct extreme wind analysis, and analyse coastal inundation.

In FY2023 freshwater flood analysis was conducted, and in FY2024 the flood models were improved to include flood depth. The flood modelling results were mapped against our electricity zone substations. In FY2025 the models were updated to include even more infrequent, high-impact events such as 1–500 year and 1–1000 year probabilities.

In FY2024 the University of Auckland's Department of Civil and Environmental Engineering conducted a land instability assessment in relation to our overhead electricity assets. Geospatial landslip risk maps were then mapped against Vector's overhead asset base to understand asset susceptibility to landslips.

We worked closely with Earth Sciences NZ (formerly NIWA) and Fire and Emergency New Zealand to conduct a dry year and associated fire zone analysis for the electricity distribution network for the subsequent summer.

Vector engaged with international electricity distribution companies, including Florida Power & Light Company and San Diego Gas & Electric, to help us understand and prepare for the impacts of extreme weather events. In the case of Florida Power & Light, this was in response to the growing frequency and severity of cyclones, to learn more about how they were managing their adaptation, while the work with San Diego Gas & Electric was around how they managed their wildfire risk.

In FY2025 Vector commissioned Earth Sciences NZ (formerly NIWA) to explore plausible outcomes for the Auckland region if Ex-Tropical Cyclone Gabrielle had taken a different track and directly impacted Auckland as opposed to Hawke's Bay. Initial analysis highlights that the heaviest rainfall that occurred with the actual Gabrielle event in Hawke's Bay was now happening over the Coromandel and Kaimai Ranges, in effect placing Auckland in a rain-shadow region, therefore lessening the impact. Most parts of Auckland still received around 100mm of rainfall, and work is underway to process this data for analysis against our assets.

Physical climate-change impact modelling is part of our scenario analysis and informs Vector's climate change strategy via the asset management process and informs the engineering and design process for works on existing assets. For example, we have developed an approach to flood abatement over zone substations within flood-risk zones and integrated those expenditures within our electricity asset management plan. These include activities such as the raising of assets above flood plain levels, or relocating the assets altogether.

There is usually a time-lag between Vector's climate modelling/analysis, and asset management processes. For example, once an asset is identified as having a potential vulnerability, detailed modelling and engineering studies are often required before appropriate action can be put forward. Note that the proposed mitigation actions in the asset management plan are not a commitment to spend, and also require periodic regulatory funding decisions from Vector's economic regulator, the Commerce Commission.

Transitional impacts modelling

The Climate Change Commission has highlighted that electrification will be key to the decarbonisation of New Zealand's economy [7]. Transitional aspects of Vector's group climate scenarios have been selected to identify the boundary conditions for infrastructural demand. The scenarios help us to focus on the strategies that can better utilise existing infrastructure - such as regulated standards for smart electric vehicle charging, which informs our position on wider policy and regulations concerning the electrification transition.

Through our scenario modelling, we consider elements of both an orderly and disorderly transition to help us understand future demand. For example, modelling of peak load under the disorderly decarbonisation scenario assumes misaligned management of customer assets and appliances, resulting in the greatest peak demand. The converse is true of the orderly decarbonisation scenario, where peak load is minimised – such as for example through the integration of smart digital platforms, network visibility, the alignment of customer incentives, and demand side orchestration of customer assets.

An example of this would be electric vehicle uptake. In a disorderly scenario, we model a greater proportion of unmanaged electric vehicles charging during peak periods, which ultimately increases the capacity requirements on the network. In an orderly scenario, demand-side orchestration results in fewer electric vehicles being charged at peak times.

This scenario modelling has been considered within Vector's strategy processes including the electricity asset management plan, which presents a detailed discussion on network growth and security in chapter 10 [3].

Transition risks to Vector's gas network were modelled in FY2023 as part of the wider Gas Industry Futures Working Group – a collaboration of gas distribution and transmission companies in New Zealand. We model the disorderly transition scenario as it relates to gas, which presumes a 2050 network wind-down with no regulatory or policy intervention. This is appropriate to analyse given the significant potential asset cost recovery risks. In FY2025 Vector divided the disorderly scenario of gas into three further sub-scenarios to test different plausible customer trends of the disorderly scenario.

Strategy (continued)

Limitations of scenario modelling

As noted on page 3, climate-related risk management, and scenario modelling in particular, is an emerging area, and often relies on data and methodologies that are developing and uncertain.

By way of example, our flood modelling is largely dependent on precipitation forecasts, pre-storm water levels, elevation topology based on light detection and ranging (LiDAR) scans, ground surface roughness and infiltration. The elevation topology represents a 'bare earth' model and therefore does not take into account buildings or subsurface stormwater reticulation.

Our wind modelling does not have spatial resolution, and therefore is not geospatially integrated into our asset analysis. This limits our ability to incorporate wind models into targeted asset planning.

In addition, our landslip modelling does not take into account the impacts of future precipitation.

Vector's transitional scenario modelling on the electricity network is also limited. For example, it only includes transitional customer impacts, such as electric vehicle uptake, industrial decarbonisation, new point loads, population growth, demand response, solar/battery uptake, and energy efficiency. It does not consider how the physical impacts of climate change (such as temperature change) may impact customer energy demand in the future.

We exclude the hothouse scenario in our transitional scenario modelling as this assumes there is no transition and therefore is an immaterial transitional impact. Hothouse is still modelled in our physical scenario analysis.

In addition, gas network scenario models are highly sensitive to the current and future policy and regulatory framework, future gas prices, availability, and customer sentiment towards fossil fuels. These regulatory settings, market conditions, and policy settings are not yet clear and therefore our assumptions may prove incorrect.

Value chain

In considering Vector's exposure to climate-related risks and opportunities, we have also taken into account the exposure of our value chain. As part of that assessment, we have defined our value chain as encompassing Vector's 50% share in Bluecurrent (formerly known as Vector Metering). It provides smart electricity and gas meters, and related data services. Bluecurrent operates in Australia and New Zealand.

We have also assessed upstream risks by including consideration of climate-related risk exposure of some of our tier 1 suppliers but have excluded tier 2 and 3 suppliers (for example, copper mining suppliers) because of the current difficulty in analysing such a large and complex supply chain.

Impacts on downstream customers, such as the cost of gas appliance conversions and gas costs, are considered. They are relevant to our assessment of climate-related risks and opportunities.

We have also begun exploring the intersectionality between critical infrastructure providers as part of our value chain analysis. In FY2025 we initiated a collaboration with Auckland Transport to analyse Vector's ability to access critical electrical infrastructure in a flood event.

Current transitional impacts

Vector is already observing growth in electric vehicles and industrial decarbonisation in the Auckland region, which impacts the load on Vector's electricity distribution network. We are also observing indirect transitional impacts, such as the anticipated rapid growth of data centres in the Auckland region. While not directly attributed to climate change, many data companies are drawn to New Zealand because of its high renewable electricity supply and competitive energy costs compared to other OECD countries.

Although electricity system growth is reflected in our electricity asset management plan - [3], it is not possible to attribute these financial variances specifically to climate change. For example, while growth is driven in part by electrification, it is also driven by housing development, and changes in industrial behaviour.

It is important to note that the current increases in Vector's electricity distribution network pricing are largely influenced by an increase in the weighted average cost of capital, rather than an increase in infrastructure expenditure.

Vector has also developed Diverge, an energy data management software platform for the collection, processing, storage and delivery of smart meter data and its related insights. Our electricity distribution network uses Diverge for ingesting and storing smart meter and related energy data which can be used to increase visibility of customer demand on Vector's low-voltage network.

The Ministry of Business, Innovation, and Employment (MBIE) have indicated that gas supply is reducing faster and sooner than previously forecast based on their most recent petroleum reserves data (January 2025) [8]. The ministry's expected proven and probable future natural gas production from 1 January 2025 onwards dropped from 1,166PJ in 2024 to 960PJ in 2025, an 18% reduction. Natural gas distributed volumes on the Vector network have declined from 14.4PJ in FY2019 to 11.9PJ in FY2025.

In 2022 the Commerce Commission implemented accelerated depreciation from the start of the third default price/quality path commencing on 1 October 2022. Shortening asset life can reduce the risk of economic network stranding. Vector is currently engaging with the Commerce Commission on the next price path reset, and highlights that more focus is required to manage stranding risk to preserve incentives to invest and ensure remaining customers are not burdened with material price rises in later years. For more information, see risk 2: gas transition.

In FY2025 Vector recognised an impairment loss of $37 million in regard to goodwill allocated to the gas distribution business. The impairment was recognised following due consideration of updated forecasts in our gas asset management plan. These forecasts show a decline in net connections to the gas network from FY2026, and the overall gas volume continuing to decline, but at a faster rate than in prior years. This follows a FY2024 goodwill impairment of $60 million. Following the impairment, the carrying value of the gas distribution business is consistent with the estimated value of the regulated asset base.

Strategy (continued)

Current physical impacts

In recent years, including FY2025, Vector's electricity network has been impacted by extreme weather events. These include:

High wind-speeds, storms and cyclonic events: Responsible for power outages, largely through vegetation falling on Vector's electricity distribution network, and related repair costs.

Flooding: Resulting in flood damage, asset relocation costs, operational costs to disconnect and reconnect power for the safety of our customers, and geo-technical instability leading to landslips and increased vegetation fall.

In FY2025 Cyclone Tam followed by a thunderstorm caused about 1,600 low-voltage faults, and 231 high-voltage faults resulting in over 79,000 customers losing power. The latest estimate is that the associated costs to Vector for electricity maintenance as a result of Cyclone Tam resulted in a cost of approximately $1.7 million.

