



# GREENHOUSE GAS EMISSIONS INVENTORY REPORT.

1 July 2024 to 30 June 2025



## IMPORTANT INFORMATION FOR READERS.

This Emissions Inventory report has been prepared by Mercury NZ Limited (Mercury) for informational purposes and in connection with our FY25 Climate Statement to be published in accordance with the Aotearoa New Zealand Climate Standards.

Information in this report has been prepared by Mercury with due care and attention with every effort to ensure the report is accurate. Mercury will not be liable for any reliance placed upon this report by any third party.

## PURPOSE OF DOCUMENT.

The purpose of this document is to provide an inventory of Mercury's greenhouse gas emissions and has been measured and prepared in accordance with The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition) and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

Using this recognised framework ensures transparency, robustness and a consistent approach that will facilitate benchmarking with similar organisations and within the energy sector.

The report includes details of the unique emissions factors associated with Mercury's geothermal generation facilities and its involvement in emissions trading and forestry carbon units to communicate the comprehensive nature of Mercury's response to the climate change challenge.

The document will also facilitate the additional disclosure of Mercury's carbon footprint, review of risks and opportunities related to climate change and educate and inform interested stakeholders. Public disclosure of carbon data and the associated management of climate related risks and opportunities also enables Mercury to reflect the requirements of the Aotearoa New Zealand Climate Standards.

## This emissions inventory report includes restated historical data to enhance accuracy and consistency.

We have recalculated and disclosed selected Scope 3 categories for all reporting years from FY22 through to FY25 to enable meaningful comparison across years. This includes calculating and incorporating emissions from Purchased Goods and Services and Capital Goods in years where they were not previously reported.

Scope 2 emissions have been recalculated for previous years following a methodology update. This recalculation aligns with GHG Protocol guidance and affects Scope 3 transmission and distribution losses related to electricity consumption.

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### Approved by:

The Mercury NZ Limited Board - 19 August 2025



## 1.0 GREENHOUSE GAS EMISSIONS INVENTORY SUMMARY.

SCOPE	CATEGORY	FY2022 TONNES CO2e	FY2023 TONNES CO2e	FY2024 TONNES CO2e	FY2025 TONNES CO2e
Scope 1 – direct emissions	Geothermal emissions for exported power	222,345	212,382	236,307	212,531
<b>Sub-total generation emissions</b>		<b>222,345</b>	<b>212,382</b>	<b>236,307</b>	<b>212,531</b>
Scope 1 – direct emissions contd.	Mobile combustion (vehicle fleet)	246	398	335	123
	Stationary combustion (generation site plant and equipment)	93	462	2,927	4,314
	Fugitive emissions (sulphur hexafluoride (SF6) releases)	52	403	5	0
	Refrigerant Gases				27
<b>Total Scope 1</b>		<b>222,736</b>	<b>213,645</b>	<b>239,574</b>	<b>216,995</b>
Scope 2 – indirect emissions	Electricity consumption (location based)	2,123	1,376	2,112	2,353
<b>Total Scopes 1 &amp; 2</b>		<b>224,859</b>	<b>215,021</b>	<b>241,686</b>	<b>219,348</b>
Scope 3 – indirect emissions	Purchased Goods & Services	6,584	9,029	9,378	14,155
	Capital Goods	20,549	37,177	28,732	66,192
	Transmission and distribution losses for electricity consumption	124	104	190	186
	Business travel and accommodation	210	1,176	1,186	1,049
	Use of sold products (gas sales)	138,279	135,910	135,111	123,861
<b>Total Scope 3</b>		<b>165,746</b>	<b>183,396</b>	<b>174,597</b>	<b>205,443</b>
<b>Total All Scopes</b>		<b>390,605</b>	<b>398,417</b>	<b>416,283</b>	<b>424,791</b>

Note: Data from FY2022 to FY2024 for Purchased Goods & Services, and Capital Goods presented in table 1 has not been subject to assurance procedures. Historical data (unverified) for 2015-2021 is provided in Appendix A.



## 1.1 FY2025 CHANGES IN ORGANISATIONAL STRUCTURE.

In January 2025, Mercury acquired a 10% interest in Forest Partners Limited Partnership, a forestry investment fund.

## 1.2 MATERIAL RESTATEMENTS OF EMISSIONS.

### 1.2.1. Restatement of Emissions to Include Additional Scope 3 Categories.

Mercury has introduced historical emissions figures to incorporate two new scope 3 sub-categories: Purchased Goods and Services, and Capital Goods. These categories are published for the first time in our FY2025 inventory to better reflect the full emissions profile of our operations.

The additional scope 3 categories were previously excluded while calculation methodologies were being developed. Emissions from these sources have now been retrospectively included in the three prior reporting periods to enable consistent year-on-year comparison.

**Table 2:** Impact of new scope 3 emissions

EMISSIONS SOURCE		FY22 TONNES CO2e	FY23 TONNES CO2e	FY24 TONNES CO2e
Purchased Goods and Services	Original	Not Disclosed	Not Disclosed	Not Disclosed
	Updated	6,584	9,029	9,378
Capital Goods	Original	Not Disclosed	Not Disclosed	Not Disclosed
	Updated	20,549	37,177	28,732
Total Scope 3 Emissions	Original	138,591	137,159	136,335
	Updated	165,746	183,396	174,597
Total Scope 1, 2, 3 Emissions	Original	362,435	351,436	376,430
	Updated	390,605	398,417	416,283

### 1.2.2 Electricity Emissions Restated

Electricity emissions have been restated to reflect improvements in how data is sourced and calculated. Updates to our internal processes have improved the availability and accuracy of electricity consumption data across sites. With more complete data now available, we have updated historical figures using a consistent approach that will also apply to future reporting.

**Table 3:** Impact of Calculation Methodology Change on Emissions.

EMISSIONS SOURCE		FY22 Tonnes CO2e	FY23 Tonnes CO2e	FY24 Tonnes CO2e
Electricity consumption (location based)	Original	1,108	632	521
	Updated	2,123	1,376	2,112
Transmission and distribution losses for electricity consumption	Original	102	73	38
	Updated	124	104	190

### 1.3 Notable changes in Emissions

The most notable change in this year's inventory is the increase in reported emissions due to the inclusion of purchased goods and services and capital goods under Scope 3. These subcategories cover:

**Purchased Goods and Services:** Emissions associated with the procurement of goods and services to support Mercury's operations; and

**Capital Goods:** Emissions from the development and upgrade of electricity generation assets.



## 1.4 Other notable changes.

**Refrigerant Gases:** Emissions from refrigerant gases have been calculated and included in the Mercury's GHG inventory for the first time in FY25.

**Sulphur Hexafluoride (SF6):** Emissions are calculated based on whether electrical equipment, such as circuit breakers, were topped up in the previous calendar year. As no SF6 top ups occurred in 2024, Mercury has no reportable emissions from SF6 releases in our FY25 inventory.

**Stationary Combustion - Geothermal Drilling:** Scope 1 emissions from stationary combustion have continued to increase in FY25, reflecting the continued activity of Mercury's geothermal drilling programme. The diesel-powered rig has operated throughout the year, with the campaign scheduled for completion in late 2025.

