Te Tāhuhu o
te Mātauranga
Ministry of Education

Ministry of Education | Te Tāhuhu o te Mātauranga

Emissions Reduction Plan 2025

Te Kāwanatanga
o Aotearoa
New Zealand Government

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Te Tāhuhu o te Mātauranga | Ministry of Education is the Government's lead advisor on New Zealand's education system. We set direction for education agencies and providers and contribute to the Government's goals for education by shaping an education system that delivers equitable and excellent outcomes.

In addition to understanding our impact on the environment and reducing our emissions, the education system and the New Zealand curriculum plays an important role in shaping lifelong learning around transitioning to a sustainable future.

The New Zealand Curriculum | Te Marautanga o Aotearoa focus on all ākonga experiencing rich and responsive learning from early learning through to secondary school. We are exploring how the curriculum can better enable kaiako to equip our tamariki and young people to understand how our actions influence the climate, and to feel empowered to take the necessary action to contribute to a low-emissions society, regardless of their life and career journeys.

We need to tackle climate change together. This means our education system, schools and kura and their communities need to be involved. Our objective is to create a system that nurtures lifelong learning and enables people to thrive as we advance towards a low-emissions society. With the right support, schools can lead the way in Aotearoa's transition and empower the next generation to build a low-carbon future.

"We shape an education system that delivers equitable and excellent outcomes.

He mea tārai e mātou te mātauranga kia rangatira ai, kia mana taurite ai ōna huanga."

Executive summary

The 2025 Emissions Reduction Plan (ERP) is the fourth iteration developed by Te Tāhuhu o te Mātauranga. Our ERP supports the requirements of the Carbon Neutral Government Programme (CNGP) and highlights the progress, achievements, and aspirations of Te Tāhuhu o te Mātauranga in achieving emissions reductions.

Reporting Boundary

Our reporting boundary represents Te Tāhuhu o te Mātauranga's investment in, and all activities undertaken by, the state schooling education system in Aotearoa. Our consolidated inventory is categorised into Te Tāhuhu o te Mātauranga Corporate Activities, Te Tāhuhu o te Mātauranga School Activities and School Board Activities.

1. **Te Tāhuhu o te Mātauranga Corporate Activities** includes emissions generated from our corporate operations and activities, such as purchased goods and services, tenant offices, energy, fleet fuel usage, air and taxi travel.
2. **Te Tāhuhu o te Mātauranga School Activities** includes emissions generated from our direct commissioning and payment of activities for schools and kura, such as school buses, capital works, and purchased goods and services including the Ka Ora, Ka Ako Healthy School Lunches programme.
3. **School Board Activities** includes emissions generated from school and kura operations. This includes emissions from utilities, waste, board-led capital works projects, purchased goods and services, and board-led and private ākonga and school staff commuting.

This categorisation allows us to demonstrate how we are reducing our mandatory emissions reported under our Corporate Activities, while also responding meaningfully and consistently to the material emissions generated by the state schooling sector. The three component parts of our inventory are interdependent.

Early Learning Centres, state-integrated schools, tertiary, and any private education facilities and organisations are excluded. Please refer to Te Tāhuhu o te Mātauranga GHG inventories for a complete list of exclusions.

Roles & Responsbilities

This ERP has been approved by Te Tāhuhu o te Mātauranga's Business Performance Board prior to being submitted to the CNGP.

Internal Reporting and Monitoring

Progress against the actions and targets set out in our ERP is reviewed and monitored through:

- Quarterly progress reporting against targets to the Business Performance Board in Te Tāhuhu o te Mātauranga.
- Emissions are measured and reported on an annual basis to the CNGP programme as well as publicly in the Annual Report.
- Monthly reporting on flight allocations, enabling business group leaders to track performance against targeted reductions.

›

Corporate

"Our people engage in our sustainability journey and sustainable outcomes are created by what we do, all the time."

Te Rautaki Toitū a Te Tāhuhu o te Mātauranga | Ministry of Education Sustainability Strategy

Our climate strategy

The three key themes set out in Te Tāhuhu o te Mātauranga's sustainability strategy are:

- Hohenga Āhuarangi | Climate Action
- Whakapeto Haepapa | Responsible Consumption
- Ngā Wāhi Mahi Toitū | Sustainable Workplaces

Figure 1: Te Tāhuhu Sustainability Strategy – themes and outcomes

Upholding our commitment to Te Tiriti o Waitangi
Partnership | Protection | Participation

Hohenga Āhuarangi Climate Action

- Reducing our emissions
- Decarbonisation of our vehicle fleet
- Less air travel
- Improving our resilience to climate change impacts

Whakapeto Haepapa Responsible Consumption

- Reduced waste to landfill
- Improved resource efficiencies
- Responsible supply chains are supported; sustainable practices and products become the expectation
- More people demonstrate a reciprocal obligation to Papatūānuku (the land)

Ngā Wāhi Mahi Toitū Sustainable Workplaces

- Supporting healthy, energy efficient and modern workplaces and enabling our people to contribute to sustainability in their work places

Culture, systems processes
Capability uplift | Collaboration | Tracking our progress | Celebration of impact

Figure 2: Te Tāhuhu o te Mātauranga | Ministry of Education's Corporate Emissions and Reductions as a Tranche One CNGP Organisation

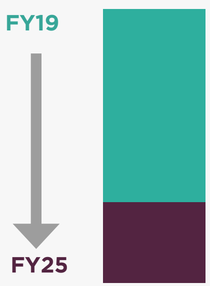
The Ministry of Education has met its 2025 CNGP requirements

Ministry's Corporate Emissions

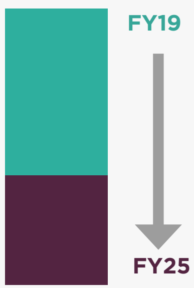
a) The Ministry has achieved its FY25 emissions reduction target. FY25 mandatory emissions are 57% below the level reported for FY19 base year. The target for FY25 had been to reduce emissions by 21% against base year. The Ministry's cost savings programme has contributed significantly to this success, with the cutback on travel budgets creating a significant reduction in flight emissions.

b) The Ministry's greenhouse gas emissions inventories have been independently verified to reasonable assurance for mandatory categories and limited assurance for material categories.

c) Emissions inventory figures have been published in annual reports each year since 2022.



70% reduction in air travel emissions FY19 to FY25



54% reduction in fleet fuel emissions FY19 to FY25

Gross Emissions Reduction Targets

d) In line with Carbon Neutral Government Programme (CNGP) requirements, the Ministry has committed to reduce mandatory category 1, 2, 3 and 4 gross emissions by 42% reduction to 3,332 tCO_2e from a FY19 base year of 5,744 tCO2e.

e) This builds on the FY25 target (attained) to reduce mandatory emissions by 21% to 4,538 tCO_2e by FY25 from the FY19 base year.

The Ministry of Education is on track to meet its 2030 CNGP reduction targets

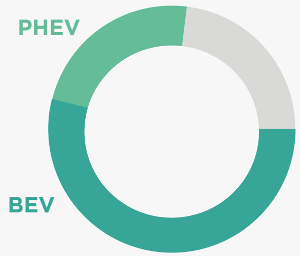
Air travel

a) Air travel in FY25 was significantly less than in FY19 base year, at 3,555,864 passenger kilometers (pkm) in FY25 versus 11,700,999 pkm in FY19. This reduction has helped the Ministry achieve its FY25 emissions reduction target.

b) Domestic flight allocations and a senior approvals process for international travel are in place to help maintain control of air travel expenditure and emissions.