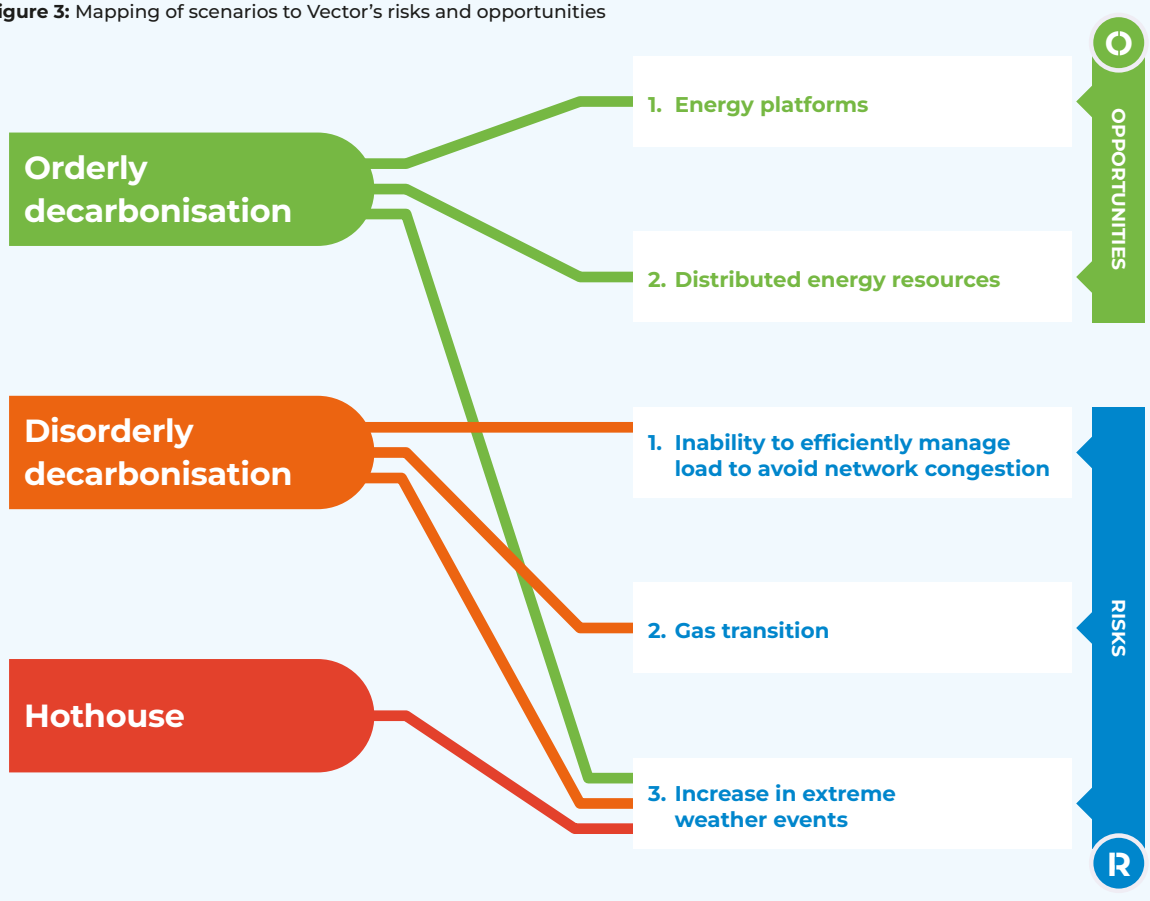
For interest, the FY2023 Auckland Anniversary floods and Cyclone Gabrielle resulted in a cost of $17.1 million.

Hot and dry weather: Reducing current capacity in electricity assets and increasing the risk of electrical equipment failing or causing wildfires.

Vector's material risks and opportunities

From our scenario analysis, we have identified three risks and two opportunities. Their mapping against our scenarios are highlighted in figure 3, and expanded on the subsequent pages.

Figure 3: Mapping of scenarios to Vector's risks and opportunities



RISK 1:

Inability to efficiently manage load to avoid network congestion

Risk description

Key scenario: disorderly decarbonisation

Type: transitional – policy risk

Sector: electricity distribution network

Geography: Auckland

In a disorderly decarbonisation scenario, an absence of timely policy, regulatory and market changes results in customer peak demand increasing faster than average annual usage. Subject to network response and planning, two different future scenarios may emerge:

a) a highly congested network with network connection queues and reliability challenges; or

b) a strong increase in physical network investment leading to affordability challenges for customers.

Time period

Long term: 10 – 30 years

Anticipated impacts

Scenario modelling highlights that under a disorderly decarbonisation scenario the growth over the next 30 years would result in a substantially stronger increase in peak demand compared to an annual increase in consumption on Vector's network. Under this disorderly scenario, the absence of demand-side orchestration leads to two fundamental issues as described in the risk section above:

If network investment is lagging demand because of unanticipated rapid peak demand growth, the network will be increasingly congested and new connections queues will become increasingly long. If prolonged and at scale, this could lead to customer outages, slow down economic growth and limit decarbonisation efforts.

Conversely, if traditional network investment is significantly ahead of demand growth or caters to an increasingly high peak demand, it may lead to a strong build-out of physical network infrastructure that locks in cost and lacks flexibility.

Both issues may pose risks such as higher customer costs and economic slowdown. This could result in intervention by regulators and/or government, impacting the return on the deployed assets and reputational loss.

Vector's risk management strategy

Vector's strategy to manage this risk over the medium-term period to 2035 involves the effective demand-side orchestration of distributed energy resources (such as electric vehicles and hot water), and the deployment of non-wires alternatives to smooth load profiles. This includes increasing our ability and capability to manage these distributed energy resources (either ourselves, or through third parties), and the alignment of market, regulatory and policy settings to support and enable this. Also included is the management of loads during critical events, such as a network or grid emergency, to ensure electricity system stability.

To defer investment in traditional infrastructure and manage the network securely, Vector needs certainty that customers' demand will be shifted outside peak periods. At a high level, delivery of our Symphony strategy to address this risk involves:

- Direct integration of distributed energy resources, and their management systems, with our network management systems. An example of this could be a dynamic operating envelope which could provide network limits to retailers' systems in real-time in response to electricity constraints on the network
- Enabling digital systems, integration protocols, cyber security, and data platforms
- Visibility of the low-voltage network, including distribution transformer and distributed energy resource visibility for more efficient planning
- Active engagement for regulatory and policy settings and standards such as regulated standards for smart electric vehicle chargers
- Network modernisation to support whole-of-system planning, distributed energy resource integration and detection
- Active customer engagement to build our understanding of preferences and behaviours, and working with retailers to evolve their offering that influence how and when customers use the network.

These initiatives are incorporated into Vector's internal capital deployment and funding decision-making processes through our electricity asset management plan [3].

Examples of actions to date that support Vector's risk management strategy include:

- Using data and insights from our gas network to inform electricity demand forecast from gas to electricity switching
- Building capability to on-board large customers onto Vector's distributed energy resource management system for demand response which can minimise the capital cost for those customers
- Further developing Diverge, an energy data management software platform for the collection, processing, storage and delivery of smart meter data and related insights
- Increasing low-voltage network visibility via the aggregation of existing smart meter data to understand remaining low-voltage headroom
- Developing a load management protocol with retailers operating customer devices, and introducing a commercial distributed energy resource tariff to enable more efficient use of existing network capacity by commercial customers with flexible loads
- Building solutions using bespoke services, co-developed between Vector Technology Solutions and AWS
- Working with Tapestry, the energy moonshot at X (Google's innovation lab) as one of a select group of global partners, collaborating on the next generation of platforms for network management. For more details, see opportunity 1: energy platforms on page 21.

Changes to this strategy may emerge in response to regulatory, technology and market changes, scientific developments, and customer preferences.

RISK 2:

Gas transition

Risk description

Key scenario: disorderly decarbonisation

Type: transitional – policy risk, market risk

Sector: gas

Geography: Auckland

An absence of timely policy and regulatory decisions on the gas transition, combined with upstream gas supply shortages gives rise to a disorderly decarbonisation scenario, where gas infrastructure companies and their connected customers are potentially exposed to material transition costs, disruption and gas-asset stranding risk.

Time period

Short term: 0 – 5 years

Medium term: 5 – 10 years

Long term: 10 – 30 years

Anticipated impact

There is uncertainty over the future asset life utilisation (capacity and longevity) of gas networks. This is driven by New Zealand's targets for net-zero carbon emissions by 2050, combined with a shortage of upstream gas supply, declining gas consumption, and inconsistent government policy direction to adequately manage the transition. Under the disorderly decarbonisation scenario, there is a risk that the government or regulator doesn't honour the principle of regulated investment cost recovery. This introduces a stranded asset risk whereby investment recovery is not achieved over the long term. This may also lead to further impairments of the value of the gas business.

Vector has already experienced a 17% decline in gas volumes since 2019, and our medium-term scenario modelling under the disorderly transition highlights that this trend will continue. This is driven by a combination of numerous factors which include decarbonisation, gas scarcity, and business closure or relocation from Auckland.

Vector's risk management strategy

Vector's short-term cash-flow risk is because of the Commerce Commission's approach to using a weighted average price cap, which incentivises gas distribution companies like Vector to grow gas demand – and therefore financially penalises gas distributors if gas volumes are lower than the Commerce Commission's forecasts. We have proposed that New Zealand follows the approach of the UK, which uses a revenue cap whereby our revenue is determined regardless of how much gas is conveyed. Vector has also been moving our pricing to fixed charges, which mitigates some short-term volume decline.

Mitigating long-term capital recovery risk requires action by regulators to make timely changes that accelerate the recovery of capital from current customers before an increased rate of disconnections puts that capital recovery at risk.

Vector's approach to mitigating gas stranding risk focuses on:

- Advocating for regulatory intervention to accelerate depreciation of gas assets
- Seeking regulatory allowances for end-of-life treatment of the gas network, such as decommissioning
- Reducing capital expenditure where safely possible to minimise added stranded value. This includes substituting some capital projects with operational projects.
- Requiring 100% customer contributions for new gas connections and associated network growth costs.

In FY2025 Vector began engagement with the Commerce Commission in relation to the upcoming price path reset. This is a regulatory framework that determines the maximum revenues of gas distribution networks over the next period from 1 October 2026. Vector has proposed that the Commission:

- Moves the form of control from a weighted average price cap to a revenue cap
- Agrees that the regulated asset base should not be indexed to inflation to avoid increasing stranding risk
- Implements a more aggressive approach to mitigating stranding risk to ensure more asset value is recovered over the current larger customer base
- Updates the assumptions in its asset stranding model to further accelerate depreciation
- Creates a step up in operational expenditure allowances to support the transition of some capital expenditure to operational expenditure
- Clarifies its view on how decommissioning costs should be treated under the regulatory framework.

Examples of actions taken by Vector as part of this strategy to reduce capital recovery risk to date include:

- Informing both government and regulators as to the criticality of preserving the principle of regulated investment cost recovery. An example of this is Vector's paper to government on 'Managing the gas transition – options preserving solutions to manage customer risks from gas asset stranding' in FY2024 [9]
- Proposing that the Commerce Commission implements accelerated depreciation from the start of the third default price/quality path commencing 1 October 2022
- Requiring 100% customer contributions for new gas connections and associated network growth costs as of 1 October 2022
- Not proceeding with some previously forecast capital projects, such as future-proofing ducting
- Reducing system growth to zero in the RY2025 gas asset management plan
- Forming the Gas Infrastructure Future Working Group alongside Clarus and Powerco, after engagement with the Ministry of Business Innovation and Employment. The purpose was to explore scenarios for the end-state and transition options for gas infrastructure [10].

This risk serves as an input into Vector's financial planning process via our gas network asset management plan [4]. It is important to note that it is not possible to deploy additional capital to manage this risk. Rather, the risk is being managed by reducing capital expenditure where safely possible to reduce exposure to further asset stranding risk. For example, in FY2021 the gas asset management plan had a 10-year forecast of net capital expenditure of $86 million (inflated to forecast 2026 dollars). In Vector's most recent gas asset management plan the 10-year forecast of net capital expenditure has dropped to $43 million (inflated to forecast 2026 dollars) – which has been partially offset through higher operational maintenance costs. Note that the gas asset management plan discloses gross capex which includes customer connections and asset relocations which do not contribute to stranding risk as they are largely funded by the customer. We chose, therefore, to disclose net capex here as this is the portion attributed to stranding risk.