## 2.0 INTRODUCTION.

Mercury NZ Limited (Mercury) generates electricity from renewable sources and is a multi-product retailer providing electricity, gas, broadband and telecommunication services. This report covers Mercury's greenhouse gas (GHG) inventory, covering data from FY2015 to FY2025. This report is a complete and accurate quantification of the amount of GHG emissions that can be directly attributed to Mercury's operations within the declared boundary and scope for the reporting period.

Mercury is a participant in the New Zealand Emissions Trading Scheme (NZ ETS). Under this scheme, Mercury has unique emission factors produced by physical sampling of emissions from each geothermal facility. This process is externally audited and assured, to a reasonable level of assurance, by Deloitte.

Emissions are measured monthly and are used for calculating total annual emissions and the required carbon units to retire. Mercury has invested in New Zealand forestry since 2010 and has long-term contracts in place. Carbon credits are then retired to cover fugitive geothermal scope 1 emissions and scope 3 downstream emissions from customer gas sales.

Carbon credits surrendered under the NZ ETS differ from geothermal fugitive emissions figures stated in this GHG Emissions Inventory due to the surrender obligations being based around equity ownership.

## 3.0 STATEMENT OF INTENT.

Mercury's reporting legislation is the Aotearoa New Zealand Climate Standards<sup>1</sup> with reference to parts 22-24 of Aotearoa New Zealand Climate Standard 1 (NZ CS1) which came into effect from FY24.

Mercury is intent on demonstrating transparency and uses commonly accepted standards when accounting for its greenhouse gas emissions. Therefore, this report relates specifically to the emissions of Mercury and is measured and prepared in accordance with The Greenhouse Gas Protocol<sup>2</sup>: A Corporate Accounting and Reporting Standard (revised edition) and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

The report has been prepared as part of an ongoing commitment to measure and manage emissions, educate and inform both internal and external stakeholders and facilitate continued discussions on carbon reduction targets and carbon neutrality.

## 4.0 DESCRIPTION OF MERCURY.

### 4.1 Mercury.

Mercury NZ Limited (Mercury) generates electricity from renewable sources, namely hydro (wai), geothermal (ngāwhā) and wind (hau). Our electricity generation sites are located along the Waikato River (wai), the nearby steam fields of the northern part of New Zealand's Central Plateau (ngāwhā) and in the Manawatū, South Taranaki, Otago and Southland regions (hau).

Mercury continued to expand its renewable generation pipeline in FY2025, with construction commencing on the second stage of the Kaiwera Downs wind farm and the new Kaiwaikawe Wind Farm near Dargaville. Construction continued to progress on the fifth generating unit at our Ngā Tamariki geothermal station.

Mercury also retails electricity, gas, mobile, and telecommunications products across approximately 906,000 customer connections throughout New Zealand.

<sup>1</sup> [www.xrb.govt.nz/standards/climate-related-disclosures/aotearoa-new-zealand-climate-standards/](http://www.xrb.govt.nz/standards/climate-related-disclosures/aotearoa-new-zealand-climate-standards/)

<sup>2</sup> <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>



## 4.2 Sustainability Policies, Strategies and Programmes.

In FY23, Mercury introduced our purpose and long-term aspirations. These are foundational aspects of our strategic framework, providing the longer-term direction for our organisation.

Our purpose 'Tiakina te anamata, mā te tūhono i ngā tāngata me ngā wāhi o te inamata. Taking care of tomorrow, Connecting people and place today' captures our why. It recognises the role we play in using our unique assets and capabilities to enable everyday living and connectivity in our communities, and to bring together the people we work with to care for the natural environment and resources that we use.

Our long-term aspirations for 2035 cover five focus areas, Kiritaki / Customer, Arumoni / Commercial, Ngā Tāngāta / Our People, Kōtuitangā / Partnerships and Kaitiakitangā / Stewardship. Sustainability underpins all of our long-term aspirations, including under our Kaitiakitangā / Stewardship aspiration of: **We leave our physical assets and the natural environment thriving for future generations.**

Sustainability is also integrated into our short-term business planning, where one of our FY22-24 objectives was to: **Play a leading role in New Zealand's successful transition to a low-carbon economy.**

Our Sustainability Policy<sup>3</sup> describes how Mercury takes an integrated approach to incorporating sustainability into our strategic framework, strategic planning and everyday decision making to deliver greater value and better outcomes for all our stakeholders.

<sup>3</sup> [mercury.co.nz/-/media/project/mercury/mercury/documents/investors/governance-documents/sustainability-policy.pdf?rev=18190a79c05049ccae9630b44c3bc305](https://mercury.co.nz/-/media/project/mercury/mercury/documents/investors/governance-documents/sustainability-policy.pdf?rev=18190a79c05049ccae9630b44c3bc305)

## 5.0 PERSONS RESPONSIBLE.

The Chief Sustainability Officer is responsible for this GHG inventory. A team of individuals across Mercury have contributed to the greenhouse gas accounting and reporting, and their efforts have been integral to the creation of this report. This team includes: Sustainability & Strategy Analyst, Adaptive Pathways Lead, Senior Plant Chemist, Future Insights Manager, Environmental Advisor, Property Manager, Reputation and Social Impact Lead, Resource Lead, Senior Analytics Engineer, Specialist Engineer – High Voltage, Procurement Advisor, General Counsel, Finance Connect, Business Analyst, Legal & Commercial Advisor, Finance Lead, Energy Analyst, Commercial Manager – Telco, Senior Financial Reconciliation Analyst, Business Insights Analyst, Project Manager, Project Commercial Coordinator, Workplace Experience Lead, Facilities Manager.

## 6.0 REPORTING PERIOD COVERED.

This GHG inventory covers the period 1 July 2024 to 30 June 2025. Historical data (unverified) is provided for the period from 1 July 2014 to 30 June 2021.



## 7.0 ORGANISATIONAL BOUNDARIES.

Mercury's organisational boundary determines the parameters for GHG reporting and is set with reference to the GHG Protocol. The boundary encompasses the operations owned and controlled by Mercury, its subsidiaries, associate companies and joint ventures. 100% of emissions from Mercury NZ Limited, Mercury Geothermal Limited, TPC Holdings Limited, Rotokawa (Joint Venture), Ngā Awa Pūrua (Joint Venture), and NOW New Zealand Limited are included within Mercury's operational boundary and therefore reported within the scope 1, 2 and 3 emissions. EnergySource LLC, EnergySource Minerals LLC, and Forest Partners Limited Partnership are outside of Mercury's operational control, and are treated as Scope 3 -Category 15 emissions based on the percent of interest held, and these have been assessed as immaterial.