Vehicle Fleet Transition

c) At the end of FY25, over half the fleet is now fully electric with more conversions planned in the coming year. We anticipate that in FY26, the Ministry will complete electric vehicle charger installations at the remaining sites where it is possible to install chargers.



Over half the fleet is now fully electric (54% BEV) with a further 23% PHEV.

Energy Efficiency Office Assessments and Audits

d) The Ministry's large tenancies have 5-star energy efficiency ratings, and actual energy use in our offices has dropped compared with base year once charging of the electric vehicle fleet is taken into account (variance in use between base year and FY25 is 0.7%, whereas base year had no energy demands for electric vehicles).

Waste Management

e) Waste is a small portion of the Ministry's carbon emissions inventory at less than 10%. The Ministry has set a target of 40% reduction in waste to landfill, with communications and engagement underway to support staff to recycle appropriately.

Our corporate emissions

Commentary

The Annual Report 2025 shows a 57% decrease in mandatory carbon emissions for FY25 (2,446 tCO_2e) versus FY19 (5,744 tCO_2e). The Ministry has attained reductions in emissions against the base year in all mandatory categories. Key reductions have come from travelling less, especially flying less, and from the ongoing electrification of our vehicle fleet.

Emissions Performance

Table 1: Corporate emissions performance in FY24 & FY25 against base year FY19.

Emissions category	FY19	FY24	FY25	% Change (FY19 vs. FY25)
FTE (approx.)	**3,250**	**4,387**	**3,835**	**+18%**
Mandatory emissions sources	**tCO_2e**	**tCO_2e**	**tCO_2e**	
Category 1: Direct GHG emissions and removals (vehicle fleet and natural gas)	1,577	772	596	-62%
Category 2: Indirect GHG emissions from energy	504	334	466	-7%
Category 3: Indirect GHG emissions from transportation (staff business travel including air travel, WFH and hotel stays)*	3,229*	1,571	1,197	-63%
Category 4: Indirect GHG emissions from products used by the Ministry (waste, water, and wastewater)	434	201	187	-57%
Mandatory emissions subtotal	**5,744**	**2,878**	**2,446**	**-57%**
Material emissions sources				
Category 3: Indirect GHG emissions from transportation – employee commuting	4,005	3,053	2,711	-32%
Category 4: Indirect GHG emissions from products used by the Ministry – purchased goods and services	40,099**	18,136	14,331	N/A
Total emissions (tonnes CO_2e) [note that totals are not directly comparable]	**49,848**	**24,067**	**19,488**	**N/A**

* Methodological change between base year and current year (introduced FY24) for calculating emissions from domestic flights.

** Due to changes in inclusions, allocations, and methodology the 2018/19 material emissions for Category 4 cannot be compared with subsequent years.

Mandatory Emissions

Table 1 shows:

- Category 1 emissions – Direct GHG emissions and removals decreased by 62% against FY19. In this category, key factors driving the emissions reduction were the ongoing vehicle fleet transition programme (with a 54% reduction in emissions from fleet fuel compared with base year) and vacating tenancies with natural gas (100% reduction from base year).
- Category 2 emissions – Indirect GHG emissions from imported energy have reduced by 7% compared to FY19. Actual electricity use has stayed the same between base year and FY25 (0.7% kwh variance) – meaning that the emissions reduction is due to a change in the national grid emissions factor. However, we note that energy use in our buildings has actually dropped since base year, given that overall kilowatt hour consumption is unchanged but the Ministry now also uses electricity for charging its growing electric vehicle fleet.
- Category 3 emissions – Indirect GHG emissions from transportation have reduced by over three-fifths (-63%) compared with base year. This substantial drop in emissions is due to the cost savings programme and a consequent shift away from flying – with domestic flights having dropped by 67% in passenger kilometres and by 69% in tCO_2e compared with base year, and emissions from international flights having dropped by 77% in tCO_2e compared with base year.
- Category 4 emissions – Indirect GHG emissions from products used by the organisation reduced by 57% in FY25 against baseline.

Material Emissions

Overall material employee commuting (Category 3) and purchased goods and services (Category 4) emissions reduced between FY19 (44,104 tCO_2e) and FY25 (17,042 tCO_2e), although the difference is not directly comparable due to changes in methodology.

Our corporate emissions reductions

Alignment to 1.5C emissions reduction pathway

The CNGP requires government agency participants to set emissions reduction targets for 2025 and 2030 in line with a 1.5-degree Celsius trajectory.

Emissions Reduction Initiatives

Flights

Air travel is the largest contributor to (mandatory scope) carbon emissions for Te Tāhuhu o te Mātauranga. At present, the Government-mandated cost savings programme is driving a change away from flying and towards the likes of increased use of online meeting tools, reflected in the significant reduction in flight emissions in FY25 (70% decrease compared with base year).

Electrifying our fleet

The transition of the vehicle fleet continues, with over half the fleet fully electric at the end of FY25 (54% fully electric and a further 23% plug-in hybrid electric vehicles (PHEV)). Te Tāhuhu o te Mātauranga is supported in this work by EECA co-funding for vehicles and charger installations through to the end of FY25.

We were working towards targets of transitioning 80% of the fleet to fully electric vehicles and 100% to electric vehicles (including PHEV) by the end of FY25. The shortfall on these targets is due primarily to site limitations (i.e. unsuitability of some offices for charger installations), as well as local roading, public charger network gaps and/or staff journey requirements dictating an ongoing need for PHEV and petrol hybrid in some locations around the country.

In FY26, we anticipate completing vehicle charger installations at remaining sites where it is practically possible to do so, bringing fully electric vehicles to 61% of total fleet.

Building performance

All Te Tāhuhu o te Mātauranga's large tenancies (over 2,000 square metres) have now achieved building energy performance ratings, with the majority rated as 5-star for tenancy or whole building and our Christchurch office rated at 5.5 stars for base build. The rating tool is the New Zealand adaptation of the National Australian Built Environment Rating System (NABERSNZ).

Table 2: Key Performance Indicators

Key performance indicators	FY19	FY24	FY25	% Change against FY19
Full time equivalents (FTE)	3,250	4,387	3,835	+18%
Domestic flights (passenger kilometres)	9,434,807	4,443,385	3,098,717	-67%
International flights (passenger kilometres)	2,266,192	621,023	457,146	-80%
Mandatory emissions (tCO_2e)	5,744	2,878	2,446	-57%
Mandatory emissions per staff (tCO_2e / FTE)[1]	1.8	0.7	0.6	-67%
Domestic flights per staff (pkm/ FTE)	2,903	1,013	808	-72%
International flights per staff (pkm/ FTE)	697	142	119	-83%

1 If using this metric to compare performance with other agencies, first compare the coverage of mandatory reporting.

NB: FY19 domestic and international flight passenger kilometres were rounded in previous iterations of this chart (in the Ministry's ERP 2023 and 2024). Rounded figures have now been replaced with exact totals.

Reduction initiatives to form the current action plan are set out in Figure 2 (page 9) and Figure 3 below. This gives a visual summary of key emissions reduction initiatives to achieve FY30 targets.