Because of the significant impact of evolving markets and government policy, updates to this risk, relevant scenarios, and strategy may need to be considered in future years' climate-related disclosures and asset management plans.

RISK 3:

Increase in extreme weather events

Risk description

Key scenarios: orderly and disorderly decarbonisation, hothouse

Type: physical – acute

Sector: electricity distribution network

Geography: Auckland

All scenarios identify an increase in extreme weather events which is expected to cause disruption to the Vector network in the Auckland region. These include increasing wind-speeds, freshwater flooding, coastal flooding, cyclonic activity, land erosion, and an increase in sustained hot and dry weather leading to elevated wildfire risk. These weather impacts are physical risks to our assets, in particular our electricity distribution infrastructure assets.

Time period

Short term: 0 – 5 years

Medium term: 5 – 10 years

Long term: 10 – 30 years

Anticipated impact

All scenarios highlight an increase in extreme weather events because of climate change compared with historical trends, with the most severe impacts in the hothouse scenario. Key impacts are customer outages, reputational risks and regulatory risks/fines from those outages, public safety risks, and asset costs (via either repair or reinforcing) to Vector's network.

Our flood modelling scenario analysis conducted in FY2024 considered 113 zone substations out to the year 2100. It highlighted 13 zone substations that are identified to be at potential risk of flooding. Only certain assets (such as the control gear) within these 13 zone substations are modelled as being as vulnerable. A total of 15 projects have been identified to mitigate these risks. Examples include the raising of assets above flood levels. These projects need to be assessed through the appropriate internal governance process for approval of capital allowances before they can be actioned. In FY2025 we completed one of our flood mitigation projects, reducing the number of flood exposed zone substations to 12.

Regarding coastal inundation, only one zone substation was identified as being at risk and is currently being decommissioned.

Wind-speed models to the year 2100 highlight that the hours of heavy wind-speeds per year are forecast to increase across all scenarios. As heavy wind-speeds resulting in vegetation fall are responsible for significant damage on the Vector network, an increase in heavy wind-speed frequency would increase unplanned outages resulting in additional expenditure for network repair, and heighten the risk that Vector does not meet our regulatory quality standards. In addition, the cascading effects of floods with high wind-speeds can weaken the geo-technical stability of the ground, leading to increased tree fall, landslips and delayed network repair until the water has subsided. Landslip susceptibility analysis from FY2025 highlighted 351 power poles in potentially very high landslip risk.

Climate modelling across all scenarios shows that the length and severity of sustained hot and dry weather will increase too. This, in combination with high wind-speeds, raises the risk of fire start from Vector's electricity distribution network under normal operating conditions. Furthermore, warmer weather decreases electrical asset capacity ratings.

Vector's risk management strategy

Vector developed a risk scoring system which uses results from climate change models, along with internal engineering expertise. Each climate-related risk to specific assets is given a risk score based on a set of specific criteria. Summing all our analysed risks comes to a total risk score of 431 risk points. This is not an exhaustive list, and more risks will be added as Vector's climate-change modelling continues to mature.

This risk serves as an input into Vector's financial planning process via our electricity asset management plan. We have put forward approximately $300 million worth of projects for inclusion in Vector's FY2025 electricity asset management plan [3]. These projects undergo further refinement beyond the description included in the electricity asset management plan. It is important to note that the electricity asset management plan is not a commitment to spend, and projects will be refined continually, for example with final tree regulations being implemented.

Examples of projects in progress include:

- Continuous asset monitoring and modernisation of our planned maintenance programmes to identify potential weaknesses early. This includes the use of aerial inspection and development of artificial intelligence (AI) based condition assessment in partnership with Tapestry, the energy moonshot at X (Google's innovation lab)
- Infrastructure upgrading to improve flood resilience at key zone substations
- Transferring load from our highest flood-risk zone substation so that it can be decommissioned (Ngātaringa Bay zone substation)
- Reconfiguring parts of the electricity network to create multiple pathways for power to flow (known as meshing), and adding network automation to quickly re-route power. In some cases, meshing can be substituted with standby distributed generation
- Upgrading overhead lines with more resilient technologies
- Reducing the risk of the network starting a wildfire during normal operations. Examples of risk reduction include the implementation of seasonal ratings, use of safer fuses and the potential to switch off reclosers on extreme-heat days
- The Government has announced a decision on the long-awaited reform of the tree trimming regulations. These changes will help us to better protect our lines from trees, and so protect our customers' electricity supply, however the cost recovery challenges of tree trimming remain unaddressed in these changes
- Ongoing engagement with Earth Sciences NZ (formerly NIWA) and Fire and Emergency New Zealand for the FY2025 summer.

OPPORTUNITY 1:

Energy platforms

Opportunity description

Key scenario: orderly decarbonisation

Type: transitional – market, products and services

Sector: electricity

Geography: global

In the orderly decarbonisation scenario, better access to data and the use of intelligent digital platforms to move loads to off-peak times would improve network utilisation and efficiency. Advanced meters, the data they provide and the accessibility of that data can be used to increase network visibility, enable demand-side management, and improve network operations, customer service, and the innovation of new products and services.

The need for Vector to build capability to process large, varied datasets has driven our investment in digital platforms. We have developed Diverge, an energy data management software platform for the collection, processing, storage and delivery of smart meter and related energy data. Diverge is being used by Bluecurrent (a provider of smart metering services and solutions that is 50% owned by Vector) to provide energy data to electricity distribution network operators in Australia and New Zealand, to improve the visibility of the impacts of distributed renewable generation and electrification on their networks.

Vector's electricity distribution network also uses Diverge for ingesting and storing smart meter and related energy data to provide various analytical functions and insights.

Time period

Short term: 0 – 5 years

Medium term: 5 – 10 years

Anticipated impact

The need for more, higher-quality, and near-real-time energy data can be expected to increase as more distributed energy resources such as electric vehicles and intermittent renewable generation capacity enter the electricity system. Developing energy platforms like Diverge would allow Vector to improve management of our electricity distribution network and offer this capability as a service to other networks, both locally and globally. This would therefore enable us to better serve our customers and monetise this technology in the future.

Vector's opportunity management strategy

We are building solutions using bespoke services co-developed between Vector's wholly owned subsidiary Vector Technology Solutions (VTS) and AWS. This has seen VTS establish the Diverge solution for Bluecurrent and Vector as well as launch a go-to-market initiative for international markets.

Beyond the arrangements with Bluecurrent, Vector's electricity distribution network also uses Diverge for ingesting and storing smart meter and related energy data for various analytical functions.

We are also continuing our partnership with X (Google's innovation lab), contributing to their Tapestry project, as one of a select group of global partners collaborating on next-generation platforms for network management. These tools include Tapestry's 'GridAware', which uses new technology including drones and applies machine learning and modern artificial intelligence processes to survey and guide maintenance of the network. This enhances the job of traditional network inspection, which is much more labour intensive, through greater efficiency and new inspection techniques. Another tool, Tapestry's 'Grid Planning Tool for Distribution', creates robust network simulations that incorporate optimised solutions for new technology such as solar photovoltaic installations and the growth of customer-owned devices like batteries and electric vehicle chargers, to ensure an efficient network.

These two partnerships support key components of our Symphony strategy, using digital solutions and innovation to enable more efficient use of the network, and improve our planning capabilities. This opportunity is funded from the Vector group's annual budget, along with out-of-cycle requests from the board when specific opportunities arise. We note the Commerce Commission's innovation and non-traditional solutions allowance (INTSA) which could provide up to $28.4 million in research and development during the current five-year regulatory period. The specific internal capital deployment and funding decisions related to this opportunity are not disclosed here because of commercial sensitivity.

OPPORTUNITY 2:

Distributed energy resources

Opportunity description

Key scenario: orderly decarbonisation

Type: transitional – resource efficiency

Sector: electricity

Geography: Auckland

In the orderly decarbonisation scenario, distributed solar, batteries (including vehicle-to-grid (V2G)) and micro-grids (including utility-scale batteries) – combined with smart, remotely manageable energy systems (such as hot water load control and smart electric vehicle chargers) – act as demand-side energy resources that complement centralised large-scale electricity generation. Efficient and effective demand-side management of these distributed energy resources presents an opportunity for Vector's role to evolve to include more advanced distribution system operation (DSO), involving advanced integrated network planning, evolved commercial arrangements with third parties, and more active network management. This has the added benefit of contributing to the mitigation of risk 1: inability to efficiently manage load to avoid network congestion.

Time period

Short term: 0 – 5 years

Medium term: 5 – 10 years

Long term: 10 – 30 years

Anticipated impact

Efficient demand-side management and orchestration of distributed energy resources connected to the network has the potential to reduce peak congestion on the network and manage network security during emergency events (such as storms). This may support Vector's electricity distribution network to reduce unnecessary capital deployment and avoid increased customer costs.

Orchestration of distributed energy resources is also crucial after network outages. If appropriately managed, the distributed energy resources could support and stabilise a network restart. However, if they are not controlled, and all demand turns on as power is restored, it could cause a large instantaneous spike in demand which could overload transformers and distribution lines – and trip protection devices, therefore delaying network restoration.

Future industry architecture, and the scope of advanced distribution system operation (including new functions and capability required) are currently the subject of much discussion among the electricity industries in New Zealand and globally. The Electricity Authority has expressed a preference to ensure risks of potential conflicts of interest across these functions are mitigated, which could include ring-fencing of certain DSO functions from network ownership and operation. While not strictly a threat to the achievement of the objectives of Vector's strategy, this could reduce the scope and scale of the opportunities available to the Vector group in executing the strategy.

Vector's opportunity management strategy

Vector's future network road map, detailed in section 2 of the 2024[3] electricity asset management plan, consists of four priority areas:

- Achieving supportive commercial, regulatory and policy settings. During the short term, we will continue working with market participants, regulators, policy-makers and appliance/network standard agencies to work towards settings that enable the demand-side orchestration of distributed energy resources. We expect a more rapid addition of distributed energy resources in the medium term
- Understanding customer needs and preferences in relation to the management of distributed energy resources. Vector continues to invest in analytics to understand customer needs and behaviours, and increase communication with electricity retailers to gather insights
- Increasing our access to distributed energy resource capacity – through improved visibility of distributed energy resources, demand-side management, evolved pricing and commercial mechanisms, continued coordination with third parties such as electricity retailers, and direct integration of distributed energy resources with our network management systems
- Building capability, by continuing to make no-regrets investments in new enabling technologies, developing new commercial arrangements and operating protocols with third parties, and increasing our understanding of customer response to load management practices and incentives.