### 7.1 Consolidation Approach

Mercury applies the operational control consolidation approach to its greenhouse gas inventory to determine organisational boundaries. This allows Mercury to focus on the emissions where Mercury has operational control and can investigate the potential to manage and reduce. The table below sets out how each entity is treated:

**Table 4:** Summary of entities.

ENTITY	PRINCIPAL ACTIVITY	TYPE	INTEREST HELD (end of FY25)	COUNTRY
Mercury NZ Limited	Electricity Generation (Hydro, wind and geothermal), electricity, gas & telco retail	Listed Company (NZX Main Board and ASX Foreign Exempt Listing)	100%	New Zealand
Mercury Geothermal Limited	Electricity generation (geothermal)	Subsidiary	100%	New Zealand
TPC Holdings Limited	Investment Holding	Associate	25%	New Zealand
Rotokawa (Joint Venture)	Steamfield Operation	Joint Operation	64.8%	New Zealand
Ngā Awa Pūrua (Joint Venture)	Electricity Generation	Joint Operation	65%	New Zealand
NOW New Zealand Limited	Broadband Retail	Subsidiary	100%	New Zealand
EnergySource LLC	Investment Holding	Joint Venture	20.86%	United States
EnergySource Minerals LLC	Mineral Extraction	Joint Venture	11.37%	United States
Forest Partners Limited Partnership	Forestry Management	Associate	10%	New Zealand



## 8.0 MERCURY FACILITIES.

### 8.1 Wai (hydro) Generation Facilities.

Mercury owns nine stations on the Waikato River. Flexible and rain-fed, hydro output can be increased or decreased quickly and efficiently.

**Table 5:** Hydro Generation Facilities.

FACILITY	FIRST OPERATED	DESCRIPTION
Karāpiro	1947	A 101MW plant with an average annual output of 515 GWh
Arapuni	1929	A 198MW plant with an average annual output of 865 GWh
Waipāpa	1961	A 51MW plant with an average annual output of 242 GWh
Maraetai I and II	1952 and 1970 respectively	The two plants have a combined capacity of 360MW with an average annual output of 880 GWh
Whakamaru	1956	A 124MW plant with an average annual output of 520 GWh
Ātiāmuri	1958	A 84MW plant with an average annual output of 285 GWh
Ōhakuri	1961	A 112MW plant with an average annual output of 405 GWh
Aratiatia	1964	A 87MW plant with an average annual output of 365 GWh

### 8.2 Ngāwhā (geothermal) Generation Facilities.

Mercury operates five geothermal stations and a steamfield facility in the North Island. Providing steady baseload, geothermal runs at full capacity about 95% of the time.

**Table 6:** Geothermal Facilities.

FACILITY	FIRST OPERATED	DESCRIPTION
Kawerau	2008	A 107MW flash plant with an average annual output of 831 GWh
Mōkai	2000	A 112MW flash plant with an average annual output of 800 GWh
Rotokawa	2000	A 34MW binary cycle plant with an average annual output of 262 GWh
Ngā Tamariki	2013	A 86MW binary cycle plant with an average annual output of 705 GWh
Ngā Awa Pūrua	2010	A 139MW flash plant with an average annual output of 1,132 GWh
Rotokawa Steamfield Operation	2000	Infrastructure associated with the supply of geothermal fluid to Rotokawa and Ngā Awa Pūrua geothermal stations.

### 8.3 Hau (wind) Generation Facilities.

Mercury operates five wind farms in the North Island and two in the South Island.

**Table 7:** Wind Generation Facilities.

FACILITY	FIRST OPERATED	DESCRIPTION
Turitea	2021	A 222MW wind farm with an average annual output of 840 GWh
Tararua I	1999	A 32MW wind farm with an average annual output of 114 GWh
Tararua II	2004	A 36MW wind farm with an average annual output of 131 GWh
Tararua III	2007	A 93MW wind farm with an average annual output of 318 GWh
Mahinerangi	2011	A 36MW wind farm with an average annual output of 100 GWh
Waipipi	2021	A 133MW wind farm with an average annual output of 455 GWh
Kaiwera Downs I	2023	A 43MW wind farm with an average annual output of 147 GWh

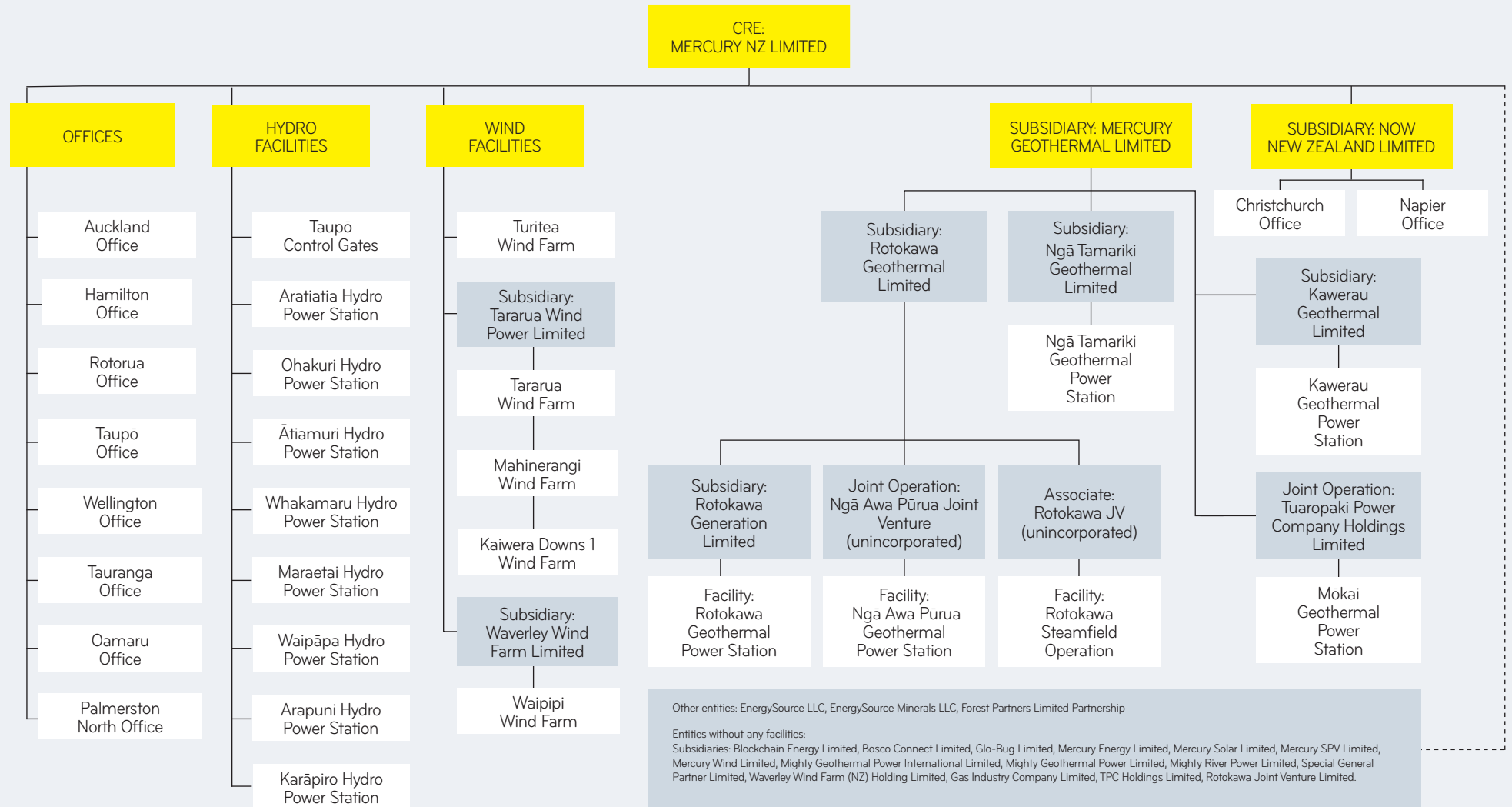


### 8.4 Other Facilities.

Other facilities include offices in Auckland, Hamilton, Rotorua, Taupō, Wellington, Taurangā, Oamaru, and Palmerston North.