Figure 3: Summary of Emissions Reduction Initiatives for FY30 Targets

Air travel:

Through an updated Ministry Travel policy, continued virtual engagement and more granular and regular flight reporting and the setting of flight budgets, Te Tāhuhu aims for a reduction against FY19 emissions of:

- 42% in domestic air travel
- 10% in international air travel
- Stay within business group travel carbon budgets.

Nearly 50% of FY19 baseline

Business travel:

Through an updated travel policy and continued use of virtual engagement, Te Tāhuhu o te Mātauranga aims to increase low carbon travel options & remote meetings:

- Influence travel booking & meeting behaviours through staff engagement
- In a minimal business travel environment, focus on travel that is occurring to ensure it has least carbon impact.

~10% of FY19 baseline

Fleet:

Te Tāhuhu o te Mātauranga is coming to the end of its Fleet Transition Plan, replacing petrol vehicles with plug in and battery electric vehicles:

- Te Tāhuhu has a fleet of 565 vehicles, over half (54%) are now fully electric and a further quarter (23%) are plug-in hybrid.
- Most sites where it is practically possible to install electric vehicle chargers have now been transitioned, with final installations planned for FY26.

Over 20% of FY19 baseline

Office energy efficiency:

There is a strong focus from the CNGP to decarbonise buildings by:

- Aiming for an average 4.5 star NABERSNZ rating for all buildings with a floor area >2,000 m^2 by FY25
- Te Tāhuhu tenanted large buildings have now all achieved successful ratings.

~15% of FY19 baseline

Communications and engagement plan:

Our staff are an integral part of the Ministry's journey to a low carbon future:

- The implementation of a low carbon communications plan will assist in bringing staff on board with the initiatives outlined in this Emissions Reduction Plan.

Waste:

Te Tāhuhu o te Mātauranga has focused on:

- Improving data quality accuracy and reporting of waste
- Influencing waste behaviours via staff engagement
- To achieve a 50% reduction in waste to landfill by FY30 against FY19.

<5% of FY19 baseline

All figures related to FY19 mandatory emissions only.

Corporate reduction targets

FY25 and FY30 Targets

CNGP target setting resources are stated to be aligned to 1.5-degree Celsius trajectory. This is designed to meet the Paris Agreement and commitment seen in Aotearoa's Climate Change Response (Zero Carbon) Amendment Act and Aotearoa New Zealand's first and second Emissions Reduction Plans (ERP1 and ERP2). Te Tāhuhu o te Mātauranga has used the CNGP target-setting resources to determine the 2025 and 2030 emissions reduction targets:

- 2025 target: Te Tāhuhu o te Mātauranga committed to reduce our mandatory category 1-4 gross emissions by 21% in 2025 to 4,538 tCO_2e, compared to the 2019 base year of 5,744 tCO_2e.
- 2030 target: Te Tāhuhu o te Mātauranga has committed to reduce our mandatory category 1-4 gross emissions by 42% in 2030 to 3,332 tCO_2e, compared to the 2019 base year of 5,744 tCO_2e.

Internal Context and Achievability

Te Tāhuhu o te Mātauranga has achieved its FY25 target with emissions below the level required for both the FY25 and FY30 targets (2,446 tCO_2e in FY25 versus the FY25 target of 4,538 tCO_2e and FY30 target of 3,332 tCO_2e).

Te Tāhuhu o te Mātauranga's cost savings programme is seeing both positive and negative impacts on the emissions reduction efforts of the organisation. Most notably, spending constraints have significantly reduced business travel and consequently cut emissions. However, the fiscal environment and change impacts on the organisation also mean that some initiatives identified in our action plan cannot currently be progressed (see Appendix 1).

We will continue to monitor our emissions performance and the impact of the cost savings programme in the coming year and will consider an increase in ambition for the FY30 target, if current trends continue. In the meantime, the implementation of the organisation's key emissions reduction initiatives will assist Te Tāhuhu o te Mātauranga in staying on track for these targets.

The top three mandatory emissions sources, reduction potential and achievability within the context of Te Tāhuhu o te Mātauranga core services are outlined in Table 3.

Table 3: Reduction Potential of Mandatory Emissions

Emission source	Reduction potential (in control of Te Tāhuhu o te Mātauranga)	Achievability	Comments
Air Travel FY19: 2,750 tCO_2e			Te Tāhuhu o te Mātauranga is currently benefiting from reduced levels of flying due to its cost savings programme and has introduced domestic flight allocations and an updated travel policy to help monitor and control flight emissions going forward.
Vehicle Fleet FY19: 1,306 tCO_2e			Te Tāhuhu o te Mātauranga's FY25 emissions from fleet fuel have reduced by 54% compared with base year and are therefore aligned with our FY30 target.
Building Electricity FY19: 504 tCO_2e			The cost savings programme is currently limiting Te Tāhuhu o te Mātauranga's ability to proactively seek further energy efficiencies from its landlords, given that requests such as LED refits must usually be compensated. Nonetheless, emissions in this category have reduced (-7%) compared with base year, although we note the favourable impact of the national grid emissions factor in this category. Action and buy in outside of the control of Te Tāhuhu o te Mātauranga is also required for: • Overall improvements in supply of renewable energy to the grid. • Landlord engagement and investment for further energy efficiency or onsite renewable initiatives

Green: Significant reduction possible with dedicated funding, existing technology, or behaviour/policy change.

Amber: Limited reduction possible with dedicated funding, existing technology, or behaviour/policy change.

Red: Cannot be addressed with current technology or behaviour/policy change, or reduction potential already achieved.

Further Target Setting

Te Tāhuhu o te Mātauranga may set targets related to the included 'material' emissions sources in future, including our Te Tāhuhu o te Mātauranga School Activities and School Board Activities. We had hoped to move the calculations for our corporate purchased goods and services from spend-based emissions accounting to supplier-specific data in FY25 but this is now unlikely going forward due to internal operating constraints.

External Barriers and Opportunities

Barriers to emissions reduction beyond direct control of Te Tāhuhu o te Mātauranga:

- Fiscal constraints and associated impacts of the change programme have potential to negatively impact Te Tāhuhu o te Mātauranga emissions reductions, as noted in Appendix 1 where initiatives cannot currently be progressed. However, the cost savings programme is having such a positive effect on flight emissions that this outweighs the effect of initiatives on pause.
- Logistical issues that affect our ability to install chargers at many more of our offices has seen a shortfall against our targets of 80% fully electric vehicles and 100% electric vehicles (including PHEV) by the end of FY25. We now expect to hit our ceiling for fully electric vehicles in FY26 at 61% of the fleet.
- Dependency on increasing renewable electricity generation of the national grid in line with Climate Change Commission forecasting and proposed ambition.
- In some cases, emissions reduction of the supply chain is difficult for Te Tāhuhu o te Mātauranga to influence. For example, Air New Zealand is aiming to increase its use of Sustainable Aviation Fuel (SAF) among other sustainability measures. Such measures could favourably impact Te Tāhuhu o te Mātauranga's emissions profile but sit outside our ability to influence.

Opportunities for action from across government to deepen or accelerate emissions reductions:

- Collaboration with other CNGP participants to engage landlords for better emissions data reporting and implementation of NABERSNZ.
- Collaboration with the wider CNGP to engage suppliers collectively such as transport, energy suppliers and goods and services providers.
- CNGP to share templates/resources between participants for improved reporting and engagement to drive emissions reductions across the group.
- Collaboration with other CNGP expertise to form a focus group to evaluate and share common opportunities.
- Collaboration with other CNGP participants to prepare and share emissions reduction information for engaging emissions reduction communications.