This opportunity serves as an input into Vector's financial planning process via our electricity asset management plan. Vector's FY2025 electricity asset management plan includes approximately $50 million of capital deployment towards distributed energy resource management over the next 10 year period. This forms part of the non-network digital capex forecasts in our electricity asset management plan. This opportunity is further supported by the platforms highlighted in opportunity 1: energy platforms.

3. A detailed asset management plan which includes narratives such as the future network roadmap is only published every second year. The last detailed asset management plan for electricity was in 2024. The 2025 plan was a shorter update.

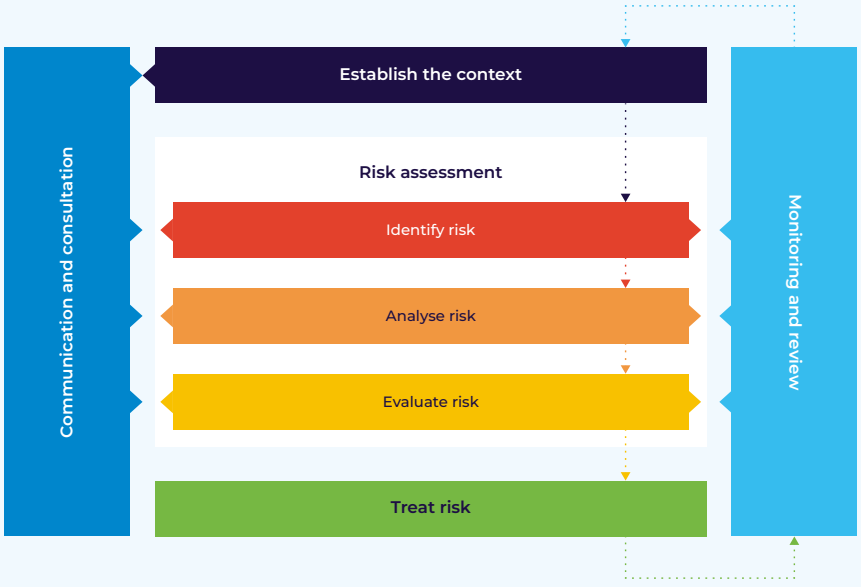
Risk management

Vector's approach to risk management

Vector's group enterprise risk management framework is consistent with the risk management standard ISO 31000. The framework is embedded in our business through our risk governance, policies, guidelines and risk partnership model that the group risk team maintains with the different business units to support Vector's risk management.

We use a risk assessment criterion within our group enterprise risk management framework to support a consistent approach to risk management across the Vector group. Our board risk and assurance committee has responsibility for overseeing and reviewing our group enterprise risk management framework, and the related policies, and Vector's group material risks.

Figure 4: Vector's enterprise risk management framework



Our process for identifying and prioritising material climate-related risks and opportunities

Risks or opportunities are assessed as material if their residual risk is assessed as high to very high based on the group risk assessment criteria – which takes into consideration severity and likelihood. In addition to this, Vector also employs the following two criteria specifically for the climate-related disclosure process:

- A risk or opportunity has a potential financial impact greater than 5% of Vector's market capitalisation
- A risk or opportunity contributes to or forms a barrier to emission reductions outside of Vector's organisational boundary which constitutes more than 1% of national emissions.

If the risk or opportunity meets any of the above criteria, it is considered material and prioritised, with oversight from the climate change steering committee. A summary of climate-related risks and opportunities is reviewed by the board risk and assurance committee.

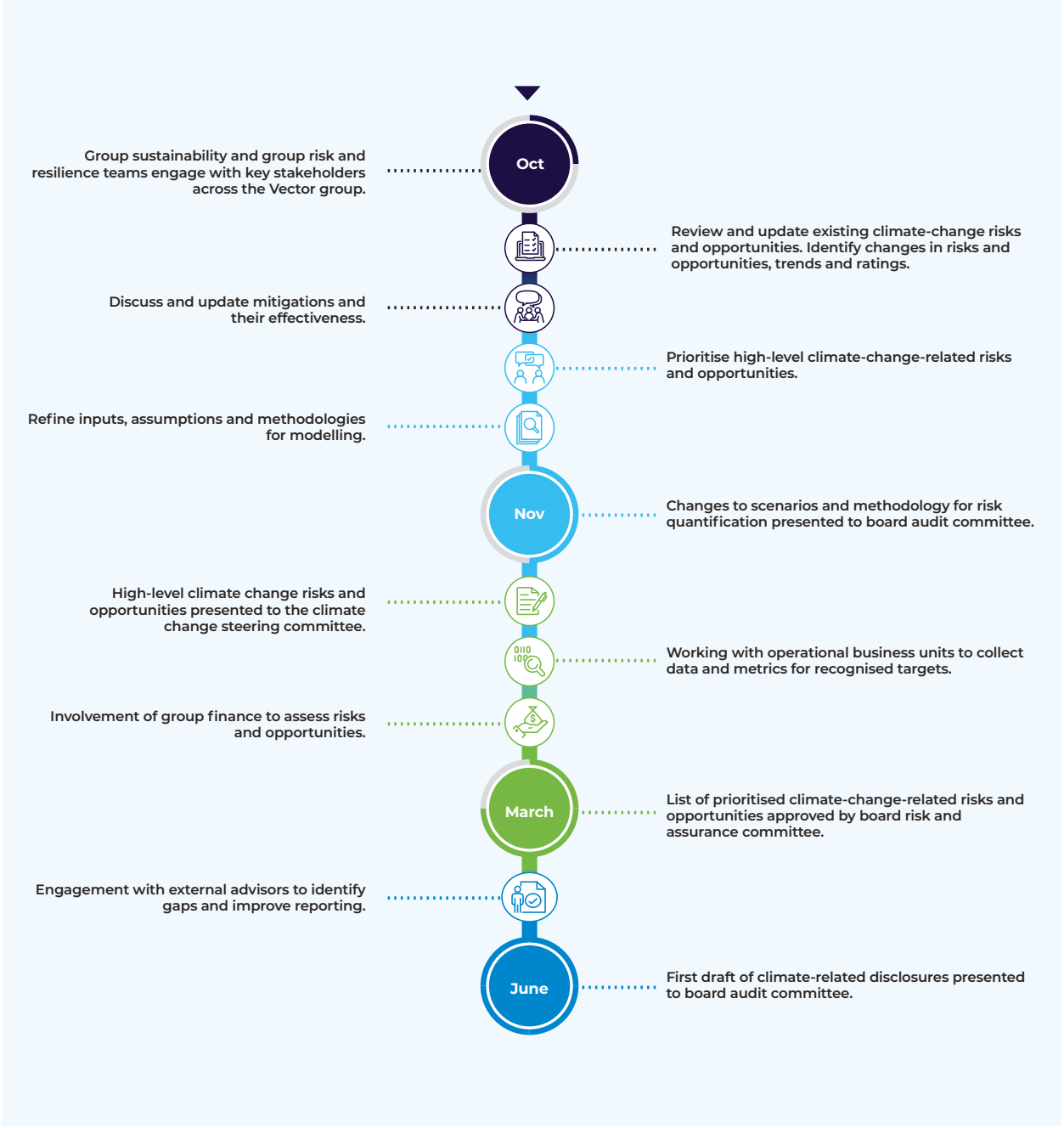
As part of our bottom-up approach, the group risk team work to identify new climate-related risks with all business units.

While we only directly engage our internal business units in our risk review, we consider our value chain when analysing and managing climate-related risks and opportunities. This includes our upstream supply chain, downstream customer impacts, and Vector's subsidiaries and investments (excluding investments that fall below 20% ownership[4]). Our approach to defining our value chain boundary and exclusions is discussed in the value chain subsection of the strategy section on page 16.

4. At the date of this report, Vector has no investments below 20% ownership.

Risk management (continued)

Figure 5: Vector's climate-related risk and opportunity management process flow. This process occurs annually.



Risk management (continued)

Our process for understanding the impacts of risks and opportunities

Vector also conducts more detailed physical and transitional risk modelling to understand the business impacts and opportunities. These are described on page 15, and summarised here for completeness.

Physical risks

Vector quantitatively and qualitatively studies physical risk, working with the University of Auckland's Department of Civil and Environmental Engineering, Earth Sciences NZ (formerly NIWA) and ClimSystems.

To date, Vector has investigated the following climate-related physical risks:

- Fluvial and pluvial flood exposure across all electrical assets
- Flood-depth exposure at zone substations
- Extreme high water level from coastal inundation across zone substations
- Projected increase in frequency and duration of high wind-speeds generally (not against any specific asset type)
- Flood and wind impacts from cyclones
- Landslip risk to overhead electricity assets
- Fire risk after extended periods of hot and dry weather, which could be triggered by Vector's overhead assets under normal operating conditions.

Transition risks

To evaluate transition risks and opportunities, the Vector group insights team uses a customer scenario model to estimate the impact of energy transitions, such as the uptake of electric vehicles, on the electricity distribution network. The model supports Vector to assess potential future load growth requirements, plan for network flexibility requirements, and understand the impact this may have on our customers. Further details of this scenario model, including high-level model assumptions, can be found in the strategy section and are explained in section 10 of Vector's electricity asset management plan [3].

The Vector insights team also uses a scenario model to evaluate different elements of the disorderly transition on the gas network.

Time frames

We use the time horizons below in our scenario analysis and physical and transitional risks and opportunities assessment.

As explained below, each time horizon has been selected because of its link to our asset planning horizons and capital deployment plans:

- Short term (0-5 years), to reflect typical business planning and regulated price path cycles which sets Vector's regulated revenue streams
- Medium term (5-10 years), to allow for our asset management plans for gas and electricity networks that detail capital and operational expenditure forecasts over a 10-year period
- Long term (10-30 years), to account for longer impacts over existing and future planned assets and business activities.

Metrics and targets

Vector uses metrics and targets to measure and manage our climate-related risks and opportunities disclosed in the strategy section. Within this disclosure we also include our scope 1, 2 and 3 greenhouse gas emissions, and our target to reduce select emissions.

Greenhouse gas emissions

We have published our greenhouse gas emissions in our FY2025 greenhouse gas emission inventory (GHG inventory) report, available here [1].

Vector measures and reports our greenhouse gas emissions in accordance with:

- The greenhouse gas protocol – a corporate accounting and reporting standard
- The greenhouse gas protocol – scope 2 guidance
- The greenhouse gas protocol's corporate value chain (scope 3) accounting and reporting standard
- Other related technical guidance issued under the greenhouse gas protocol standard.

Together we refer to these as the greenhouse gas protocol. This splits greenhouse gas emissions into three categories:

Scope 1 – Direct emissions from sources Vector directly owns or controls such as emissions from our vehicle fleet's fuel combustion, our diesel backup generators, methane leaks from our natural gas distribution network, and SF_6 leaks from our electricity distribution network.

