

FY2023/24

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Unison Group's vision for the future

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## **Executive summary**

This report documents the carbon footprint for ETEL's 2024 financial year (1 April 2023 – 31 March 2024), covering all relevant direct (scope / category 1), indirect (scope / category 2) and supply chain emissions (scope 3 / category 3, 4). It is calculated in line with the following standards:

- ISO 14064-1:2018 Greenhouse Gases Part 1
- Greenhouse Gas Protocol A Corporate Accounting and Reporting Standard
- Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)

The total GHG inventory across all emission sources is 23,155 tonnes  $CO_2e$ . This comprises:

- 186 tonnes CO<sub>2</sub>e from direct fuel related emissions
- 301 tonnes CO<sub>2</sub>e from indirect purchased electricity
- 22,668 tonnes CO<sub>2</sub>e from indirect emissions from supply chain and sources outside ETEL's direct control.

ETEL is part of the Unison Group, which consists of specialist companies delivering world-class electricity solutions.

#### Scope 1 emissions

Scope 1 emissions primarily come from the 73,000 litres of fossil fuel consumed though vehicle combustion and stationary combustion, and a small amount of refrigerant, resulting in 186 tonnes of CO₂e.

#### Scope 2 emissions

Scope 2 emissions are driven by the manufacturing sites; New Zealand manufacturing accounting for 64% and Indonesia manufacturing 19%.

#### Scope 3 emissions

Scope 3 emissions contribute 98% of the total inventory, and include those from purchased goods and services, upstream fuel "well to tank" emissions, business travel, and waste to landfill.





## **GHG EMISSIONS INVENTORY**

**Scope 1 Total Emissions:** 

186 CO2e

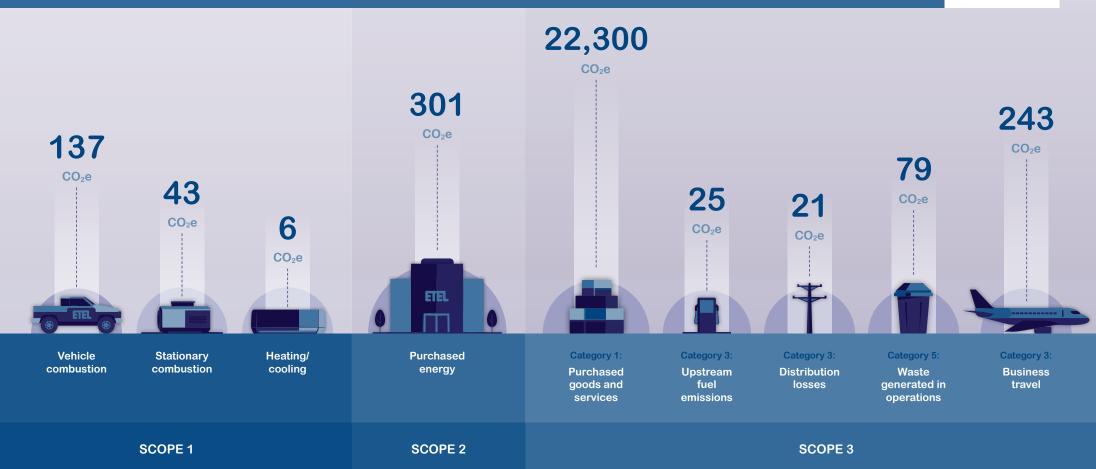
**Scope 2 Total Emissions:** 

301 CO<sub>2</sub>e

23,115 CO<sub>2</sub>e

**Scope 3 Total Emissions:** 

**22,668** CO<sub>2</sub>e





## Introduction

This report is the first ETEL Transformers annual greenhouse gas (GHG) emissions inventory report, covering the period April 2023 - March 2024.

The inventory is a complete and accurate quantification of the amount of greenhouse gas emissions that are directly attributed to the organisation's operations within the declared boundary and scope for the specified reporting period.

The inventory is prepared in line with the following standards and guidance:

- Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004)
- Greenhouse Gas Protocol:
   Corporate Value Chain (Scope 3)
   Accounting and Reporting Standard (2011)
- Greenhouse Gas Protocol: Technical Guidance for Calculating Scope 3 Emissions (version 1.0) Supplement to the Corporate Value Chain (Scope 3) Accounting & Reporting Standard
- ISO 14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals
- Ministry for the Environment. Measuring Emissions, a Guide for Organisations
- ThinkStep ANZ Emission Factors for New Zealand - Greenhouse Gas Emission Intensities for Commodities and Industries May 2024

This report is intended to advise the stakeholders of ETEL Transformers on our GHG inventory for the reporting period FY24.

## Intended users and uses

This report is intended to advise the stakeholders of ETEL Transformers on our GHG inventory for the reporting period FY24.