State schools & kura

With the right support, the wide network of schools and kura can be leaders in Aotearoa's journey to a low-carbon future, and empower the leaders of tomorrow to shape a low-emissions society.

Emissions Reduction
State Schools & Kura

Our vision is a future where every action makes a positive impact on climate change.

Our school's carbon footprint is a stepping stone to understanding our collective, national and global impact.

Influence

We can identify decision makers that influence climate change mitigation action

Understand

We understand the developments that have led to the need for climate change mitigation action

Know

We draw on available information to build knowledge of climate change mitigation action

Participate

We can identify our own opportunities to participate in and contribute to climate change mitigation action

Act

We work with others to collectively create and undertake climate change mitigation action

Global

Aotearoa

Ministry of Education

School

Our carbon footprint

Te Tāhuhu o te Mātauranga funds the nationwide state school system that includes 2,139 state schools and kura, educating ākonga from year 0-13. Structural changes are underway to establish a new Crown agency dedicated to School Property - the New Zealand School Property Agency - this plan reflects and anticipates that shift.

Our emissions reporting focuses on emissions relating to investment by School Property, including investment that Te Tāhuhu o te Mātauranga makes directly (Te Tāhuhu o te Mātauranga School Activities), and property investment and activities undertaken by School Boards **(School Board Activities).**

At the time of this report, both **Te Tāhuhu o te Mātauranga School Activities** and **School Board Activities** are material emissions for Te Tāhuhu o te Mātauranga.

School level carbon footprints

Using our FY24 inventory model and visualised through PowerBI, we created visually engaging and easy-to-understand carbon footprints for all 2,139 state schools and kura. School-level carbon footprints will be refreshed and made available annually at the start of each calendar year.

The process of sharing these carbon footprints sparked discussions and interest among schools, leading to a desire to understand the underlying data and assumptions. Schools also expressed a willingness to assist in improving the accuracy of their reports. This feedback loop between Te Tāhuhu o te Mātauranga and schools also fosters greater collaboration as we work collectively to reduce our impact.

We are committed to providing schools with more accurate, dynamic, and useful emissions data. Our goal is to incorporate feedback from schools and offer more valuable and actionable insights in return.

In 2024, the Ministry of Education worked out our school's carbon footprint as part of its emissions reporting for all state schools and kura. This footprint looks at the main ways our school creates emissions, like how ākonga and staff travel to school, how much energy is used, water use, waste, construction projects at our school, and the Ka Ora, Ka Ako Healthy School Lunches programme. Below you'll see how much of our school's footprint comes from real data and how much is estimated. For example, energy use is mostly based on actual data, while waste and water emissions are estimated using data from schools similar to ours. Our carbon footprint helps us understand our school's impact on the environment. By looking at our footprint, getting our school community involved, and making small changes – like saving energy, rethinking transport, and reducing waste – we can make a real difference. This is just the first step in helping schools better understand emissions, which are an important factor in the changing of our climate. Action starts with understanding, and by making emissions easier to understand, we can support tamariki to take simple, meaningful steps toward a more sustainable future.

Transport: Active (km)
23,345

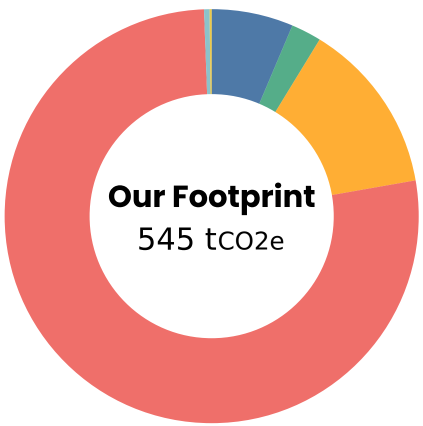
Transport: Non-active (km)
2,010,113

Energy use (kWh)
159,825

Waste to landfill (kg)
10,173

Spend (tCO2e)
32

Water use (L)
1,524,000

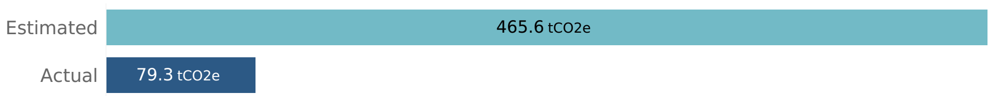


1,874
Native trees
to offset our
emissions

Our footprint compared to national average (per pupil)

Getting to and from school creates most of our carbon footprint. More than 25% of our ākonga live over 7.5 km away, so travel emissions add up quickly. While we can't change how far people travel, we can help reduce emissions by carpooling, walking part of the way, or using public transport when possible.

The basis of our footprint (estimated vs. actual data)



A CLOSER LOOK AT TRANSPORT

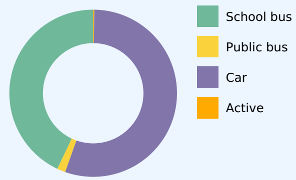
How far our staff and ākonga travelled (km)

2,033,458

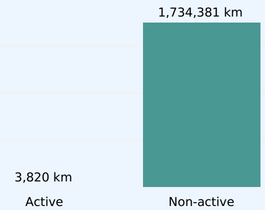
Trips from Cape Reinga to Bluff

982

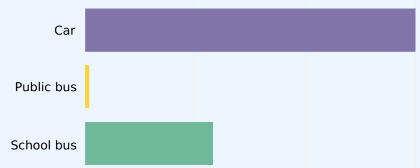
How our ākonga travel to school



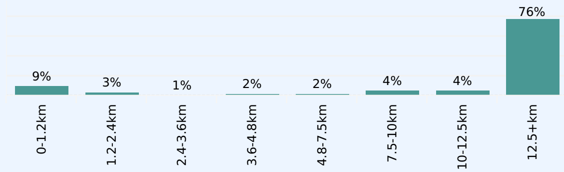
Distance our ākonga travel using Active and Non-active modes



Emissions generated by mode (staff & ākonga)

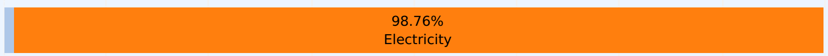


How far our ākonga travel



A CLOSER LOOK AT ENERGY

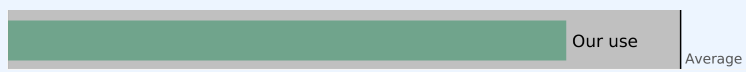
Our energy comes from



Emissions from maintenance projects

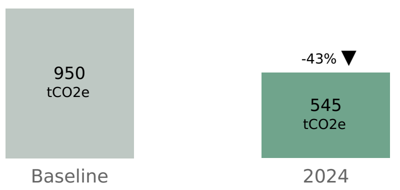
8 tCO2e

Our energy use compared to the national average (per pupil)

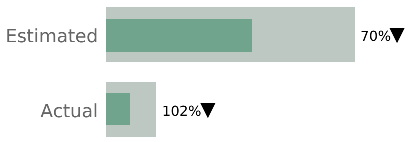


Tracking emissions each year helps us understand how they change over time. This allows us to measure the impact of any efforts to reduce emissions and see our progress toward the global goal of limiting warming to 1.5°C above pre-industrial levels. The charts below show how emissions have changed for our school, comparing 2024 to the baseline year (2023). By stacking and comparing the data, we can see the differences and gain insight into what's driving the changes. Schools present a unique challenge when tracking emissions over time because many factors change from year to year. Roll numbers may go up or down, staff and ākonga travel distances may change, and construction projects may take place – all of which can significantly impact our school's carbon footprint. The Ministry is looking at how to address the emissions produced by the state education system and figuring out how we can reduce our impact now and in the future. By being involved in that process we can understand how our school contributes to the overall emissions, and how we can be part of the solution.