Scope 2 – Indirect emissions from Vector's consumption of purchased electricity, and electricity distribution losses along the network.

Scope 3 – All other indirect value chain emissions, including customer energy consumption, and supply chain emissions.

The greenhouse gas protocol splits scope 3 emissions into 15 categories. A breakdown of Vector's emissions by scope and category can be found in table 3 with bespoke emissions intensity metrics in table 2.

All calculations are expressed in total tonnes of carbon dioxide equivalent (tCO_2e).

Vector uses the operational control approach, as defined by the greenhouse gas protocol, to measure and report emissions. This allows emissions reduction efforts to focus on emissions over which Vector has the greatest control, and thereby can influence most.

Our base year for emissions reporting is FY2020 (1 July 2019 to 30 June 2020). Vector recalculates emissions of historic years if the inventory is affected by changes that in aggregate total 5% of our carbon footprint. These changes can be structural (for example acquisitions or divestments), changes in the way the inventory is calculated, or discovery of omissions or errors. Vector might decide to update historic years for changes below the threshold for other reasons, such as consistency or clarity.

Additional information on Vector's organisational boundaries for the purpose of emissions calculation, including the treatment of investments, operational boundaries, emission factors, exclusions, summary of changes to previous years, methodologies, and results, can be found in Vector's greenhouse gas emissions inventory report [1].

Independent limited assurance over Vector's greenhouse gas emissions inventory was provided by KPMG (see Vector's greenhouse gas emissions inventory report [1]).

Emissions reduction target

In FY2021 Vector set an absolute emissions reduction target. That target is for Vector to reduce our scope 1 and 2 emissions (excluding electricity distribution losses) by 53.5% by FY2030 from a FY2020 baseline. The target was developed by thinkstep-anz in 2021, based on a methodology published by the Science Based Target Initiative (SBTi) and the SBTi's then applicable guidance on reductions required to be consistent with keeping global warming to 1.5°C.

Our target has not been validated by SBTi because SBTi's methodology provided for the inclusion of emissions related to electricity distribution losses, which we have excluded. Further detail regarding this exclusion is set out on page 27.

The emissions reduction target does not rely on any offsets[5]. Vector does not have any interim targets. However, we have internal emissions reduction targets that are weighted to staff remuneration, which are explained in more detail on page 34.

In FY2025 we achieved our emission reduction target, five years ahead of the original FY2030 target date, with a reduction in our scope 1 and 2 emissions (excluding distribution losses) of 55% compared to the FY2020 base year. This was largely because of a reduction in natural gas fugitive emissions, along with a reduction in diesel-generation-related emissions.

Meeting the target in FY2025 does not guarantee that the emissions reductions can be maintained in subsequent years. There are key risks highlighted in table 4 that could result in Vector missing our target in any given year.

Our total emissions across all three scopes (including electricity distribution losses) have decreased by 54% since FY2020. This is mainly owing to a reduction in natural gas consumption in the Auckland region, combined with a wind-down of Vector's Natural Gas Trading contracts.

Vector's emissions intensity, in table 2, has also decreased across four out of five categories, which are linked to our emissions reductions across our gas and electricity businesses. The final metric, 'kgCO2e per MWh delivered – including electricity distribution losses' fluctuates largely owing to New Zealand's national electricity emission factor, however this can also change because of characteristics on our distribution network, which can be a result of several factors including load profiles, and distance to load.

A breakdown of emissions by scope and a comparison of emissions per scope since Vector's base year in FY2020 can be found in table 3. These summaries of emissions have been extracted from our greenhouse gas emissions inventory report [1].

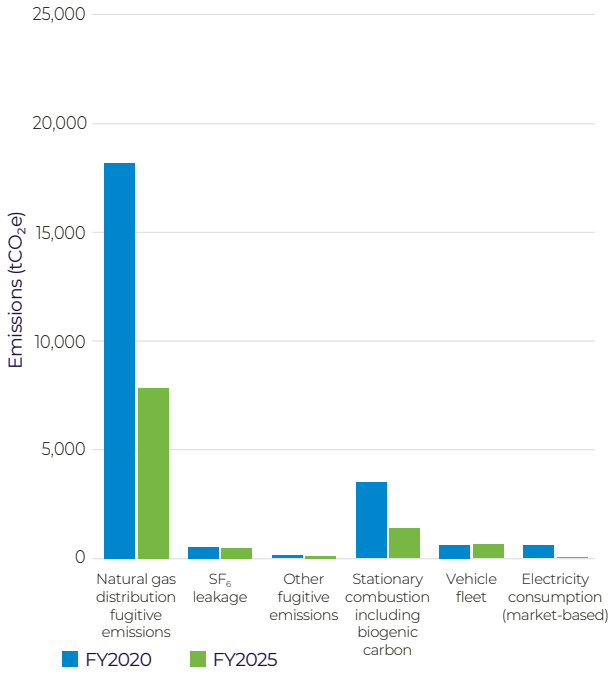
5. Vector made a public commitment to net-zero emissions by 2030 in 2017, which contemplated the use of offsets. This commitment has since been updated in FY2021 with an additional absolute emissions-reduction target to reduce our absolute scope 1 and 2 emissions by 53.5% by FY2030, which does not anticipate use of offsets. In FY2025 Vector has used the 53.5% target to manage our climate-related risks and opportunities and it is against this target that we track our performance.

Metrics and targets (continued)

Electricity distribution losses

Electricity distribution losses are not like a water or gas leak; they are an inherent characteristic of electricity distribution networks. Although we can measure these losses, and report their associated emissions based on New Zealand's published electricity generation emission factor, we can never fully remove them. As distribution losses are largely an inevitable by-product of electrical conduction, Vector has elected to exclude emissions associated with such losses from our emissions reduction target. This allows our target to focus on emissions that we can more readily manage.

Figure 6: (left) Emissions included in Vector's emissions reduction target - scope 1 and 2 excluding distribution losses and their comparison to the FY2020 base year. (right) Vector's yearly scope 1 and 2 emissions excluding distribution losses since FY2020. Emissions are in tCO_2e.



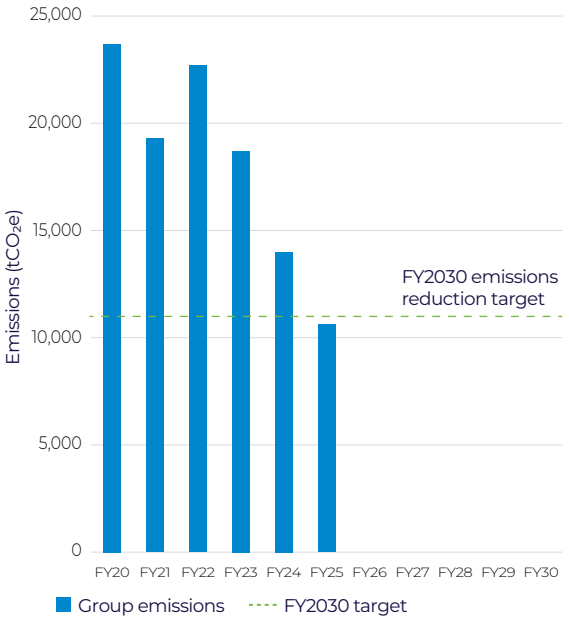


Table 2: GHG emissions intensity of select scope 1 and 2 emissions

EMISSIONS INTENSITY	EMISSIONS SOURCES INCLUDED	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
$kgCO_2e$ per gas pipeline length in m	Total natural gas fugitive emissions	2.66	1.96	2.33	1.90	1.34	1.12
kg CO_2e per main** lines length in m	Natural gas fugitive emissions attributable to main lines	1.02	1.09	1.35	0.78	0.77	0.53
kg CO_2e per service** lines length in m	Natural gas fugitive emissions attributable to service lines	5.22	3.04	3.64	3.54	1.86	1.69
$kgCO_2e$ per MWh delivered – excluding electricity distribution losses***	Stationary combustion, SF_6, and location-based electricity consumption of Vector's electricity business	0.53	0.54	0.69	0.58	0.47	0.26
$kgCO_2e$ per MWh delivered – including electricity distribution losses***	Stationary combustion, SF_6, location-based electricity consumption of Vector's electricity business, and electricity distribution losses	4.43	4.58	5.36	5.56	3.54	4.82

** Main gas lines refer to the shared pipeline infrastructure, while service lines connect the customer to the main line.

*** Electricity distribution losses are excluded from our emissions reduction target (see explanation above).

Metrics and targets (continued)

Table 3: GHG inventory by scope and category in tCO_2e. FY2025 emissions highlighted in green indicate a reduction since the base year or year in which emissions were first reported, whereas emissions in red show increases.

EMISSIONS CATEGORY	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Total scopes 1, 2 and 3	**1,712,423**	**1,495,052**	**1,129,872**	**1,090,392**	**985,712**	**794,241**
Scope 1	**22,933**	**18,457**	**22,193**	**18,334**	**13,850**	**10,449**
Natural gas distribution fugitive emissions	18,313	13,507	16,218	13,323	9,379	7,887
SF_6 leakage	524	1,263	2,081	1,299	924	487
Other fugitive emissions‡	131	131	118	125	49	103
Stationary combustion‡	3,342	2,755	3,099	2,838	2,733	1,325
Vehicle fleet‡	623	801	677	749	766	647
Scope 2	**33,087**	**34,353**	**39,402**	**42,774**	**26,897**	**39,476**
Electricity consumption* (market based)‡	582	731	324	184	5	39
Electricity consumption (location based)‡	730	721	808	1,117	619	644
Electricity distribution losses	32,505	33,622	39,078	42,590	26,892	39,437
Scope 3	**1,656,403**	**1,442,242**	**1,068,278**	**1,029,285**	**944,966**	**744,316**
Purchased goods and services						
Upstream-purchased natural gas§	227,569	170,442	35,026	18,797	7,024	–
Fuel used by field service providers	6,475	6,822	6,456	7,235	7,127	6,087
Upstream-purchased materials and products‡	12,884	6,709	11,254	9,873	12,308	9,435
Upstream-purchased other goods and services‡	72,568	67,390	71,094	76,760	76,239	79,224
Fuel and energy-related activities‡	1,082	979	1,110	1,114	1,065	642
Upstream transportation‖	–	–	–	–	–	
Waste generated in operations‡				62	83	53
Business travel‡	294	70	65	230	144	202
Employee commuting and working from home‡				859	657	729
Use of sold products						
Distributed natural gas Auckland – Total	772,265	760,185	711,336	735,048	706,355	647,278
Sold natural gas – Auckland§	151,603	115,578	57,149	42,322	19,193	–
Other distributed natural gas – Auckland§	620,662	644,607	654,188	692,727	687,162	647,278
Sold natural gas – non-Auckland§	562,567	381,871	231,127	178,484	133,260	–
Shipped natural gas – non-Auckland§		47,002	–	–	–	–
Investments						
Bluecurrent	700	771	809	821	703	666
Biogenic carbon	**162**	**134**	**150**	**138**	**131**	**64**

‡ Recalculated FY2020 to FY2024 to remove emissions relating to the sale of the Ongas LPG business. For details, see sections 1 and 4 of the greenhouse gas emissions inventory report [1].