Stakeholders include shareholders, investors, regulators, customers and communities who we supply transformers to, and employees, contractors and members of the public.

Reporting of greenhouse gas (GHG) emissions supports Unison Group's sustainability commitments and aligns with the United Nation's Sustainable Development Goal 13 "Climate Action".



## **Organisation description**

ETEL is a manufacturing business specialises in the design and production of distribution transformers.

Sites include a head office and six plant manufacturing facility in Auckland, operational facilities in Melbourne and Perth, and manufacturing plant in Jakarta.

A service division specialises in assessing, maintaining, repairing and refurbishing all distribution transformers up to 3MVA.

ETEL has in place a complete quality system, which complies with and is certified to ISO9001:2015 and an occupational health and safety management system which is certified to ISO45001.

ETEL are part of the Unison Group, which consists of specialist companies delivering world-class electricity solutions.



## The Unison Group's vision for the future:

We see a future where Unison's group of internationally successful electricity companies delivering specialist energy solutions, services, and products have contributed to a better world.

Leveraging the power of our people alongside technology and data, we have built enduring relationships by putting our customers at the heart of our decisions to generate ongoing value.

Our collective efforts deliver positive returns for our consumers while actively supporting the communities we live and work in.

Together, we have created a sustainable energy future.

Leading a sustainable energy future to support consumers' changing energy needs, while enabling our communities to prosper for generations to come.



**VISION STATEMENT** 

## Organisational boundaries

The organisational boundaries of the inventory is ETEL Transformers Limited, which includes ETEL Indonesia (PT Lucky Light Globalindo), and ETEL Services Limited, both subsidiaries to ETEL.

ETEL's operational control includes all activities in New Zealand, Singapore, Australia, and Indonesia.

ETEL is part of the Unison Group, which includes other subsidiaries; Unison Contracting Services Limited, Unison Networks Limited, RPS Switchgear Limited and PBA Limited.

## **Operational boundaries**

The GHG emission sources from the ETEL value chain were identified with reference to the methodology described in the GHG Protocol. These have been classified as follows.

<u></u>	GHG Protocol	Emission type	Emission source	Description	Data source	Emission factor reference
Scope	Emission from operations that are owned or controlled by the reporting company	Mobile combustion fuel use	Petrol, Diesel, LPG bottle refill or swap	Litres of petrol used in vehicle fleet, number of LPG bottle swaps	BP and WEX reports of fuel card transactions by vehicle Indonesia data provided as a translation by ETEL Indonesia due to language barrier	MfE
		Fugitive emissions	Refrigerant leakage	Top up of refrigerant gasses due to leaks	Indonesia data provided as a translation by ETEL Indonesia due to language barrier	MfE

2	GHG Protocol	Emission type	Emission source	Description	Data source	Emission factor reference	
	Scope	Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company	Purchased electricity	Electricity used	kWh used	Supplier invoices across 8 different locations in Australia and New Zealand Indonesia data provided as a translation by ETEL Indonesia due to language barrier	MfE



SO O	GHG Protocol	Emission type	Emission source	Description	Data source	Emission factor reference			
Scope	All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions								
	Category 1. Purchased goods and services	Upstream emissions for goods and services purchased	All upstream emissions, including emissions embodied in international trade	Products and materials including steel products, oil, wires, cables, paint, copper and aluminium	All creditors where the sum is over 70% and the individual creditor is at least 0.5% of total spend in year. Excluding those captured elsewhere in the inventory	Thinkstep ANZ Emission Factors for New Zealand Greenhouse Gas Emission Intensities for Commodities and Industries May 2024			
	Category 2. Capital goods	Currently captured in goods and se	Currently captured in goods and services, a data improvement action for the future						
	Category 3. Fuel- and energy-related activities (not included in scope 1 or scope 2)	Upstream fuel related	Well to tank emissions	Emission associated with extraction, refining, transport of fuels to point of purchase	BP fuel data report WEX fuel data report Indonesia data provided as a translation by ETEL Indonesia due to language barrier	Upstream well to tank for fuels (UK Government GHG Conversion Factors for Company Reporting 2022)			
	Category 4. Upstream transportation and distribution	Already included in Category 1 as the Thinkstep ANZ emission factors include upstream emissions. Over time as we are able to get goods and service emission data direct from suppliers we will be able to include transport and distribution without double counting.							
_	Category 5. Waste generated in operations	Waste	Waste to landfill	Tonnes general mixed commercial	Waste Management transaction report Envirowaste invoices and transaction report No waste data available for ETEL Indonesia	MfE			
	Category 6. Business travel	Air travel	Flights taken	KMs travelled  Domestic  International<3700km  International>3700km	CTM report, Flight Centre Australia report.	MfE, Supplier calculated (Flight Centre)			
		Accommodation		Count of nights of accommodation by country	CTM report, Flight Centre Australia report.	MfE, Supplier calculated (Flight Centre)			
	Category 7. Employee commuting	Excluded due to data not being ava	ilable, considered for the future	3					