### 8.5 Organisation Chart.

Mercury, as the Climate Reporting Entity (CRE), its associated entities and facilities are shown in the organisation chart below:



## 9.0 EMISSIONS SOURCE INCLUSIONS.

### 9.1 Emissions Assessment and Categorisation.

Mercury has used the GHG Protocol to assess its business activities and facilities for emissions sources and identify the emission sources required to complete this inventory. This has been done on the basis that emissions sources from prior years are maintained unless the associated business activity or facility has ceased or been divested. Any additional business activities or facilities commenced or acquired during the financial year have been assessed for emissions sources not previously present.

In accordance with the GHG Protocol, the assessed emissions sources have been classified into:

**Scope 1** – Direct GHG emissions that are operationally controlled by Mercury.

**Scope 2** – Indirect emissions from the generation of purchased electricity; and

**Scope 3** – Indirect emissions that occur because of the activities of Mercury but from sources that are not owned and controlled by Mercury.

### 9.2 Materiality.

Mercury considers Scope 1 and Scope 2 emissions as material. For Scope 3 emissions, Mercury may exclude categories where emissions are estimated as being below 5% of total emissions across all categories, provided the total excluded emissions do not exceed 5% of all emissions.

### 9.3 Other Emissions – Perfluorocarbons (PFCs).

Mercury does not use or hold PFCs so no emissions from these sources are included in this inventory.

### 9.4 Other Emissions – CO<sub>2</sub> emissions from the Combustion of Biomass.

There was no combustion of biomass in Mercury's operations during the reporting period.



## 9.5 Emissions Inclusions.

**Table 8:** Summary of emissions source inclusions.

SCOPE	CATEGORY	GHG EMISSION SOURCE	FACILITIES INCLUDED	DATA SOURCE	DATA COLLECTION UNIT	METHOD, DATA QUALITY, UNCERTAINTY (QUALITATIVE)
Scope 1	Fugitive emissions	Fugitive emissions from geothermal generation	Kawerau, Mōkai, Ngā Awa Pūrua, Ngā Tamariki, Rotokawa	Steam flow records gathered internally at each site. The Unique Emission factor has been approved and submitted to the ETS	Geothermal Resources	Emissions factors (EFs) from NZ EPA. Captured by Geothermal Resources team, audited by Deloitte for ETS use, medium quality data, further information in section 11 of this report
Scope 1	SF6 releases	SF6 releases during operations	Kawerau, Mōkai, Ngā Awa Pūrua, Ngā Tamariki, Rotokawa, Arapuni, Aratiatia, Ātiamuri, Karāpiro, Maraetai I and II, Ōhakuri, Waipāpa, Whakamaru	Maintenance records (SF6 top ups) – Note: Stocks recorded as a liability	Asset Management Team	EFs from MfE guidance documents. Review of calendar year records, reasonable data quality, medium level of uncertainty due to use of calendar year for financial year
Scope 1	Mobile combustion	Vehicle fleet fuel	Vehicle fleet	Fuel cards cover most of fuel purchases, there will be a limited number of purchases made by staff using cash/ card	Finance	EFs from MfE guidance documents. Review of fuel card records, good data quality, very low level of uncertainty
Scope 1	Stationary combustion	Fuel used in generators and on-site plant and equipment	Kawerau, Mōkai, Ngā Tamariki, Rotokawa, Ngā Awa Pūrua, Aratiatia, Arapuni	Delivery company data and finance records	Finance	EFs from MfE guidance documents. Review of delivery company data, good data quality
Scope 1	Refrigerant Gases	HFCs from air-conditioning systems	All generation sites and office locations	Records from sites	Facilities	EFs from MfE guidance documents. Calculation based on charge-data taken from equipment and extrapolated across all sites. high level of uncertainty
Scope 2	Electricity – Offices and other sites	Electricity consumed in offices and internal sites	Auckland, Wellington, Taupo, Rotorua, Hamilton, Tauranga, Oamaru, Palmerston North	Electricity internal customer category in financial records, electricity bills for facilities billed through agents	Customer	EFs from MfE guidance documents. Calculation based on internal invoicing with some estimation, low level of uncertainty



SCOPE	CATEGORY	GHG EMISSION SOURCE	FACILITIES INCLUDED	DATA SOURCE	DATA COLLECTION UNIT	METHOD, DATA QUALITY, UNCERTAINTY (QUALITATIVE)
Scope 2	Electricity generation sites	Grid electricity consumed at generation sites	Hydro, geothermal and Wind	SCADA extract	Technology	EFs from MfE guidance documents. Calculation based on recorded revenue meter data, low level of uncertainty but some lines consumption may not be Mercury's
Scope 3: Subcategory 1 – Purchased Goods & Services	Operational goods and services	Emissions associated with acquiring operational goods & services	All	Operational expense data from Mercury's finance system	Finance	EF's from Thinkstep-anz documents. Calculations based on internal finance data. High level of uncertainty due to spend based EF's. Further information on uncertainties in section 11
Scope 3: Subcategory 2 – Capital Goods	Capital Goods	Embodied emissions from procurement of capital goods and related expenditures	All	Capital expenditure data from Mercury's finance system combined with supplier provided data	Finance & Supplier Provided Data	EF's from Thinkstep-anz documents. Calculations based on spend data obtained from internal finance records and information provided by suppliers. High level of uncertainty due to spend based EF's. Further information on uncertainties in section 11.
Scope 3: Subcategory 3 – Fuel and energy related activities	Transmission and distribution losses for imported electricity	Transmission and distribution losses for imported electricity	Generation sites, offices and other internal sites	Electricity invoicing, internal customer category and SCADA extracts	Customer & Technology	EFs from MfE guidance documents. Calculation based on internal invoicing with some estimation and recorded revenue meter data, low level of uncertainty
Scope 3: Subcategory 6 – Business travel	Business travel, accommodation	Emissions from flights and accommodation	All	Flight and accommodation reports	Travel service provider	EFs from MfE guidance documents. Calculation based on flights and accommodation invoicing, good data quality, low level of uncertainty
Scope 3: Subcategory 6 – Business travel	Mileage	Emissions from staff travel to and from workplaces	All	Mileage expense claim reports	Finance	EFs from MfE guidance documents. Calculation based on spend-based assessment of mileage expenses, moderate level of uncertainty
Scope 3: Subcategory 11 – Use of sold products	Use of sold products (including distribution losses)	Gas purchased. (reticulated gas only)	Captured by Customer	Reticulated gas invoices from direct purchases & nomination report	Customer	EFs from MfE guidance documents. Invoiced volumes & traded nominations provided by Customer so high-quality data, carbon is included in the credits required to be surrendered under the NZ ETS
Scope 3: Subcategory 11 – Use of sold products	Use of sold products	LPG purchases	Captured by Customer	LPG invoices	Customer	EFs from MfE guidance documents. Invoiced volumes from purchase invoices so high-quality data



## 10.0 EMISSIONS SOURCE EXCLUSIONS.

The emissions sources listed in the table below are excluded from Mercury's GHG inventory report because they are considered immaterial in the context of the inventory or may not be applicable.