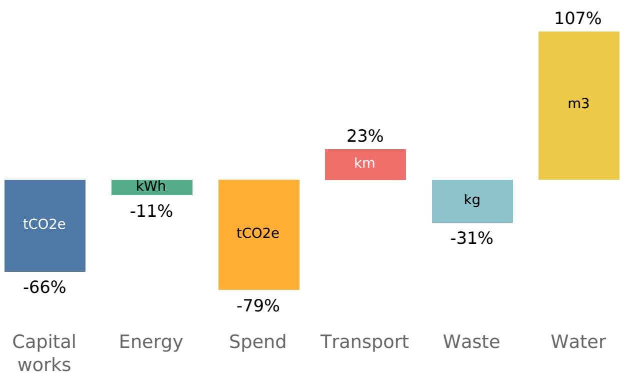
Our Footprint Baseline vs 2024



Comparing the basis of our footprint (estimated vs. actual data)



A closer look at our emissions: baseline to 2024 % variance



In 2024, we changed how we calculate emissions, using more detailed spending information. Your results are probably different because of the new calculations, not because your school spent more or less.

Energy use (kWh)
-22,585 ▼

Purchasing goods & services (tCO2e)
-136 ▼

km's of travel (car, bus & train)
374,971 ▲

Waste to landfill (kg)
-4,600 ▼

Water use (L)
786,000 ▲

A CLOSER LOOK AT TRANSPORT: baseline to 2024

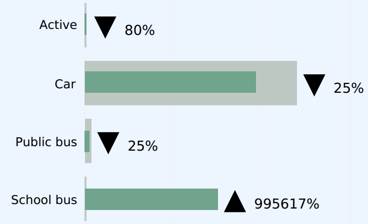
How far our staff and ākonga travelled (km change)

374,971

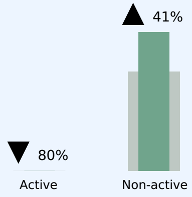
Trips from Cape Reinga to Bluff

181
more

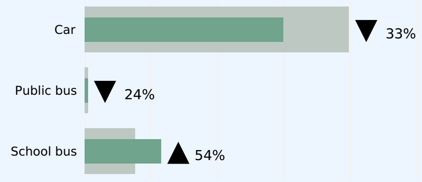
How our ākonga travel to school



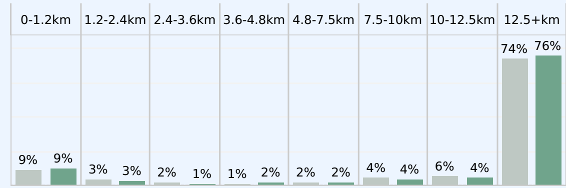
Distance our ākonga travel by mode



Emissions generated by mode (staff & ākonga)



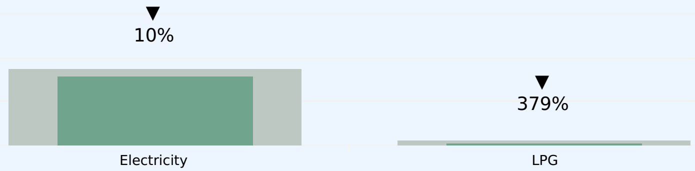
How far have ākonga travelled



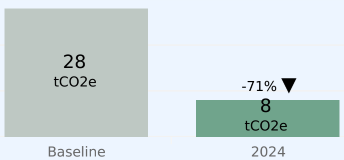
The darker green box shows our 2024 emissions, and the lighter box is our baseline emissions. This comparison gives us insight into how the emissions have changed year on year.

Baseline 2024

A CLOSER LOOK AT ENERGY: baseline to 2024



Emissions from maintenance projects



Comparing energy use - baseline vs. 2024

Typologies

Our inventory relies on extensive modelling and extrapolation across all emissions sources. To carry out this modelling, we group schools with similar characteristics into distinct typologies. These typologies are determined by a combination of factors which all have an impact on the school's emission profile. Characteristics include:

› climate zone or region
› type - Primary, Secondary, Composite, or Specialist
› energy mix - whether they use electricity only or a combination of electricity and fossil fuels
› and their urban or rural location.

This method allows for more precise extrapolations and gap-filling, while also helping us clearly communicate our methodology and rationale to schools and kura.

Data Quality & Gaps

Given the scale and complexity of our emissions reporting, particularly as we manage this on behalf of schools and kura without directly receiving data from them, it is crucial for us to understand and effectively communicate the quality and limitations of the data underpinning our reports. To calculate emissions for our inventory, which is later broken down into individual school reports, we use a combination of estimated, partially estimated, and actual data.

For example:

› Energy use emissions are primarily based on actual data, as we collect electricity data from over 1,800 schools.
› Waste and water emissions are estimated using data from schools with similar characteristics within the same typology.
› Partially estimated data is used when we have incomplete information for a school, and averages are applied to fill in the gaps.

As our reporting matures, we are aiming to reduce the reliance on estimated data. To do so we will continue to seek out data to gain greater coverage of schools for our operational emissions, gather data from ākonga and kaiako to understand more about their commuting behaviours to test our modelling assumptions, and gain a better understanding of the quantities and types of materials used in our school construction projects.

State schools & kura emissions

Te Tāhuhu o te Mātauranga School Activities FY25

Table 4 is a summary of Te Tāhuhu o te Mātauranga School Activities – the emissions as a result of the investment that Te Tāhuhu o te Mātauranga makes at, or on behalf of state schools, it does not include School Board Activities.

Table 4: Te Tāhuhu o te Mātauranga School Activities

Category	Category name	Mandated / material	Detailed emissions source	tCO_2e
1	Direct Emissions	N/A		
2	Indirect Emissions from Imported Energy	N/A		
3	Indirect emissions from transportation	Material	Pupil Commuting – Ministry-Funded School Buses	30,190
		Subtotal		**30,190**
4	Indirect Emissions from Products and Services used by the Organisation	Material	Ministry Funded Purchased goods and services	Excluded
			Ministry funded School Lunches	Excluded
			Ministry funded capital works	165,880
		Subtotal		**165,880**
5	Indirect Emissions Associated with the Use of Products and Services from Organisation	N/A		
6	Indirect Emissions from other sources	N/A		
TOTAL				**196,070**

Table 5: Emissions Performance
Te Tāhuhu o te Mātauranga School Activities performance in FY25 against base year FY23

Emissions category	FY23	FY25	% change against FY23 (recalculated)
State school ākonga (students)	702,143	714,358	+1.7%
Emissions source	**tCO_2e**	**tCO_2e**	
Category 3: Indirect emissions from transportation	27,365	30,190	+9%
Category 4: Indirect emissions from products used by the organisation	168,857	165,880	-1.7%
Total emissions (tonnes CO_2e)	**196,222**	**196,070**	**0%**

School Board Activities FY25

Table 6 is a summary of School Board Activities – the emissions as a result of direct investment schools make. The table below is represented as if reporting was undertaken by School Boards directly - shown as Category 3 and 5 in Te Tāhuhu o te Mātauranga's combined reporting, here shown as Category 1, 2, 3 and 4 for School Boards.

