



2024

NAPIER^o
PORT
Te Herenga Waka o Ahuriri

CLIMATE CHANGE RELATED DISCLOSURE **REPORT**

This report is prepared in compliance with the Aotearoa New Zealand Climate Standards (NZ CS) 1- *Climate Related Disclosures*, 2 - *Adoption of Aotearoa New Zealand Climate Standards*, and 3 - *General Requirements for Climate-related Disclosures*.

The New Zealand External Reporting Board (XRB) in December 2022 issued the NZ CS, which are effective for reporting periods commencing on or after 1 January 2023. These new mandatory climate standards are based on the Taskforce on Climate-Related Financial Disclosures (TCFD) framework which this report also adheres to. Napier Port has not applied any of the adoption provisions that are permitted under NZ CS 2.



Introduction

This is the fourth climate change related disclosure report produced by Napier Port Holdings Limited (Napier Port) which seeks to provide stakeholders an understanding of the potential financial implications of climate change on its business. The previous three years' reports were primarily based on the recommendations of the TCFD.

The focus of the fourth report is to comply with the new NZ CS framework and to incorporate, where relevant, updates to its Climate Change Risk Assessment (CCRA) report.

Napier Port's sustainability journey is one of continuous improvement and the people of Napier Port are committed to improving its environmental, social and economic performance by identifying and managing risks and finding opportunities to use our resources more efficiently.

Napier Port expects to further develop and improve its climate change related disclosures as we gather more information and knowledge and continue to deliver against our publicly disclosed sustainability strategy.

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DISCLAIMER: Quantifications in this report of financial impacts of climate change are estimates and are not intended to constitute earnings guidance. No representation is made as to their accuracy, completeness or reliability. These risks and opportunities may not eventuate and, if they do, the actual impact may differ materially from these estimates. Other material risks and opportunities may exist or eventuate that are not included within this report



Figure 1. Governance of climate-related risks at Napier Port

RISK MANAGEMENT POLICY

- Provides the overarching framework for identifying, assessing, managing and monitoring risk at Napier Port, including climate-related risks.
- Objectives of the policy include ensuring that Napier Port operates in a sustainable manner and protects the Port environment in accordance with its sustainability strategy.

BOARD OF DIRECTORS

- The Board is ultimately responsible for identifying the principal risks faced by Napier Port and taking reasonable steps designed to ensure that appropriate internal controls and monitoring systems are in place to manage and, to the extent possible, reduce the impact of these risks, including material climate-related risks.
- The Board receives reports and recommendations from, and has access to management reports provided to, the Audit and Risk Management Committee, in relation to Napier Port's overall risk management framework, and reviews the Risk Management Policy annually.
- The Board is also responsible for setting the strategic direction of Napier Port. This includes ensuring that the environmental, social and governance (ESG) risks and opportunities in Napier Port's sustainability strategy, including climate-related risks and opportunities, are integrated into the Group's long-term strategy and investment decision making.
- The Board receives reports and recommendations from and has access to management reports provided to the Sustainability Committee, and reviews the Sustainability Committee Charter annually.

AUDIT AND RISK MANAGEMENT COMMITTEE

- Ensures that management is implementing Napier Port's overall risk management framework and policy.
- Monitors corporate risk assessments and internal controls implemented.
- Reports to the Board whether Napier Port's overall risk management framework and processes are sufficient.
- Responsible for overseeing the assessment and assignment of financial and economic impacts within disclosures related to the expected physical and transitional impacts of climate change as identified through Climate Change Risk Assessments or similar exercises.

SUSTAINABILITY COMMITTEE

- Makes recommendations and reports to the Board on material ESG matters requiring governance decisions.
- Ensures the integration of ESG considerations into business planning and strategy, risk management, key policies, processes and culture.
- Oversees the development of Napier Port's ESG sustainability strategy and workplan.
- Monitors progress against the goals and actions included in Napier Port's sustainability strategy.
- Responsible for ESG related aspects of climate change and related physical risks within context of qualitative or quantitative assessments to measure or understand the potential impacts of climate change e.g. undertaking annual Climate Change Risk Assessments.
- Ensures an appropriate framework is maintained for the management of ESG risks, including climate-related risks and opportunities.
- Reviews and monitors ESG related risk assessments and the effectiveness of the related risk management processes.
- Oversees and reviews ESG reporting processes, including relevant internal controls and external review and audit processes.