**Table 9:** Emissions Source Exclusions.

SCOPE	GHG EMISSION SOURCE	FACILITIES DESCRIPTION	ASSESSMENT/REASON FOR EXCLUSION
Scope 3: Subcategory 3 – Fuel and energy related activities	Generation of electricity that is purchased and resold to end users	N/A	Assessed as below materiality threshold
Scope 3: Subcategory 4 – Upstream transportation and distribution	Emissions associated with purchased transport and distribution services, e.g. freight, postage, courier	N/A	Assessed as below materiality threshold, high level of data uncertainty
Scope 3: Subcategory 5 – Waste generated in operations	Emissions associated with waste to landfill from offices and wastewater treatment	All	Assessed as below materiality threshold, high level of data uncertainty
Scope 3: Subcategory 7 – Employee commuting	Emissions associated with employee travel to and from work	All	Assessed as below materiality threshold
Scope 3: Subcategory 8 – Upstream leased assets	Emissions associated with telecommunications network from leased assets	All	Assessed as below materiality threshold
Scope 3: Subcategory 9 – Downstream transportation and distribution	Emissions associated with non-Mercury purchased transportation and distribution services of products to customers	N/A	Assessed and considered not applicable as Mercury does not conduct business activities in this area
Scope 3: Subcategory 10 – Processing of sold products	Emissions associated with processing of sold products	N/A	Assessed and considered not applicable as Mercury's sold products do not undergo further processing
Scope 3: Subcategory 12 – End-of-life treatment of sold products	Emissions associated with end-of-life of broadband routers and household appliances	N/A	Assessed as below materiality threshold
Scope 3: Subcategory 13 – Downstream leased assets	Agricultural emissions	Mercury leases small landholdings near its generation facilities to local farmers mainly for grazing	Assessed as below materiality threshold
Scope 3: Subcategory 14 – Franchises	Emissions from operations of franchises	N/A	Assessed and considered not applicable as Mercury does not grant franchise licenses
Scope 3: Subcategory 15 – Investments	Emissions from companies that Mercury provides capital and/or financing services	EnergySource LLC, EnergySource Minerals LLC, Forest Partners Limited Partnership	Assessed as below materiality threshold



## 11.0 DATA COLLECTION AND UNCERTAINTIES.

### 11.1 Data Collection.

Mercury has developed robust GHG information systems to record fugitive geothermal emissions as this forms most of its carbon footprint and have been required to meet its obligations under the NZ ETS since 2010. These geothermal unique emissions factors are subject to external audit and assurance and are therefore robust.

The preparation of this emissions inventory report has prompted collation of additional, less material, datasets in a way that ensures ongoing conformance with the GHG Protocol. Future emissions inventory reports will follow the same data collection and collation process, with opportunities taken to improve data integrity, completeness and emissions reporting accuracy.

Additional data required to produce this emissions inventory comes from internal operational data, with datasets around scope 2 and 3 emissions sourced from specific providers, internal financial records, and where available, supplier provided emissions data.

Quantification of the associated emissions currently uses spreadsheets to relate consumption and usage to emissions factors. Emissions factors are sourced from either New Zealand Government guidance documents, IPCC publications or recognised GHG emission databases.

### 11.2 Impact of Uncertainties.

Mercury's greenhouse gas emissions inventory follows the GHG Protocol, using calculation methods based on the quality of available data and the significance of each emissions source. The most significant sources of emissions are fugitive geothermal sources at geothermal generation sites and emissions from the use of sold products (gas), both of which have low levels of uncertainty. Geothermal steam data is gathered and recorded internally at each site, the emission factors associated are subject to independent assurance. Gas sales data is gathered from gas measuring systems that are subject to New Zealand gas measurement technical standards.

Capital goods and purchased goods and services represent the next largest source of emissions, calculated for the first time in FY25. A spend-based method was used for purchased goods and services, while a hybrid method was applied to capital goods, combining finance system data with supplier-provided emissions estimates for key construction materials. Emission factors from the 2022 Thinkstep-ANZ dataset were used, with adjustments based on the latest CPI data to reflect current pricing. Basic price emission factors were selected to reflect business-to-business procurement. For spend under \$200,000, we applied an average emissions factor based on the ratio of emissions to spend over \$200,000.

We have used turbine-specific data from our wind supplier's life cycle assessment (LCA), focusing on the turbine only figure. The estimate from the LCA has been adjusted to align with a cradle-to-gate boundary for capital goods which excludes emissions from operations and end-of life.

We acknowledge that both spend-based, and supplier-derived methods carry high levels of uncertainty due to generalised emissions factors, boundary assumptions, and product variation. We are focused on improving data quality over time, including reducing reliance on spend-based methods by using more accurate data based on quantities or supplier information where possible.

Mercury operates various facilities, including offices, internal sites, and generation sites for which Scope 2 imported electricity and refrigerant gas emissions are calculated. There are uncertainties in our calculation approach for these facilities as we rely on estimations based on employee numbers and usage data from offices where information is available, in the absence of comprehensive site-specific data.

Our scope 3 emissions from business travel comprise of air travel, accommodation and staff mileage. Air travel and accommodation are derived from a third-party report, and staff mileage is derived from our staff mileage claims. We reconcile these invoices against our business travel spend to ensure there are no significant discrepancies. While these uncertainties exist, we consider that the impact on our overall emissions reporting is not material. We do, however, acknowledge these limitations and will continue to work on improving data accuracy and reliability.



## 12.0 THE BASE YEAR SELECTED.

The chosen base year is 1 July 2021 to 30 June 2022 and is unchanged from previous reports. In line with the GHG Protocol, additional Scope 3 categories – Purchased Goods & Services and Capital Goods – have been retrospectively applied to the FY2022 base year and subsequent reporting years following the finalisation of calculation methodologies. Emissions reported for FY25 have been assured, whereas historical emissions for Purchased Goods & Services and Capital Goods for FY2022 to FY2024 have not yet been subject to assurance.

These updates have increased Scope 3 emissions for FY2022 by approximately 19%, and contributed to a higher total emissions figure, ensuring consistency and comparability across all reporting periods.

Section 19.1 of this report compares our direct emissions over the past two financial years to our FY2022 base year as well as to FY15, when we began measuring CO<sub>2</sub>. This comparison highlights the improvements and progress we've made since 2015.