Table 6: School Board Activities

Category	Category name	Mandated / material	Detailed emissions source	tCO2e
1	Direct Emissions	Mandated	Schools & kura – Stationary Combustion – Natural Gas	10,932
			Schools & kura – Stationary Combustion – LPG	959
			Schools & kura – Stationary Combustion – Coal	3,820
			Schools & kura – Wood Biofuel	50.5
			Schools & kura – Stationary Combustion – Oil	355
		Subtotal		**16,115**
2	Indirect Emissions from Imported Energy	Mandated	Schools & kura – Electricity	23,186
		Subtotal		**23,186**
3	Indirect emissions from transportation	Mandated	Schools & kura – Correspondence Teaching	2,170
		Material	Schools & kura Pupil Commute – Public Transport	14,896
			Schools & kura Pupil Commute – Private Vehicles	211,048
			Schools & kura Staff Commute – Public Transport	7,695
			Schools & kura – Board funded transport	1,811
			Schools & kura Staff Commute – Private Vehicles	64,790
		Subtotal		**302,411**
4	Indirect emissions from products and services used by the organisation	Mandated	Schools & kura – Waste	4,927
			Schools & kura – Water Supply	169
			Schools & kura – Wastewater Treatment	2,002
			Schools & kura – Transmission and distribution Electricity	1,763
			Schools & kura – Transmission and distribution Natural Gas	348
		Material	Schools & kura – Board led capital works projects	58,300
			Schools & kura Expenditure – Purchased goods and services	Excluded

		Subtotal	**67,509**
5	Indirect Emissions Associated with the Use of Products and Services from the Organisation	N/A	
6	Indirect Emissions from other sources	N/A	
TOTAL			**409,222**

Emissions Performance

Table 7: State schools & kura emissions performance in FY25 against base year FY23 (recalculated).

Emissions category	FY23	FY25	% change against FY23 (recalculated)
State school ākonga (students)	702,143	714,358	+1.7%
Emissions source	**tCO2e**	**tCO2e**	
Category 1: direct emissions – stationary combustion & biofuel	35,855	16,116	-55%
Category 2: indirect emissions from imported energy	18,625	23,186	+24%
Category 3: Indirect emissions from transportation	312,697	302,410	-3%
Category 4: Indirect emissions from products used by the organisation	44,853	67,509	+50%
Total emissions (tonnes CO_2e)	**412,030**	**409,222**	**-0.6%**

Table 7 shows the change in emissions per category between the recalculated baseline and the current year.

Refer to Appendix 2 for further detail of the change from FY23 to FY25 for all major emission sources, and Appendix 3 for our reporting improvements.

Tracking Change Over Time

Tracking year-on-year emissions changes in state schools and kura presents a unique challenge, particularly when analysing and communicating the root causes of these fluctuations – whether they stem from the natural variability within the education sector or reflect the impact of improved emissions reduction efforts.

Over time, we aim to gain a deeper understanding of the consistent variables influencing our carbon footprint and their direct correlation to emissions. Our focus is on how these variables can be consolidated and communicated more effectively, enabling us to better compare, contrast, and interpret emissions from year to year. This work will continue to be a focus for us in the coming years as we gain a better understanding of the variables and constants we report on, the impact on our emissions profile, the flow on effect on any target setting activities, and how we support schools and kura to participate in these processes.

State schools & kura emissions reduction

Emissions Reduction Roadmap

This Emissions Reduction Plan has been developed under Te Tāhuhu o te Mātauranga, which at the time of its development, holds responsibility for the state school property portfolio. Structural changes are underway to establish a new Crown agency dedicated to school property—the New Zealand School Property Agency—this plan reflects and anticipates that shift.

In developing this plan, we have considered the future roles and responsibilities of the new agency. The plan is designed to provide a strong strategic foundation that can guide long-term emissions reduction efforts across the portfolio, regardless of where operational responsibility sits.

By aligning with national climate goals and focusing on actions within both current and future spheres of control and influence, this plan ensures continuity of purpose. It enables the school property system to move forward with clarity, accountability, and momentum—both through the transition period and into the agency's future delivery.

Reducing emissions across the state school sector requires the integration of sustainability considerations into property decision-making, while balancing national and local priorities.

To achieve impactful emissions reduction, we will design system-wide solutions by:

- Prioritising solutions and investments that maximise environmental outcomes.
- Designing solutions predicated on scale and the opportunities it creates.
- Optimising and rethinking the use of existing funding commitments while also exploring new ways to bring additional investment into the system.
- Ensuring solutions align to core organisational priorities by improving the efficiency, transparency, and long-term sustainability of our school property management, and aligning with Te Tāhuhu o te Mātauranga broader goals of creating a future-ready education network.
- Designing solutions that deliver tangible improvements across our education network, enhancing the overall experience for staff, schools, ākonga, and wider stakeholders.

Education Energy – Reducing Energy Demand in Schools

This workstream is about creating a dedicated energy strategy for School Property — designing the energy future we want for our schools. The strategy will set out how we reduce energy demand, transition from fossil fuels, and better manage costs across the network.

Using detailed data and advanced modelling we are building a level of understanding we have never had before. These models allow us to predict the energy demand each building should have based on its individual climate zone and building characteristics, pinpoint schools where the greatest opportunity exists, and identify where upgrades or interventions will have the biggest impact. This data also provides detailed insights into roof sizes, pitch, and orientation, allowing us to accurately determine solar generation potential and undertake cost-benefit analysis and payback periods.

By establishing this strategy, we are deliberately shaping how schools will purchase, use, produce, and manage energy into the future – ensuring our investments support lower costs, reduced emissions, and greater resilience across the entire School Property portfolio.

Reducing Construction Emissions via Standardisation

Construction and capital works are the single largest source of emissions across the schooling sector, driven by the embodied carbon in building materials, construction processes, and waste from new builds and redevelopments.

School Property has three key current workstreams:

- Increased use of off-site manufactured buildings;
- Increased use of existing and new relocatable buildings; and
- Standard School Design Typologies & Layouts.

These workstreams provide a set of standardised building designs and layouts that together provide adaptable standardised solutions for primary, intermediate and secondary schools on both existing and new campuses.

This reduces design and construction costs, simplifies delivery, ensures consistent quality and equity across the network. By using standardised, proven solutions, we can deliver better outcomes for learners and make more effective use of public investment.

Our construction strategy will quantify and forecast the emissions reduction potential of these workstreams, identify where further reductions can be made, and ensure these opportunities are realised across both new builds and maintenance.

By building robust models we can forecast emissions by material quantities and produce carbon footprints for different building types e.g. teaching, admin and specialist spaces. We will be able to show the emissions impacts of standardised and repeatable layouts and materials and highlight where bulk procurement or alternate specifications could drive greater reductions.

This is about quantifying emissions impacts, highlighting further reduction opportunities, and aligning maintenance and new build activities under common standards.