* Market-based method for electricity consumption. While location-based electricity emissions are also included in our inventory, the amounts summed in table 3 include only market-based emissions, as these form part of our emissions reduction target.

§ Recalculated FY2022 to FY2024 to remove emissions relating to the sold Natural Gas Trading contracts. As a result of the closure of the business from 1 July 2024, there are no FY2025 emissions relating to purchased, sold or shipped natural gas. For details, see sections 1 and 4 of the greenhouse gas emissions inventory report [1].

‖ Recalculated FY2020 to FY2024 to remove emissions relating to the sale of the Ongas LPG business. For details, see sections 1 and 4 of the greenhouse gas emissions inventory report [1]. Post the Ongas sale, emissions from third-party transportation for upstream-purchased materials and products are immaterial and are therefore excluded from reporting.

Metrics and targets (continued)

Marginal carbon abatement cost curve

In FY2022 Vector developed a carbon abatement cost curve to help measure and understand our emissions reduction target (scope 1 and 2 excluding electricity distribution losses) and actions available to us to contribute to reaching this target.

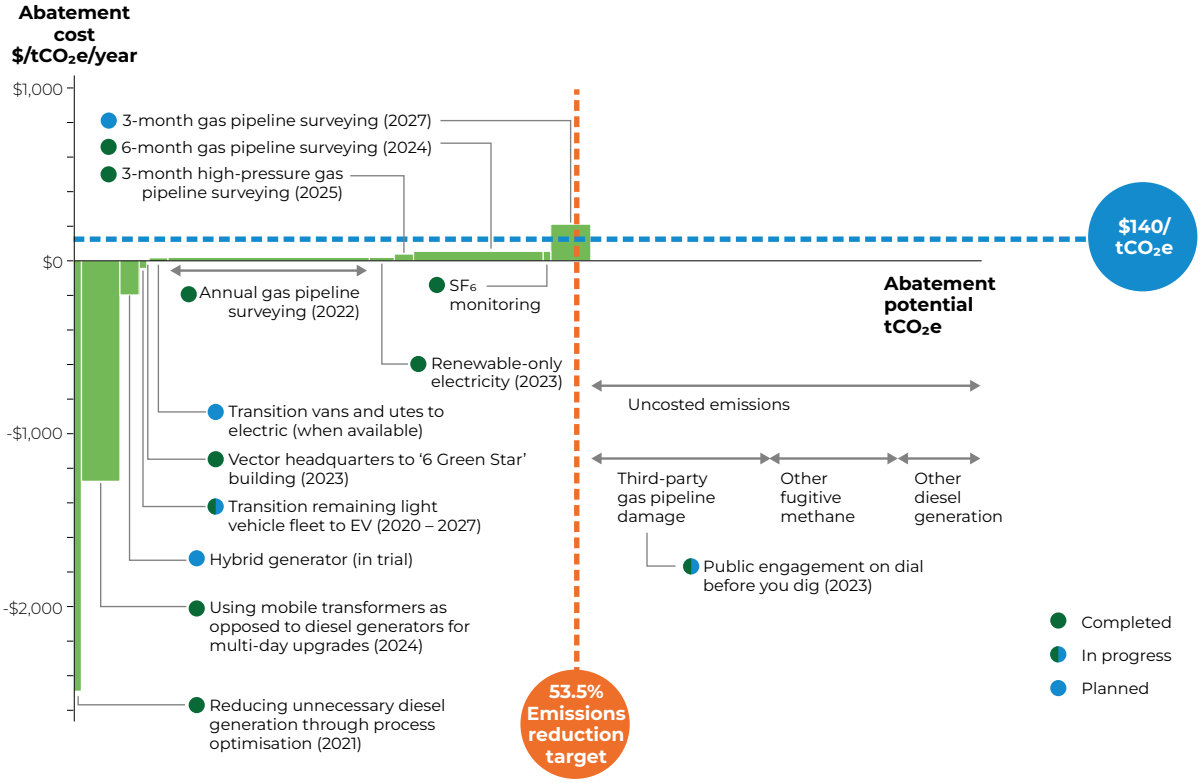
This work identifies the financial impact of potential carbon reduction activity across scope 1 and 2 emissions, using an internal carbon cost of $140 per tCO_2e. This amount was chosen as it aligned with the Climate Change Commission's 2021 recommendations to government to meet its 2050 targets [11], and is consistent with our internal carbon cost since FY2022. We consider this internal carbon cost to still be appropriate.

Through this work, we identified emissions that could be reduced while achieving cost savings for the group (those with negative abatement cost) and others that were close to cost neutral (those with bars close to $0/$tCO_2e$/year), with the balance assessed as being more complex to abate given the availability of current alternatives. While the data in the cost curve is updated based on the latest information, it presents forward-looking estimates of emissions reduction potential, as opposed to actual emissions results. The estimates are also conservative, which explains how we have already met our emissions reduction target, even though we have not yet completed all the actions on the curve.

The cost curve was updated in FY2025 to include the sale of the Ongas business – this removed any emissions reduction activities associated with Ongas, along with a removal of corresponding historic emissions.

Changes in technology, project prices, emissions cost modelling, new business innovation and a range of other factors may alter the marginal carbon abatement cost curve in our future disclosures.

Figure 7: Vector's marginal carbon cost abatement curve. The horizontal axis corresponds to Vector's total FY2020 scope 1 and 2 emissions excluding electricity distribution losses. Each bar relates to a potential emissions reduction initiative where the thickness of the bar details the amount of emission reductions estimated to be possible as a result of the initiatives. The vertical axis represents the estimated cost, with negative values indicating estimated cost savings. Initiatives are ordered left to right, from the most cost saving to the most expensive.



Metrics and targets (continued)

Table 4: Key risks that may form a barrier to Vector achieving our emissions reduction target

CARBON ABATEMENT RISK	DESCRIPTION
Damage to high-pressure pipelines	Damage to Vector's high-pressure gas pipelines can release significant quantities of CO_2e. For example, two leaks detected in FY2022 were responsible for the release of over 3,000 tCO_2e. While we can reduce emissions over time on average, these high-volatility events can cause a sudden spike in emissions for that reporting year. In addition, there is a risk that emissions from third-party damages (such as a contractor digging into the pipe) remain high or increase, with limited influence from Vector's side.
Long-term SF_6 assets on Vector's network	Many of Vector's SF_6 assets have a lifetime beyond 2030. It is challenging to replace all these assets before FY2030, and leaks can be largely unpredictable. Although we have installed some monitoring devices that alert us of leaks quickly, there is still a risk that leaks could increase and keep occurring. SF_6 has an emission factor 23,500 times that of CO_2; therefore, even small leaks of SF_6 can have material impacts on our emissions inventory.

Assets vulnerable to transition risks

Vector's assets that are vulnerable to transition risks are our gas-related businesses and investments. This table highlights our key gas businesses that are potentially vulnerable to transition risks and their associated carrying value. We are currently disclosing 100% of the total carrying value as this represents a conservative estimate of potential impacts. This does not include the electricity distribution network.

The sale of the Ongas business and the investment in Liquigas, along with the wind-down and subsequent closure of Vector's Natural Gas Trading business has reduced some of our exposure to transition risks. The main drivers behind reduction in the carrying value of the gas network were the goodwill impairments in both FY2025 and FY2024.

	30 JUNE 2023	30 JUNE 2024	30 JUNE 2025
Gas network	607.0	546.4	497.7
Ongas	71.8	68.0	Sold
Natural Gas Trading	13.3	Ceased trading	–
Liquigas (100%)	72.7	74.7	Sold

Metrics and targets (continued)

Assets vulnerable to physical risks

Vector has modelled electricity distribution network assets vulnerable to flood impacts and landslip risk. With respect to freshwater flooding, while we have highlighted 12 zone substations at potential risk of flooding, only some assets within those zone substations are at risk of damage. Flood modelling conducted in FY2023 did not take into account the depth of water, and therefore was insufficient at assessing the true asset exposure – for this reason we chose not to disclose data for this year. The more comprehensive flood-depth modelling was conducted in FY2024 and updated in FY2025 to include more infrequent high impact events. The decrease in the number of zone substation assets exposed to flooding risk in FY2025 is a result of the completion of the Wairau zone substation flood mitigation project. The increase in the number of power poles exposed to landslip risk is because of more poles in Vector's asset base. We are still awaiting data from the completion of the Earth Sciences NZ (formerly GNS) Sliding Lands project, which may supersede this current analysis. We do not have landslip data for the period before FY2024.

ASSET TYPE	RISK TYPE	TOTAL ASSETS ANALYSED	POTENTIAL NUMBER OF ASSETS EXPOSED IN FY2024	POTENTIAL NUMBER OF ASSETS EXPOSED IN FY2025
Zone substations*	Freshwater flooding	113	13	12
Zone substations	Coastal inundation	113	1	1
Power poles	Landslip	125,950 (in FY2024) 126,513 (in FY2025)	331	351

* In Vector's voluntary FY2023 TCFD report, we disclosed 119 zone substations as being potentially vulnerable to freshwater flooding, as complex flood modelling, and technical engineering investigation were still in development. The improvements in methodology and data quality noted above mean that we can disclose more meaningful information in relation to this metric for FY2024 and FY2025.

Business activities aligned with climate-related opportunities and capital deployment towards climate-related risks and opportunities

The values listed here represent the total carrying value, revenue and capital expenditure invested in the electricity distribution network.

As we did in FY2024, we are currently disclosing 100% of the total capital expenditure of the entire electricity distribution business as being aligned with our climate-related opportunities. This is because there is currently no clear method to identify specific capital expenditure allocated to individual climate-related risks and opportunities; for example, the specific capital expenditure associated with managing risk 1 (inability to efficiently manage load to avoid network congestion), risk 3 (weather impacts), and opportunity 2 (distributed energy resources). This is the same when related to the amount of capital deployed towards climate-related risks and opportunities in the reporting period. Data in FY2024 was restated to align with changes in the segment allocation in Vector's annual report, with electricity distribution now recognised as a separate reporting segment (previously combined with gas distribution).

The increase in annual gross capex on our electricity distribution business between FY2023 and FY2025 reflects Auckland's growth, electrification of transport and industry, and new types of connections such as data centres, making trend identification more complex. Vector's revenue is impacted by total energy delivered, pricing adjustments, and pass-through recoverable costs.