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Scope 3	GHG Protocol	Emission type	Emission source	Description	Data source	Emission factor reference		
	Category 8. Upstream leased assets	ETEL has no upstream leased assets						
	Category 9.  Downstream transportation and distribution	Included under category 1, intentions to collect supplier data in the future.						
	Category 10. Processing of sold products	Sold products are finished goods.						
	Category 11. Use of sold products	Excluded due to data not being available but considered for inclusion in the future.						
	Category 12. End-of-life treatment of sold products	Excluded due to data not being available but considered for inclusion in the future.						
	Category 13.  Downstream leased assets	ETEL has no downstream leased assets						
	Category 14. Franchises	ETEL has no franchises.						
	Category 15. Investments	ETEL has no investments.						



# Data collection and methodology

ETEL has developed and maintains GHG information management processes that ensure conformance with the principles of the GHG Protocol and of ISO 14064-1:2018; provide routine and consistent reviews to ensure completeness and accuracy; ensure consistency with the intended use of the GHG inventory; manage and store documentation in a controlled and accessible manner; and identify and address omissions and errors.

GHG emissions across scopes 1, 2, and 3 are calculated using a bottom-up approach where outputs from our activities are converted to a CO<sub>2</sub>e value using an appropriate emission factor.

ETEL's key GHG information management procedures are:

- Source data is collected directly from third party suppliers or from ETEL's financial and asset management systems.
- The data is stored in a central location and reviewed by the Unison Group Strategy and Sustainability Team.
- Emissions factors and conversion factors are sourced from reputable organisations, such as Ministry for the Environment and Thinkstep ANZ.
- The GHG inventory is compiled using activity data and emission factors.
- The report is reviewed to identify opportunities to improve the information management process.
- Senior management and all employees are kept informed of emissions reduction progress via internal dashboards and reporting..

This data has not been verified by a third party to provide independent assurance.

## Reporting period and base year

The current reporting period is the financial year ended 31 March 2024 (FY24). This will become the base year.

This definition will be reassessed if:

- We significantly change the scope of what we are measuring within our value chain.
- · We buy or sell a company.
- Emission factors change significantly and affect previous years, eg if the science behind the emissions factor is revised.
- On discovery of an error or cumulative errors that could be collectively significant

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## **ETEL FY 24 emissions**

	Sum of tonnes CO₂e
Scope	FY 23/24
Stationary combustion	43
Vehicle combustion	137
Heating/cooling	6
Scope 1 total	186
Purchased energy	301
Scope 2 total	301
Category 1: Purchased goods and services	22,299
Category 3: Fuel - and energy related activities (not included in scope 1 or scope 2)	46
Category 5: Waste generated in operations	79
Category 6: Business travel	244
Scope 3 total	22,668
ETEL total emissions	23,155



## Results by intensity measure

Calculating greenhouse gas emissions as an intensity metric against key performance indicators that are relevant to the business allows comparison year on year, allowing for business growth. It also allows for the comparison of business intensity against other businesses.

Emission intensity result	Scope 1&2	All emissions
Tonnes CO <sub>2</sub> per \$M revenue	3.85	182.90



## **SCOPE 1 emissions**

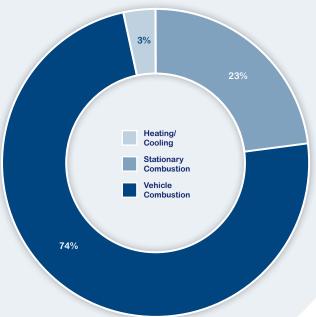
Direct emissions from stationary combustion makes up 23% of Scope 1 emissions (43 tonnes), this is bulk LPG gas used in heaters to dry paint at the Auckland transformer manufacturing site on Rosebank Road.

Vehicle combustion accounts for 137 tonnes – 74% of Scope 1 emissions. The service division has a different footprint from the manufacturing side of the business, as their emissions are primarily related to travel, and their use of vehicles makes up just over half of the vehicle combustion emissions. There are also significant contributions from Australia and the manufacturing arm of ETEL in NZ, including LPG forklifts at the Rosebank Road site which make up 14% of all Scope 1.

There is a small quantity of refrigerant due to a top up of air conditioning in Indonesia – 3% of Scope 1.

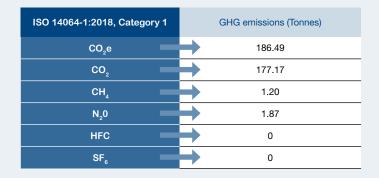
**Scope 1 Emissions Total:** 

186 tCO<sub>2</sub>



#### Direct emissions by component gas

In line with the reporting requirements of ISO 14064-1:2018, Category 1 direct emissions should be reported as tonnes of individual greenhouse gases, carbon dioxide  $CO_2$ , methane  $CH_4$ , and nitrous oxide  $N_2O$  as well as carbon dioxide equivalent ( $CO_2e$ ).