"On Our Way" Sustainable Transport Initiative

Our flagship initiative for school property transport emissions is the "On Our Way" programme. On Our Way is an education and data-driven initiative designed to empower students, teachers, and school leaders to understand and reduce their school transport emissions. We provide tools, knowledge, and data to schools so they can devise solutions that fit their unique transport situations.

Every school has a different "transport story" – varying proportions of students walking, cycling, taking buses, driving, etc., influenced by local geography and infrastructure. On Our Way helps schools uncover, assess, and respond to their own transport patterns. Participating schools collect data on how students travel. Armed with this information, schools can take targeted steps like promoting “walk to school” days, improving bike facilities, or encouraging carpooling. Our role is to provide the digital tools, analytics, and support – including a user-friendly web app – to help schools interpret their data and explore solutions.

The programme’s success so far, including pilots with 32 schools in 2024 and a further 21 schools in 2025 in partnership with Sport NZ, shows how we can scale impact through collaboration.

Looking ahead, we plan to offer the On Our Way climate literacy resources to all schools in 2026.

Appendix 1
Corporate decarbonisation action plan

Focus area	Initiative	Target/outcome	Senior Responsible Officer	Start date	Completion date
MANDATORY EMISSIONS					
Fleet (FY19 1,306 tCO_2e)	Decarbonisation of current vehicle fleet	Up to 80% BEV fleet by FY25 and up to 90% BEV fleet by FY30. 100% EV by 2030.	Manager, Property and Sustainability; Manager Vehicle Fleet Optimisation and Transition	FY22	Will reach ~60% in FY26
	Engage in fleet optimisation through data analysis, including vehicle utilisation patterns, and relocating vehicles to high-demand areas	Aiming to avoid fleet growth through optimisation	Manager Vehicle Fleet Optimisation and Transition	FY23	Ongoing
	Provide fleet dashboard reporting to relevant regional staff and senior leaders, including information on fleet utilisation	Relevant staff are accessing reporting	Manager Vehicle Fleet Optimisation and Transition	FY23	Ongoing
Staff communication & engagement plan	Develop a low carbon emissions communication plan: • This will develop key themes for behaviour change throughout the year, including mode shift, waste and energy • The plan will seek to engage and empower staff, and elevate regional and local voices.	Sustainability communications rhythm to be established and underway	Manager Property and Sustainability; Manager, Sustainability; Manager Organisational Communications	FY24	Lower profile due to change programme
Business travel (FY19 3,044 tCO_2e)	Reduction in business travel emissions, which are from air travel, accommodation, taxi, staff mileage and rental car hire.	42% reduction in domestic air travel emissions by FY30 against FY19 baseline 10% reduction in international air travel emissions by FY30 against FY19 baseline	Manager, Property and Sustainability	FY23	Ongoing
	Te Tāhuhu o te Mātauranga will assess if setting and monitoring carbon budgets for air travel for each business group will help reduce emissions without limiting service delivery and outcomes	Decision on setting of carbon budgets	Te Pou Tokomanawa Hautū lead for their business groups	FY23	Flight allocations were introduced in FY24
Air travel (FY19 2,750 tCO_2e)	Update Te Tāhuhu o te Mātauranga Travel Policy to enable: • Travel to be consistent with our carbon emissions reduction targets of 21% by 2025 and 42% by 2030. • 'Minimising the Ministry's carbon footprint' as a policy principle	Travel policy is updated	General Manager, People, Sustainability and Place – via People Policy Lead	FY23	FY24 – done
	Provide monthly Orbit reporting on flight usage to business groups and the leadership team, Te Pou Tokomanawa.	All teams have access to monthly air travel use reports by end of FY23	Manager Property and Sustainability; Team Leader, Business Support	FY23	FY23 – done

Taxi, rental cars and staff mileage (FY19 294 tCO_2-e)	Investigate options to encourage uptake of lower carbon intra-city travel and run pilots where appropriate. For example, look into: • Improved information provision to staff re local alternative transport options • Public transport cards to borrow and/or streamlined ticket claim reimbursement. • Fleet diversification to trial ebikes or escooters	Scope pilot potential	Manager Property and Sustainability; Sustainability Manager	FY24	TBC – will not proceed at present
	Introduce public car share option to support the current fleet by introducing additional capacity	Finalise and launch Mevo car-share scheme to supplement fleet/taxi use particularly in Wellington, Christchurch, Hamilton and Auckland	Manager, Property & Sustainability	FY23	FY23 – done
Building energy (FY19 775 tCO_2-e)	Ensure building energy monitoring and reporting includes all energy consumption data from Te Tāhuhu o te Mātauranga offices.	Energy consumption data is complete for all sites	Manager, Property and Sustainability; Manager Sustainability; Senior Advisor Sustainability	FY22	FY24 – done
	NABERSNZ ratings will be undertaken, where possible, for each office over 2,000m^2	4.5 average NABERSNZ ratings on relevant buildings	Manager, Property and Sustainability	FY22	FY24 – done
	For new office site selection, Te Tāhuhu o te Mātauranga will develop a low carbon criteria list to help evaluate low carbon outcomes from the selection of a new office. Criteria are likely to include: • Does the site have an existing NABERSNZ rating and what's the kWh/m^2 rating? • Access to a regular bus service? • Existing or suitability to install EV charging points? • Availability of end of trip facilities for active travel (related to business travel and commuting)	Follow GPG guidelines and look to go beyond where practical	Manager, Property and Sustainability; Manager Corporate Property	FY23	TBC – will not proceed at present
Freight (FY19 30 tCO_2-e)	Investigate potential to reduce emissions from freight – for example: • Prioritising low emissions freight where possible • Prioritising local products over international or national produce to reduce courier distance	Scope initiative potential	Sustainability Manager; Lead Advisor Broader Outcomes	FY22	TBC – will not proceed at present
Waste (FY19 279 tCO_2-e)	Develop a waste minimisation plan. Actions could include: • Waste avoidance e.g. encourage printing alternatives • Waste diversion e.g. providing further recycling/ compost streams in offices • More accurate measuring and reporting of waste quantities per office	Reduction in waste to landfill against FY19 – 50% in FY30	Manager Property and Sustainability; Sustainability Manager	FY22	FY26 – staff comms planned FY24 – data accuracy improvements completed
Water/wastewater (FY19 79 tCO_2-e)	Improve data accuracy of water/wastewater by collecting consumption data from landlords.	Work with property managers to assess status	Manager, Property and Sustainability	FY23	TBC – will not proceed at present
Employee commuting (FY19 4,585 tCO_2-e)	Undertake an inaugural staff commuting survey to improve data accuracy and help understand perceived and actual barriers to low carbon/ active commuting.	Improved data accuracy	Manager, Property and Sustainability; Sustainability Manager	FY24	TBC – will not proceed at present
	Investigate initiative potential to overcome barriers and encourage commuting mode shift. For example, actions could include: • Improve end of trip facilities in existing offices e.g. secure bike parking and showers • Ride sharing mapping to help staff that commute at similar time to/from similar residences to the larger offices	Develop a feasibility study and carbon reduction potential and network with other CNGP participants	Manager, Property and Sustainability; Sustainability Manager	FY24	TBC – will not proceed at present
Purchased goods and services (FY19 40,099 tCO_2-e) Due to changes in inclusions, allocations and methodology, FY19 emissions for purchased goods and services cannot be compared with later years.	Discovery Phase – improve data collection and quality to allow for more accurate understanding of emissions and focus areas.	N/A	Sustainability Manager; Lead Advisor Broader Outcomes	FY23	FY25 – done
	Request as part of any continuous improvement clauses that major individual suppliers (top 5 by annual spend) are asked to provide a GHG inventory within a specified timescale (appropriate to the size and nature of the contract).	N/A	Manager, Property and Sustainability; Sustainability Manager; Lead Advisor Broader Outcomes	FY23	TBC – will not proceed at present

Appendix 2

State schools & kura emissions performance explained

Overall

The table below shows the change in emissions per category between the baseline and the current year. The total GHG emissions have decreased by less than 1%. The sections below go into further detail of the change from FY23 (base year) to FY25 for all major emission sources.