ELECTRICITY DISTRIBUTION	CARRYING VALUE ($M)	REVENUE INCLUDING CONTRIBUTIONS ($M)	ANNUAL GROSS CAPEX ($M)
FY2023	4,579.9	834.5	389.6
FY2024 (restated)	4,863.8	872.6	457.0
FY2025	5,151.3	960.1	432.0

Metrics and targets (continued)

Electric vehicle uptake in Auckland

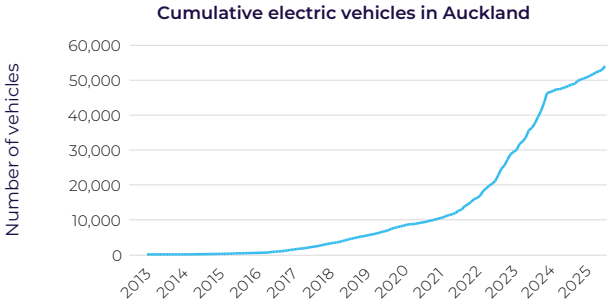
Related to risk 1:
inability to efficiently manage load to avoid network congestion

Related to opportunity 1:
energy platforms

Related to opportunity 2:
distributed energy resources

Vector monitors electric vehicle uptake in Auckland to understand their impact on the network and emerging charging behaviours.

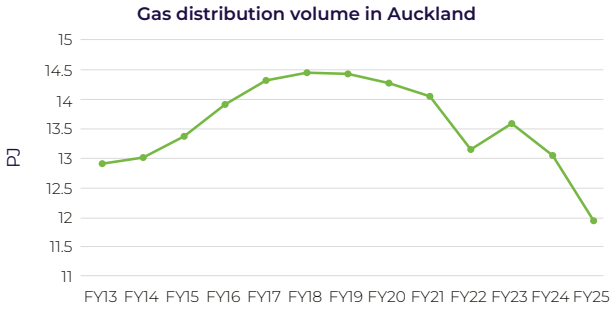
Electric vehicle registrations peaked in December 2023. The uptake of electric vehicles slowed after December 2023 because of additional costs being added to electric vehicle use (road user charges and rebate removals), combined with a broader economic slowdown.



Actual gas volumes

Related to risk 2:
gas transition

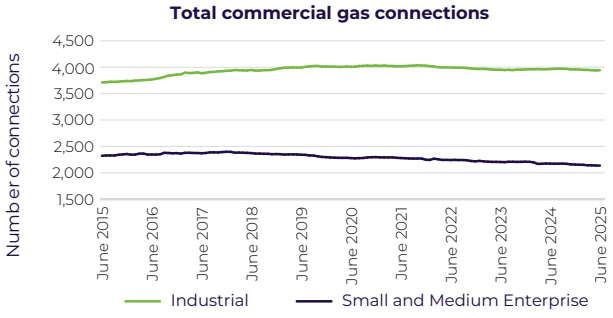
Gas distribution volumes in Auckland have been trending down since 2019. Note that COVID impacts have caused a decrease in activity in FY2022 also. There has been a loss of multiple large industrial loads due to business closures or relocation from Auckland, along with a reduced consumption per connection. The reduced consumption can be attributed to numerous factors, including decarbonisation, reduction in business output, and derisking operations from supply side risk. Residential gas use per household has been decreasing as well.

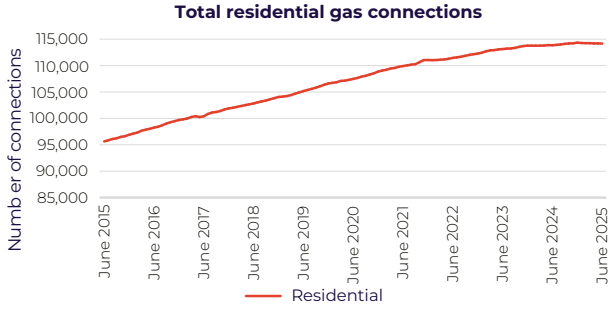


Total gas connections

Related to risk 2:
gas transition

Overall we have observed a continued slowdown in all segments for new connections over recent years, and the connections we are getting are typically smaller on average than historical averages. Forecasts in our gas asset management plan (linked to a disorderly decarbonisation scenario) show a decline in net connections to the gas network from FY2026, and the overall gas volume continuing to decline, but at a faster rate than in prior years.





Metrics and targets (continued)

Distributed generation uptake in Auckland

Related to risk 1:
inability to efficiently manage load to avoid network congestion

Related to opportunity 1:
energy platforms

Related to opportunity 2:
distributed energy resources

Vector registers distributed generation – for example photovoltaic solar-uptake in the Auckland region. This can be used to understand the uptake of this type of distributed energy resource within Auckland. We have disclosed the metrics by regulatory year, which ends 31 March 2025, for simplicity and consistency with our wider disclosures.

We have noted a 5.5-fold increase in capacity of distributed generation connected in RY2025 compared to RY2020. The metric refers to the electricity distribution network regulatory year, which is from 1 April to 31 March. We have, however, noticed that both the capacity and number of connections appear to have decreased from RY2023.

	RY2020	RY2021	RY2022	RY2023	RY2024	RY2025
New capacity connected (MVA)	1.8	4.8	4.1	15	12	10
Number of new connections	219	901	582	1799	1653	1106

Industry-based metrics/targets: Electrical power outages

Related to risk 3:
increase in extreme weather events

SAIDI and SAIFI are two measures that the Commerce Commission uses to monitor a reliable standard of service to customers. We have disclosed the metrics in regulatory year, which ends 31 March 2025, for simplicity and consistency with our wider disclosures. SAIDI and SAIFI incorporate all causes of power outages, including non-weather-related outages such as car accidents on power lines, and asset failure. However, an increase in the frequency of high wind-speeds, flood events, and high temperature days can still contribute to an increase in SAIDI and SAIFI. These two metrics are defined as:

SAIDI (system average interruption duration index) – Average outage duration for each customer served over the course of a regulatory year.

SAIFI (system average interruption frequency index) – Average number of interruptions per customer per regulatory year.

Vector seeks to be below the regulatory limits set at 104.83 and 1.337 for SAIDI and SAIFI respectively.[6]

Major event SAIDI – Days of severe impacts that breach the SAIDI unplanned boundary value of 4.83 SAIDI minutes[6]. While major event SAIDI does not have a target, it is a metric that can indicate an increase in extreme weather events, such as cyclones. This is noted in the significant increase in major event SAIDI in the 2023 regulatory year, which included Cyclone Gabrielle and the Auckland Anniversary Floods. There are no targets for major event SAIDI.

We have maintained our performance under the regulatory limit in RY2025.

NORMALISED UNPLANNED SAIDI/SAIFI	RY2023	RY2024	RY2025	REGULATORY LIMIT[6]
SAIDI	118.7	98.4	76.56	104.83
Major event SAIDI	292.3	14.1	16.3	–
SAIFI	1.19	1.13	0.90	1.337

6. Note that from 1 April 2025, Vector has moved to a new regulatory period (DPP4), where the limits have changed to 110.07 and 1.40 for SAIDI and SAIFI respectively. The major event SAIDI unplanned boundary value has also increased to 5.79 minutes. This will impact our FY2026 disclosure.

Metrics and targets (continued)

Remuneration: Senior staff performance goals

Remuneration targets impact the overall short-term incentive payments to the executive team members and their eligible direct reports. The targets are designed and agreed by the executive team, ensuring alignment with our corporate strategy, and approved by Vector's people and remuneration board committee and the full board. All payments are subject to full board approval and discretion.

Vector's emissions reduction goals were designed to track towards our FY2030 emissions reduction target. In FY2023 an additional goal to quantify supply chain emissions was added to support the development of our scope 3 greenhouse gas emissions inventory.

The resilience target has remained constant to prevent exceeding the regulatory limits of SAIDI/SAIFI. In FY2025 an additional qualitative resilience goal was set to uplift Vector's approach to climate-change resilience planning.

	FY2023	FY2024	FY2025
% contribution to short-term incentive goals[7]	5 – 30%	10% - 30%	0% - 22%
Criteria			
Emission reduction from FY2020 against scope 1 and 2 emissions (excluding electricity line losses)	16.1% reduction A further qualitative emissions accounting goal which involves the development of a methodology for calculating supply chain scope 3 emissions	21.4% reduction	39.2% reduction
Resilience	Not exceeding the regulatory limits of 104.83 SAIDI, and 1.337 SAIFI	Not exceeding the regulatory limits of 104.83 SAIDI, and 1.337 SAIFI	Not exceeding the regulatory limits of 104.83 SAIDI, and 1.337 SAIFI And a further qualitative climate change resilience goal which includes: 1) Community engagement with customers and communities vulnerable[8] to climate-change impacts 2) Development of a model/ framework to calculate the trade-off between investment options and resilience outcomes 3) Engagement with government and regulators to propose financial and investment criteria on how Vector should consider resilience investment.

7. The range is due to weighting differences between business units. Some business units have zero weighting to some criteria when they do not have reasonable influence over them.
8. We used historic customer outage data during major storm events to define 'vulnerability'.

Metrics and targets (continued)

Table 5: NZCS cross-referenced to Vector's greenhouse gas (GHG) emissions inventory report. The sections referenced below form part of the CRD.

STANDARD	DETAILS	LOCATION OF DISCLOSURE IN GREENHOUSE GAS EMISSIONS INVENTORY REPORT
NZCS 1 (24)	GHG emissions - An entity must disclose the following in relation to its GHG emissions:	See below
NZCS 1 (24)(a)	A statement describing the standard or standards that its GHG emissions have been measured in accordance with.	Introduction, page 2
NZCS 1 (24)(b)	The GHG emissions consolidation approach used: equity share, financial control, or operational control.	Organisational boundaries, page 5
NZCS 1 (24)(c)	The source of emission factors and the global warming potential (GWP) rates used or a reference to the GWP source.	Table 4, pages 8 - 10
NZCS 1 (24)(d)	A summary of specific exclusions of sources, including facilities, operations or assets with a justification for their exclusion.	Table 3, page 6
NZCS 3 (52)	An entity must provide a description of the methods and assumptions used to calculate or estimate GHG emissions, and the limitations of those methods. When choices between different methods are allowed, or entity-specific methods are used, an entity must disclose the methods used and the rationale for doing so.	Table 4, pages 8 - 10, and data collection and quantification, pages 11 and 12
NZCS 3 (53)	An entity must describe uncertainties relevant to the entity's quantification of its GHG emissions, including the effects of these uncertainties on the GHG emissions disclosures.	Table 4, pages 8 - 10
NZCS 3 (54)	An entity must provide an explanation for any base year GHG emissions restatements.	GHG emissions calculation and results, page 13