### 12.1 Base Year Recalculation Methodology:

Mercury's base year emissions will be recalculated if misstatements, changes to the business (such as mergers, acquisitions, or divestments), or changes in methodology would result in changes of more than 5% to total emissions in the base year. If the recalculation is significantly uncertain or unable to be carried out (due to lack of data), then Mercury will establish a new base year.

## 13.0 GHG EMISSIONS CALCULATIONS AND RESULTS.

Emissions source datasets were gathered from across the business from metered consumption points, financial records and from specific third-party suppliers such as liquid fossil fuel providers. The factors required to calculate the associated emissions are sourced from:

- Analysis of physical samples (for geothermal fugitive emissions only).
- New Zealand Government guidance documents published by the Ministry for the Environment (MfE) - MfE Measuring Emissions: A guide for organisations – 2025 – Emissions Factor Workbook
- Thinkstep-anz. (2024). Emission Factors for New Zealand: Greenhouse Gas Emission Intensities for Commodities and Industries. v1.1. Wellington: thinkstep-anz

Following these calculations, Mercury's emissions profile is dominated by Scope 1 emissions, namely fugitive emissions from geothermal electricity generation, which account for approximately 50% of all emissions. Scope 3 emissions from subcategories Purchased Goods and Services, Capital Goods, and Use of sold products are also significant sources of emissions.



## 14.0 GHG SPECIFIC INFORMATION.

Mercury's direct emissions for the base year (FY2022) and FY2023-FY2025 by greenhouse gas and source, together with their respective Global Warming Potentials (GWP) are shown in the table below.

Mercury's direct emissions are converted to CO<sub>2</sub>e using GWP conversion factors from the latest MfE guidance and Thinkstep documents (AR5). In previous years,

direct methane emissions from geothermal sources were converted using different GWP factors due to variations in calculation methodologies.

Specifically, geothermal fugitive emissions were calculated and disclosed based on Mercury's submissions to the New Zealand Environmental Protection Authority for NZ ETS compliance, differing from the GWP used for non-geothermal sources. These methodologies have now been aligned.

**Table 10:** GHG Specific Information.

EMISSIONS SOURCE	FY2022			FY2023 <sup>4</sup>			FY2024 <sup>4</sup>			FY2025 <sup>4</sup>		
	t	GWP	tCO <sub>2</sub> e	t	GWP	tCO <sub>2</sub> e	t	GWP	tCO <sub>2</sub> e	t	GWP	tCO <sub>2</sub> e
<b>Geothermal Emissions</b>												
Carbon Dioxide	183,421	1	183,421	175,732	1	175,732	192,596	1	192,596	173,759	1	173,759
Methane	1,557	25	38,925	1,466	25	36,650	1,561	28	43,711	1,385	28	38,780
<b>Other scope 1 &amp; 2 emissions</b>												
Carbon Dioxide	2,395	1	2,395	2,170	1	2,170	5,262	1	5,262	6,695	1	6,695
Methane	2,251	28	63	1,975	28	55	2,856	28	80	3,949	28	111
Nitrous Oxide	0.0143	265	4	0.008	265	2	0.01509	265	4	0.02	265	5
Sulphur Hexafluoride	0.0023	22,800	52	0.017	23,500	403	0.00022	23500	5	0	23500	0
<b>Total All Sources</b>												
Carbon Dioxide	185,816		185,816	177,902		177,902	197,858		197,858	180,454		180,454
Methane	1,559		38,988	1,468		36,705	1,564		43,791	1,389		38,891
Nitrous Oxide	0.0143		4	0.008		2	0.01509		4	0.01850		5
Sulphur Hexafluoride	0.0023		52	0.017		403	0.00022		5	0		0

<sup>4</sup> Numbers may not exactly total summary figures in Section 1 due to rounding.



## 15.0 GHG REMOVALS AND REDUCTIONS.

All emissions figures presented in this inventory are gross emissions, i.e. they exclude any biogenic or other removals.

Mercury held 10 forestry contracts under the New Zealand Emissions Trading Scheme (NZ ETS) during the reporting year, with four remaining active as of 30 June 2025. These contracts have supported the sequestration of approximately 300,000 tonnes of carbon annually.

GHG removals resulting from these contracts have not been included or netted off from any emissions figures in this inventory.

## 16.0 GHG LIABILITIES.

Mercury uses a gas, sulphur hexafluoride (SF6), in circuit breakers that has a global warming potential much higher than carbon dioxide. Its storage and use require annual audit under the Resource Management Act and as a matter of good practice.

Total GHG holdings for the previous eight years have been calculated and are provided in the table opposite. The significant decrease in holdings during FY2020 is due to consolidation and centralisation of stored SF6 across Mercury sites.

**Table 11:** GHG Holdings.

GHG HOLDINGS	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY2025
SF6 Holdings (kg)	12,397	12,373	1,191	1,156	1,574	1,726	1,928	1,978

Data from FY18 to FY21 presented in table 11 has not been subject to assurance procedures.

## 17.0 AUDIT OF THE GHG INVENTORY.

Mercury's FY2025 GHG Emissions Inventory report (excluding Appendixes A and B) has been audited to a limited level of assurance (refer Appendix C). Mercury's fugitive geothermal emissions are subject to monthly sampling and annual review and audit under the NZ ETS.

## 18.0 DESCRIPTION OF ADDITIONAL INDICATORS.

Mercury presents its generation emissions intensity and compares that to the New Zealand grid average<sup>5</sup> in Table 12.

<sup>5</sup>The Measuring emissions guide: 2025 is for Aotearoa New Zealand-based organisations wishing to measure and report their greenhouse gas emissions.



## 19.0 ASSESSMENT OF PERFORMANCE AGAINST RELEVANT BENCHMARKS.

### 19.1 Emissions Intensity.

Mercury's emissions intensity for FY2015, the base year (i.e., FY2022), and FY2024 to FY2025 are shown in Table 12 and Figure 1. Mercury's emissions intensity is impacted by the volatility of hydro and wind generation. The intensity calculation uses gross Scope 1 generation emissions only, no adjustments have been made in relation to NZUs surrendered under the NZ ETS.