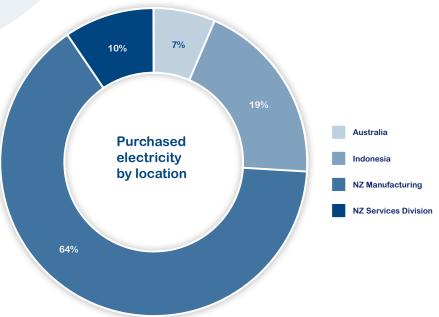
## Scope 2 emissions

#### **Purchased electricity**

In total during the reporting period 3,872,463 kWh of electricity were purchased. The majority of electricity is used at the manufacturing sites; Rosebank Road location in Auckland (64%) and Indonesia (19%).

**Scope 2 emissions total:** 

301 tCO<sub>2</sub>





## **SCOPE 3 emissions**

Other Indirect Emissions (Scope 3) are a consequence of the activities of the business but occur from sources not owned or controlled by the company. This includes business travel, waste to landfill, purchased goods and services, and upstream fuel related emissions.

This year's inventory for Scope 3 emissions is 22,668.10 tCO<sub>2</sub>.

As with most Scope 3 inventories, Scope 3 emissions include more assumptions than Scope 1 and 2, therefore have higher uncertainties and limitations.

Scope 3 emissions total:

22,668 tCO<sub>2</sub>

#### Purchased goods and services

ETEL's supply chain includes purchasing various goods for the manufacture of electricity distribution transformers. Supplier data was not available, so the spend based method has been used.

Data was extracted from ETEL's financial system, with creditors that make up more than 0.5% of the total spend for the year being included - excluding any already included in the Scope 1, 2 or existing Scope 3 sources. Overall, across all scopes, 81.4% of the total spend for the year has been included in the inventory. Appropriate emissions factors were assigned corresponding to the most relevant commodity codes, to estimate emissions.

Thinkstep-ANZ's industry or basic price emission factors (updated May 2024) were used for the following groups;

- · Products of steel
- Electric motors, generators and transformers, and parts thereof, includes installation services
- Semi-finished products of copper, nickel, aluminium, lead, zinc and tin or their alloys
- Electricity distribution and control apparatus, and parts thereof, includes installation services
- Other (non crude) petroleum oils and oils obtained from bituminous materials; other products refined from petroleum (including petroleum gas and petroleum jelly; excluding natural gas); radioactive and nuclear fuel products
- Paints and varnishes and related products; artists' colours; ink
- Insulated wire and cable; optical fibre cables, includes installation services
- Animal and vegetable oils and fats; oil-cake and other solid residues of vegetable oils and fats; vegetable and insect waxes; flouts and meals of oil seeds and oleaginous fruits

#### Waste to landfill

Waste Management and Envirowaste provide waste collection and disposal services to ETEL's NZ sites and provides detailed reporting on waste quantities and collections.

In the 23/24 year the Rosebank Road site generated 337 tonnes of landfill waste, which equates to 78 tCO<sub>2</sub>. The Service Division did have regular water collections, but the EnviroWaste collections did not include weights, therefore only 1.6 tonne collected by Waste

Management is included. Waste weight data for Australia and Indonesia is also not available.

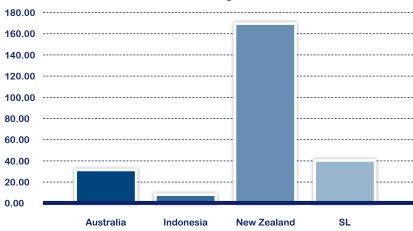
As the composition of this mixed waste is unknown, an average emission factor for a landfill with a methane gas recovery was used to estimate GHG emissions at 79 tonnes of CO<sub>2</sub>e.

Waste data is an area where there are obvious data improvements that can be made.

#### **Business travel**

Emission sources related to business travel include flights and accommodation. In this inventory they contributed 244 tonnes of CO<sub>2</sub>e, 235 of which is due to air travel, the NZ manufacturing cost centre accounted for most of the travel - which includes head office travel.

## **ETEL** travel by cost centre





# GHG emission source exclusions

Some Other Indirect GHG emissions (Scope 3) that occur because of the company's activities but from sources not owned or controlled by the company have been excluded from this report either where data was not available, or they were assessed as not material.

#### Staff commute

At this time there is no good data available to correctly calculate this.

### Staff working from home

Data is not readily available.

Taxis, rental cars and couriers

All de minimus.



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