References

1	Vector's annual reports. Accessed 13 August 2025 <https://www.vector.co.nz/investors/reports>
2	Vector's governance. Accessed 8 August 2025 <https://www.vector.co.nz/investors/governance>
3	Vector Limited. 2025. Vector Electricity Asset Management Plan. Accessed 8 August 2025 <https://www.vector.co.nz/about-us/regulatory/disclosures-electricity/asset-management-plan>
4	Vector Limited. 2025. Vector Gas Asset Management Plan. Accessed 8 August 2025 <https://www.vector.co.nz/about-us/regulatory/disclosures-gas/gas-asset-management>
5	IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V, Zhai P, Pirani A, Connors S L, Péan C, Berger S, Caud N, Chen Y, Goldfarb L, Gomis M I, Huang M, Leitzell K, Lonnoy E, Matthews J B R, Maycock T K, Waterfield T, Yelekçi O, Yu R and Zhou B (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp 3–32, doi:10.1017/9781009157896.001.
6	Network for Greening the Financial System. NGFS Scenarios. Accessed 8 August 2025 <https://www.ngfs.net/ngfs-scenarios-portal/>
7	Climate Change Commission. *2023 Draft advice to inform the strategic direction of the Government's second emission reduction plan*. Accessed 8 August 2025 <https://www.climatecommission.govt.nz/public/Advice-to-govt-docs/ERP2/draft-erp2/CCC4940_Draft-ERP-Advice-2023-P02-V02-web.pdf>
8	Ministry of Business, Innovation & Employment. 2025. Petroleum reserves data. Accessed 13 August 2025 <https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/petroleum-reserves-data>
9	Vector Limited. 2023. Managing the gas transition - options preserving solutions to manage consumer risks from gas asset stranding. Accessed 8 August 2025 <https://blob-static.vector.co.nz/blob/vector/media/vector-2024/vector-2023-managing-the-gas-transition.pdf>
10	Gas Infrastructure Future Working Group. 2023. Gas Transition Analysis Paper. Accessed 8 August 2025 <https://comcom.govt.nz/__data/assets/pdf_file/0012/323130/Gas-Infrastructure-Working-Group-GIFWG-Attachment_-Gas-Transition-Analysis-Paper-13-June-2023-Submission-on-IM-Review-2023-Draft-Decisions-19-July-2023.pdf>
11	Climate Change Commission. 2021.Ināia tonu nei: a low emissions future for Aotearoa. Accessed 8 August 2025 <https://www.climatecommission.govt.nz/public/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa.pdf>

Appendix 1: KPMG's Limited Assurance Report

Independent Limited Assurance Report to Vector Limited

Conclusion

Our limited assurance conclusion has been formed on the basis of the matters outlined in this report.

Based on our limited assurance engagement, which is not a reasonable assurance engagement or an audit, nothing has come to our attention that would lead us to believe that, in all material respects, the Climate-related Disclosures of Vector Limited for the year ended 30 June 2025 are not fairly presented and prepared in accordance with the Aotearoa New Zealand Climate Standards issued by the External Reporting Board.

Information subject to assurance

We have performed an engagement to provide limited assurance in relation to Vector Limited's Climate-related Disclosures for the period 1 July 2024 to 30 June 2025.

The Climate-related Disclosures includes the following:

- Statement of Compliance on page 2;
- Governance related disclosures on pages 7 to 10;
- Strategy related disclosures on pages 11 to 17;
- Risk Management related disclosures on pages 18 to 25; and
- Metrics and Targets related disclosures on pages 26 to 35.

The Scope 1, Scope 2 and Scope 3 greenhouse gas (**GHG**) emissions, additional required disclosures of those emissions and the related method, assumptions and estimation uncertainty disclosures (**GHG Disclosures**) are included within Vectors Limited's Climate-related Disclosures as follows:

- Scope 1, Scope 2 and Scope 3 GHG emissions included in the Metrics and Targets related disclosures in Table 3 on page 28; and
- Scope 1, Scope 2 and Scope 3 additional required disclosures and gross greenhouse gas emissions methods, assumptions and estimation uncertainty disclosures contained within the Greenhouse Gas Emissions Inventory report, as outlined in Table 5 on page 35.

Our assurance engagement does not extend to any other information included, or referred to, in the Vector Climate-related disclosures (**other information**). We have not performed any procedures with respect to the other information.

Criteria

The criteria used as the basis of the Company's Climate-related Disclosures is the Aotearoa New Zealand Climate Standards (**NZCS**):

- NZCS 1 Climate Related Disclosures;
- NZCS 2 Adoption of Aotearoa New Zealand Climate Standards; and
- NZCS 3 General Requirements for Climate-related Disclosures.

The Scope 1, 2 and 3 Greenhouse gas (GHG) emissions and the GHG related disclosures required under NZCS Greenhouse Gas emissions Disclosures, have been measured in accordance with the World Resources Institute and World Business Council for Sustainable Development's Greenhouse Gas Protocol standards and guidance:

- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition);
- The Greenhouse Gas Protocol: GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard; and
- The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard

As a result, this report may not be suitable for another purpose.

Standards we followed

We conducted our limited assurance engagement on the Climate-related Disclosures in accordance with International Standard on Assurance engagements (New Zealand) 3000 (Revised) Assurance Engagements Other Than Audits or Reviews of Historical Financial Information) **(ISAE (NZ) 3000 (Revised**) issued by the New Zealand Auditing and Assurance Standards Board.

GHG emissions

We conducted our limited assurance engagement on the Scope 1, 2 and 3 emissions and the GHG-related disclosures required under NZCS in accordance with New Zealand Standard on Assurance Engagements 1 (**NZ SAE 1**) Assurance Engagements over Greenhouse Gas Emissions Disclosures and International Standard on Assurance Engagements (New Zealand) 3410 Assurance Engagements on Greenhouse Gas Statements (**ISAE (NZ) 3410**) issued by the New Zealand Auditing and Assurance Standards Board.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Our responsibilities under ISAE (NZ) 3000 (Revised), NZ SAE 1 and ISAE (NZ) 3410 are further described in the 'Our responsibility' section of our report.

How to interpret limited assurance and material misstatement

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

Misstatements, including omissions, within the Climate-related disclosures are considered material if, individually or in the aggregate, they could reasonably be expected to influence the relevant decisions of the intended users taken on the basis of the Climate-related disclosures.

Inherent limitations

As noted in the Climate-related Disclosures page 3, forward-looking statements are subject to a number of uncertainties and factors because of associated limitations, evolving methodology and availability of data.

As noted in the Greenhouse Gas Emissions Inventory Report in Table 4 on pages 8 to 10, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emission factors and the values needed to combine emissions of different gases.

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Use of this assurance report

Our report is made solely for Vector Limited. Our assurance work has been undertaken so that we might state to Vector Limited those matters we are required to state to them in the assurance report and for no other purpose.

Our report should not be regarded as suitable to be used or relied on by anyone other than Vector Limited for any purpose or in any context. Any other person who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, none of KPMG, any entities directly or indirectly controlled by KPMG, or any of their respective members or employees accept or assume any responsibility and deny all liability to anyone other than Vector Limited for our work, for this independent assurance report, and/or for the opinions or conclusions we have reached.

Our conclusion is not modified in respect of this matter.

Vector Limited's responsibility for the Climate-related Disclosures

The Directors of Vector Limited are responsible for the preparation and fair presentation of the Climate-related Disclosures in accordance with the criteria. This responsibility includes the design, implementation and maintenance of such internal control as Directors determine is relevant to enable the preparation of the Climate-related Disclosures that are free from material misstatement whether due to fraud or error.

The Directors of Vector Limited are also responsible for selecting or developing suitable criteria for preparing the GHG disclosures and appropriately referring to or describing the criteria used.

Our responsibility

We have responsibility for:

- planning and performing the engagement to obtain limited assurance about whether the Climate-related Disclosures are free from material misstatement, whether due to fraud or error;
- forming an independent conclusion based on the procedures we have performed and the evidence we have obtained; and
- reporting our conclusion to Vector Limited.

Summary of the work we performed as the basis for our conclusion

A limited assurance engagement performed in accordance with the Standard involves assessing the suitability in the circumstances of Vector Limited's use of the criteria as the basis for the preparation of the Climate-related Disclosures, assessing the risks of material misstatement of the Climate-related Disclosures whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Climate-related Disclosures.

We exercised professional judgement and maintained professional scepticism throughout the engagement. We designed and performed our procedures to obtain evidence about the Climate-related Disclosures that is sufficient and appropriate to provide a basis for our conclusion.

Our procedures selected depended on the understanding of the Climate-related Disclosures that is sufficient and appropriate to provide a basis for our conclusion. The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

In undertaking limited assurance on the Climate-related Disclosures the procedures we primarily performed were:

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Climate-related Disclosures

- obtained, through inquiries, an understanding of Vector Limited's control environment, processes and information systems relevant to the preparation of the Climate-related Disclosures. We did not evaluate the design of particular control activities, or obtain evidence about their implementation;
- for selected disclosures obtained documentation or agreed to source, either in total or on a sample basis, to assess whether the disclosure was fairly presented and evidence available which substantiated the disclosure;
- obtained, through inquiries and corroborating evidence, an understanding of the underlying process undertaken by Vector Limited to identify material climate-related risks and opportunities and how this is consistent with the qualitative disclosures; and
- evaluated the Climate-related Disclosures against the NZCS disclosure requirements and the fair presentation principles.

GHG disclosures

- obtained, through inquiries and walkthroughs, an understanding of Vector Limited's control environment, processes and information systems relevant to the preparation of the GHG disclosures;
- evaluated whether Vector Limited's methods for developing estimates are appropriate and had been consistently applied. Our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate Vector Limited's estimates;
- recalculated the emissions for a limited number of items;
- performed analytical procedures on particular emission categories by comparing the expected GHGs emitted to actual GHGs emitted and made inquiries of management to obtain explanations for any significant differences we identified; and
- considered the presentation and disclosure of the GHG disclosures against the NZCS disclosure requirements.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Our independence and quality management

This assurance engagement was undertaken

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards*) (New Zealand) (**PES 1**) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements* (**PES 3**), which requires the firm to design, implement and operate a system of quality control including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have also complied with Professional and Ethical Standard 4 *Engagement Quality Reviews* (**PES 4**) which deals with the appointment and eligibility of the engagement quality reviewer and the engagement quality reviewer's responsibilities relating to the performance and documentation of an engagement quality review.

Our firm has also provided regulatory assurance services, other assurance services, and compliance services in relation to R&D tax credits services to Vector Limited. Subject to certain restrictions, partners and employees of our firm may also deal with Vector Limited on normal terms within the ordinary course of trading activities of the business of Vector Limited. These matters have not impaired our independence as assurance providers of Vector Limited for this engagement. The firm has no other relationship with, or interest in, Vector Limited.

As we are engaged to form an independent conclusion on the Climate-related Disclosures prepared by Vector Limited, we are not permitted to be involved in the preparation of the Climate-related Disclosures as doing so may compromise our independence.

The engagement partner on the assurance engagement resulting in this independent assurance report is Matt Diprose.

KPMG

Auckland

22 August 2025