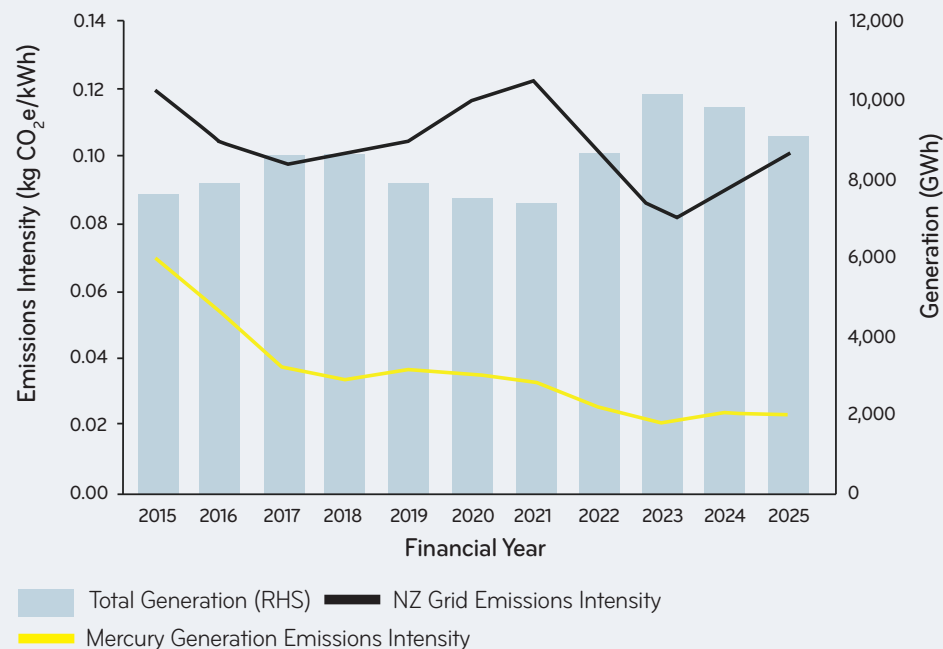
**Table 12:** GHG emissions, reductions and intensity calculations for Mercury's electricity.

GHG METRICS	FY15	-	FY22	-	FY24	FY25
Scope 1 - Direct Emissions from generation (tCO <sub>2</sub> e)	529,900		222,345		236,307	212,531
Total annual reductions (tCO <sub>2</sub> e)	-		19,199		-23,925	23,776
Total reductions from FY2015 (tCO <sub>2</sub> e)	-		307,555		293,593	317,369
% Reduction from FY2015 (tCO <sub>2</sub> e)	-		58%		55%	60%
Total Generation (GWh)	7,583		8,656		9,833	9,081
Emissions Intensity (kg CO <sub>2</sub> e/kWh)	0.070		0.026		0.024	0.023
Emissions Intensity NZ grid electricity* (kg CO <sub>2</sub> e/kWh)	0.120		0.103		0.073	0.101
Emissions Intensity reduction from FY2022 base year	-		-		6.45%	8.89%
Emissions Intensity reduction from FY2015			63%		66%	67%

\* The NZ grid Electricity Emissions Intensity is based on MfE advised figures. The FY figure is calculated by averaging the emissions intensities from that and the previous calendar years. The FY25 figure is based on CY2024 only.

Data from FY2015 to FY2021 presented in table 12, figure 1, and appendix B has not been subject to assurance procedures. FY16-FY21 information is presented in appendix B.

**Figure 1:** Generation Emissions Intensity FY2015 to FY2025.



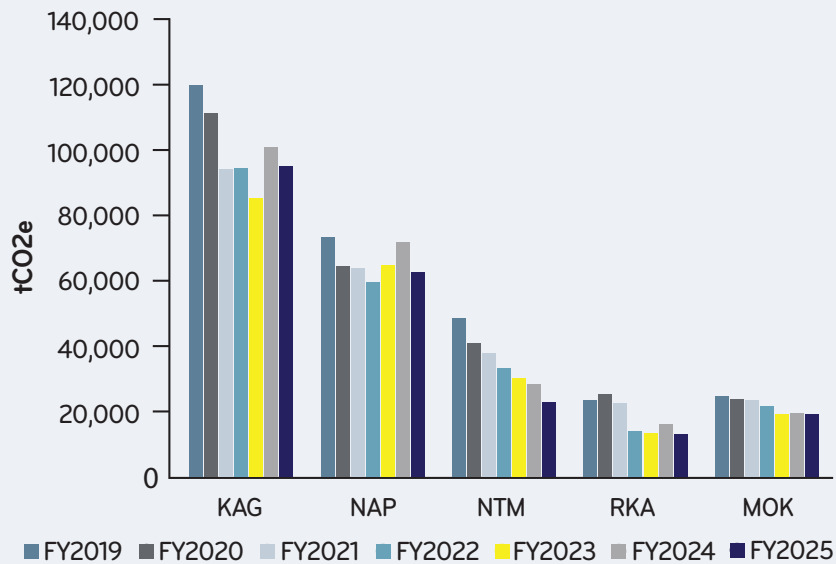
## 19.2 Geothermal Emissions and Emissions Intensity by Station.

Mercury's geothermal fugitive emissions and emissions intensity by station for the past seven years are shown in Table 13 and Figures 2 and 3 below.

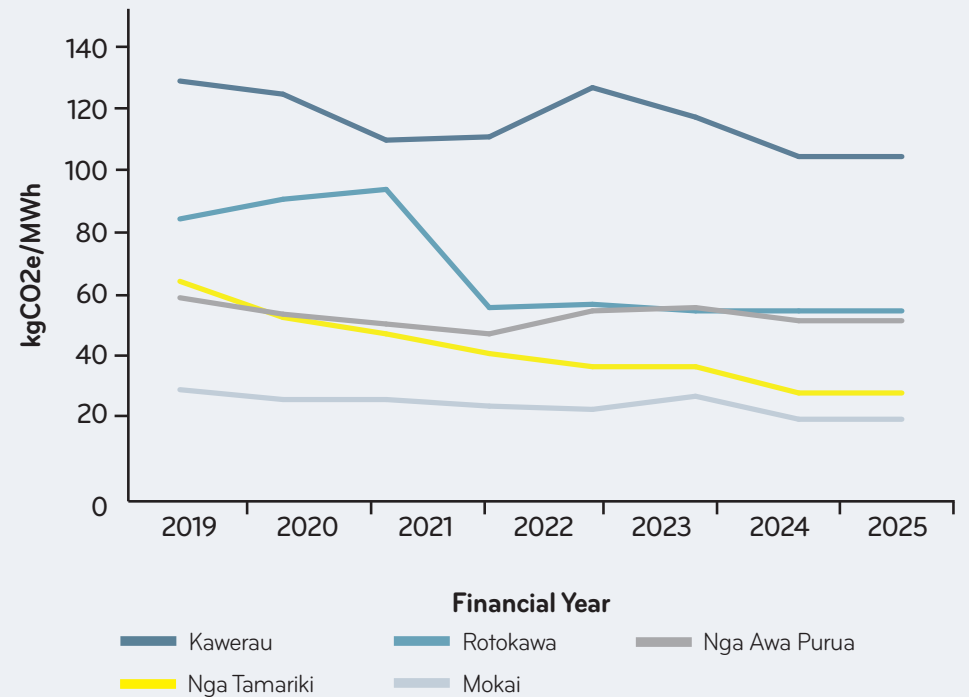
**Table 13:** Fugitive geothermal emissions by station.

GEOTHERMAL EMISSIONS (tCO <sub>2</sub> e)	FY19	FY20	FY21	FY22	FY23	FY24	FY2025
Kawerau	119,799	111,108	94,065	94,313	85,209	100,933	94,996
Ngā Awa Pūrua	73,303	64,323	63,772	59,407	64,657	71,670	62,503
Ngā Tamariki	48,417	40,991	37,674	33,101	30,077	28,258	22,928
Rotokawa	23,498	25,113	22,621	13,899	13,237	16,082	13,039
Mōkai	24,758	23,676	23,411	21,625	19,201	19,364	19,065

**Figure 2:** Geothermal Emissions by Station.



**Figure 3:** Geothermal Emissions Intensity by Station.



Data from FY19 to FY21 presented in table 13 and figures 2 & 3 has not been subject to assurance procedures.