As we have excluded Purchased Goods and Services from our reporting this financial year, we have not accounted for those emissions recorded in previous years to allow for more accurate comparison.

Emissions Category	FY23	FY25	% change
Category 1	n/a	n/a	
Category 2	n/a	n/a	
Category 3	27,365	30,190	+10%
Category 4	168,857	165,880	-1.7%
Category 5	411,920	409,222	-1%
Category 6	n/a	n/a	
Total tCO_2e	**608,142**	**605,292**	**+0.3%**

Capital Works

The table below shows the difference in emissions for Capital works between FY23 (base year) and FY25.

Emissions source	FY23	FY25	% change
Major works (incl. services)	141,836	161,968	+14%
Relocatables	2,550	3,911	+53%
Board-led construction	34,175	58,300	+71%
Total tCO_2e	**178,561**	**224,180**	**+25%**

The key variables to be considered in analysing change in Capital Works emissions are:

- **CMI projects:** m^2 of constructed New Builds and Roll Growth.
- **Other major works:** Cost of New Builds and Roll Growth projects.

- **Relocatables:** Distance transported.
- **Board-led construction:** No underlying drivers could be identified as the data is too aggregated.

The table below shows the data related to the above-mentioned change drivers.

Variables	FY23	FY25	Unit	% change
New build projects in CMI	41,949	-	m^2	-
Roll growth projects in CMI	19,803	-	m^2	-
New build spend in CW database	193,000,000	632,000,000	NZD	+227%
Roll growth spend in CW database	130,000,000	116,000,000	NZD	-11%
Board-led construction spend	305,500,000	472,000,000	NZD	+54%

Staff commuting

The table below presents the emissions associated with Staff Commuting in FY23 (base year) and FY25. There has been a 4% decrease in emissions from FY23 (base year) to FY25.

FY23			FY25		
Travel mode	**pkm**	**tCO_2e**	**Travel mode**	**pkm**	**tCO_2e**
Car	254,047,642	63,298	Car	265,130,871	64,790
Train	1,467,384	28	Train	4,305,009	115
Public bus	4,571,827	709	Public bus	10,937,645	1,695
Emissions tCO_2e		**64,035**	**Emissions tCO_2e**		**66,600**

The key variables to be considered in analysing change in Staff Transport emissions are:

- Number of full-time equivalents
- Total travel distance

The table below shows key changes in the above-mentioned variables.

Variables	FY23	FY25	% change
Number of full-time equivalents	72,019	70,610	-2%
Total travel distance, one-trip (km)	4,718,500	4,367,250	-7%

The increase in emissions from staff commuting relates to an increased distance travelled by staff as well as updated assumptions due to new Stats NZ Census data. Since calculations are done for each individual staff member, total FTEs and kilometres travelled does not interact linearly with either the resulting total km travelled for the total staff, nor the associated emissions. The numbers provide a high-level indication of the magnitude of change.

Pupil commuting

The table below presents the emissions associated with Pupil Commuting in FY23 (base year) and FY25.

Pupil commuting	FY23	FY25	Change
Car	221,319	211,048	-5%
Public transport	17,173	14,896	-13%
Ministry-funded transport	27,364	30,190	+9%
Board-funded transport	8,974	7,695	-14%
Total tCO_2e	**274,830**	**263,829**	**-4%**

The key variables to be considered in analysing change in Pupil Commuting emissions are:

- Student distances to schools:
  - Percentage of students within active transport or funded bus distance bands
  - Percentage of students outside active transport or funded bus distance bands
- Percentage of students eligible for transport assistance

The reduction in emissions is predominantly due to reduced car emissions as the change in emissions between public transport, Ministry funded or board funded transport indicate that these students are still utilising some form of bus transport, however the responsibility for who delivers that transport shifts year on year.

The table below shows the change in distance distribution for students' commuting between FY23 (base year) and FY25

Change in distribution for ākonga commuting distance

Distance distribution (km from school)	0-2	2-4	4-6	6-8	8-10	10-20	>20
FY23	45.4%	22.2%	9.8%	5.7%	3.8%	8.4%	4.6%
FY25	43.0%	22.4%	10.1%	6.0%	4.0%	9.2%	5.3%
Change	**-5.3%**	**+0.9%**	**+3.0%**	**+5.3%**	**+5.3%**	**+9.5%**	**+15.2%**

Operational

The table below presents the emissions associated with schools and kura operations in FY23 (base year) and FY25.

School operations and utilities	FY23	FY25	% change

Electricity	18,625	23,186	+25%
Natural gas	24,102	10,932	-55%
LPG	1,018	959	-6%
Coal	9,603	3,820	-60%
Diesel	1,016	355	-65%
Biomass*	116	50.5	-56%
Waste to landfill	5,984	4,927	-18%
Water	103	169	+64%
Wastewater	1,543	2,002	+30%
Total tCO_2e	**62,110**	**46,401**	**-25%**

Key variables to consider in analysing change in Operational emissions are:

› Transition from fossil fuels as part of the Coal Boiler Replacement programme (complete April 2025), and a greater electrification of schools as part of that process

› Change in teaching spaces per school

› Climatic differences between years (e.g. a warmer year may decrease the energy demand for heating and increase the demand on cooling).

There was a significant reduction in the UEF intensities from Waste Management who supply our waste reporting. We expect the change in water and wastewater use is due to the increase in student population.

Appendix 3
Schools & kura emissions reporting improvements

Suggested future improvements

The following were identified as process improvement findings.

Area	Description and recommendation
Estimation and actual source data	Many of the emissions models included significant estimation and extrapolation, such as Capital Works, Purchased Goods and Services, and Pupil and Staff Commute. We recommend you identify the key drivers within these models and work towards improving their data collection.
Assumptions	Most models relied on key assumptions. We recommend you continue to test these assumptions against actual data to ensure they remain appropriate. E.g., the typologies attributed to schools, the model share of transport types etc.
Record Keeping	Part of the GHG Inventory Report (in relation to Ministry Funded, and Schools and Kura emissions) was prepared by Beca, an external provider of the Ministry of Education. We recommend that key documentation on decision rational and assumptions are kept by the Ministry to support its GHG Inventory, as ultimately the Ministry is accountable for the overall inventory. We note there was some additional record keeping documents in 2025, including 'Assumptions and Changes' document prepared by Beca, which included helpful information for the audit.
Review of models, calculation and GHG Report	We noted there was an enhanced internal review process in 2025 of models, calculations, and the GHG Report. We recommend this internal review continues in future years.

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Ministry of Education

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kia rangatira ai, kia mana taurite ai ōna huanga.

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