## 20.0 APPENDIX A - HISTORICAL DATA - GHG EMISSIONS INVENTORY SUMMARY.

SCOPE	CATEGORY	FY2015 TONNES CO2e	FY2016 TONNES CO2e	FY2017 TONNES CO2e	FY2018 TONNES CO2e	FY2019 TONNES CO2e	FY2020 TONNES CO2e	FY2021 TONNES CO2e
Scope 1 - direct emissions	Geothermal emissions for exported power	362,375	361,553	321,565	291,950	289,776	265,212	241,544
	Thermal combustion (gas-fired generation)	167,525	63,518	-	-	-	-	-
Sub-total generation emissions		<b>529,900</b>	<b>425,071</b>	<b>321,565</b>	<b>291,950</b>	<b>289,776</b>	<b>265,212</b>	<b>241,544</b>
Scope 1 – direct emissions contd.	Mobile combustion (company vehicle fleet)	461	492	485	449	458	281	316
	Stationary combustion (generation site plant and equipment)	1,712	36	1,611	27	70	85	63
	Fugitive emissions (SF6 releases)	98	26	26	10	10	1,249	3,208
Scope 2 – indirect emissions	Electricity consumption (location based)	n/r	n/r	n/r	n/r	n/r	n/r	n/r
Total Scopes 1 & 2		<b>532,171</b>	<b>425,625</b>	<b>323,687</b>	<b>292,436</b>	<b>290,314</b>	<b>267,468</b>	<b>243,866</b>
Scope 3 – indirect emissions	Use of sold products (gas sales)	57,293	54,513	57,356	63,392	62,009	67,104	66,576
	Transmission and distribution losses for electricity consumption	n/r	n/r	n/r	n/r	n/r	n/r	n/r
Total All Scopes		<b>589,464</b>	<b>480,138</b>	<b>381,043</b>	<b>355,828</b>	<b>352,323</b>	<b>334,572</b>	<b>310,442</b>

Data from FY2015 to FY2021 presented in Appendix A has not been subject to assurance procedures.



## 21.0 APPENDIX B – HISTORICAL DATA - GHG EMISSIONS, REDUCTIONS AND INTENSITY CALCULATIONS FOR MERCURY'S ELECTRICITY.

GHG METRICS	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
Scope 1 - Direct Emissions from generation (tCO <sub>2</sub> e)	425,071	321,565	291,950	289,776	265,212	241,544
Total annual reductions (tCO <sub>2</sub> e)	104,829	103,506	29,615	2,174	24,564	23,668
Total reductions from FY2015 (tCO <sub>2</sub> e)	104,829	208,335	237,950	240,124	264,688	288,356
% Reduction from FY2015 (tCO <sub>2</sub> e)	20%	39%	45%	45%	50%	54%
Total Generation (GWh)	7,891	8,571	8,640	7,874	7,503	7,386
Emissions Intensity (kg CO <sub>2</sub> e/kWh)	0.054	0.038	0.034	0.037	0.035	0.033
Emissions Intensity NZ grid electricity* (kg CO <sub>2</sub> e/kWh)	0.104	0.097	0.101	0.104	0.115	0.119
Emissions Intensity reduction from FY2022 base year	-	-	-	-	-	-
Emissions Intensity reduction from FY2015	23%	46%	52%	47%	49%	53%

\* The NZ grid Electricity Emissions Intensity is based on MfE advised figures. The FY figure is calculated by averaging the emissions intensities from that and the previous calendar years.

Data from FY2016 to FY2021 presented in Appendix B has not been subject to assurance procedures.



## 22.0 APPENDIX C.



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with confidence**

### **Independent Limited Assurance Report to the Directors of Mercury NZ Limited**

#### **Assurance Conclusion**

Based on our limited assurance procedures performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Mercury NZ Limited's ("Mercury" and "the Group") Greenhouse Gas ("GHG") emissions inventory report for the year ended 30 June 2025 is not prepared, in all material respects, in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised version) (2004), and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011) (the "Criteria").

#### **Scope**

Ernst & Young Limited ("EY") has undertaken a limited assurance engagement to report on Mercury's GHG Emissions Inventory Report (the "Report") for the year ended 30 June 2025.

#### **Criteria applied by Mercury**

In preparing the Report, Mercury applied Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised version) (2004), and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011) (the "Criteria"). In applying the Criteria the methods and assumptions used are described on pages 11 to 12 and page 14 of the Report, as are the estimation uncertainties inherent in the methods and assumptions used.

#### **Mercury's directors Responsibility**

Mercury's directors are responsible, on behalf of Mercury, for the preparation of the Report in accordance with the Criteria. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Report, such that it is free from material misstatement, whether due to fraud or error.

#### **EY's Responsibility**

Our responsibility is to express a limited assurance conclusion on the Report based on the procedures we have performed and the evidence we have obtained.

Our engagement was conducted in accordance with *International Standard for Assurance Engagements (New Zealand): Assurance Engagements on Greenhouse Gas Statements ("ISAE (NZ) 3410")*. This standard requires that we plan and perform

this engagement to obtain limited assurance about whether the Report has been prepared, in all material respects, in accordance with the Criteria. The nature, timing and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

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

Ernst & Young provides financial statement audit, interim financial statements review, agreed-upon procedures and other assurance engagements to the Group. Partners and employees of our firm may deal with Group on normal terms within the ordinary course of trading activities of the business of Group. We have no other relationship with, or interest in, the Group.

#### **Our Independence and Quality Management**

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

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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*, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### **Description of procedures performed**

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 procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the report and related information, and applying analytical and other relevant procedures.

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Our procedures included:

- Obtaining, through inquiries, an understanding of Mercury's control environment, processes and information systems relevant to the preparation of the Report. We did not evaluate the design of particular control activities, or obtain evidence about their implementation;
- Performing walkthroughs of key processes and data sets;
- Inquiring with relevant staff regarding any matters that arose in the application of the selected boundary in establishing the reported amounts;
- Evaluating whether Mercury'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;
- Testing a limited number of items to, or from, supporting records, as appropriate;
- Assessing a limited number of emission factor sources for appropriateness;
- Performing analytical procedures on selected emission categories and making inquiries of management to obtain explanations for any significant movements or unexpected variances; and
- Considering the presentation and disclosure of the Report.

We also performed such other procedures as we considered necessary in the circumstances.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls.

### **Inherent Uncertainties**

The GHG quantification process is subject to scientific uncertainty, which arises because of incomplete scientific knowledge about the measurement of GHGs. Additionally, GHG procedures are subject to estimation uncertainty resulting from the measurement and calculation processes used to quantify emissions within the bounds of existing scientific knowledge.

### **Use of our Assurance Report**

We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than the Directors of Mercury, or for any purpose other than that for which it was prepared.

*Ernst & Young Limited*

Ernst & Young Limited  
Auckland  
19 August 2025