CHIEF EXECUTIVE AND SENIOR MANAGEMENT TEAM

- The Chief Executive and Senior Management Team are responsible for ensuring that risks to the business, including climate-related risks, are identified and evaluated, effective responses and control activities developed, and appropriate monitoring and timely re-evaluation conducted, in accordance with Napier Port's Risk Management Policy.
- The Chief Financial Officer, working with senior management, updates Napier Port's overall risk management framework and reports to the Audit and Risk Management Committee on a six-monthly basis.
- The General Manager – Assets and Infrastructure has overall responsibility for the development and implementation of the sustainability strategy, including assessment of climate-related risks, and reports on progress to the Sustainability Committee.

KEY STAFF TASKED WITH RISK MANAGEMENT ACTIVITIES (FROM INFRASTRUCTURE, FINANCE AND OPERATIONS TEAM)

- Provide support with identifying, monitoring and assessing climate change risks and ensuring appropriate management actions are taken in relation to them.
- Responsible for maintaining the safety, performance and capability of Napier Port's infrastructure assets and plant and equipment over their projected economic lives.
- Maintain long term asset management plans.

The Napier Port Board of Directors are ultimately responsible for identifying the principal risks faced by Napier Port and taking reasonable steps to ensure that appropriate internal controls and monitoring systems are in place to manage and, to the extent reasonably possible, reduce the impact of these risks, including material climate-related risks. The Board reviews Napier Port's Risk Management Policy annually.

The Audit and Risk Management Committee supports the Board in this function by ensuring that management is implementing Napier Port's overall risk management framework and policy and monitoring corporate risk assessments and ensuring that risk controls are implemented. The Audit and Risk Management Committee reviews Napier Port's overall risk management framework on a six-monthly basis and the Committee proceedings are reported back to the Board.

The Sustainability Committee reviews annually a separate Climate Change Risk Assessment (CCRA) inclusive of a climate-related risk register specifically for the management of climate-related risks and opportunities. This is part of the Sustainability Committee's wider role to identify and consider relevant environmental, social and governance (ESG) matters to provide strategic guidance and feedback to the Board and management on Napier Port's ESG related strategies, policies, frameworks, initiatives, performance and reporting.

The Sustainability Committee meets at least two times per year to review progress on the implementation of Napier Port's Sustainability Strategy, the assessment of climate-related risks and opportunities documented within the CCRA, and progress and achievements against climate-related metrics. The Committee proceedings are reported back to the Board.

The Board maintains a director skills matrix, which includes a specific category for sustainability expertise. The skills matrix is an important recruitment consideration when a new director is

being considered to join the Board. The Corporate Governance Statement found within the Annual Report shows the Director skills matrix and the attendance at Sustainability Committee meetings.

As climate-related issues, including the new Aotearoa New Zealand Climate Standards, are rapidly evolving, directors are continuing to develop their knowledge, including by attending courses and presentations.

The Chief Executive and Senior Management Team are responsible for ensuring that risks to the business, including climate-related risks and opportunities, are identified and evaluated, effective responses and control activities developed, and appropriate monitoring and timely re-evaluation conducted in accordance with Napier Port's Risk Management Policy.

The General Manager – Assets and Infrastructure has overall responsibility for the development and implementation of the sustainability strategy, including the assessment of climate-related risks and opportunities and reports on progress to the Sustainability Committee.

Board and management utilise external advice and expertise for climate-related issues where appropriate.

Remuneration policies for the CEO and Senior Management Team are outlined in the Governance Statement in the Annual Report, and for the CEO and certain executives includes remuneration linked to the achievement of sustainability strategy related objectives.

The different levels of responsibilities and the supporting Risk Management Policy that governs the management of climate-related risks at Napier Port are illustrated in Figure 1.

+ Risk Management

NZ CS Requirements:

- + Describe the organisation's processes for identifying and assessing climate-related risks (for both transition risks and physical risks)
- + Describe the organisation's processes for managing climate-related risks
- + Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management

S2

Napier Port's Risk Management Policy provides the overarching framework for identifying, assessing, managing and monitoring risk at Napier Port, including climate-related risks and opportunities. Each Napier Port business unit is responsible for establishing and maintaining risk documentation to monitor and report risks that threaten achievement of business objectives. The Chief Executive and Senior Management Team are responsible for ensuring that risks to the business are identified and evaluated, that effective responses and control activities are developed, and appropriate monitoring and timely re-evaluation is conducted. The Chief Financial Officer, working with senior management, updates the Napier Port enterprise risk register, drawing on business units' documentation, and reports this register to the Audit and Risk Management Committee at least on a six-monthly basis.

An output of the CCRA process is a climate-related risk register specifically for the management of climate-related risks and opportunities. Napier Port has also benchmarked against recommendations of the NZ CS and the TCFD for identifying and assessing climate-related risks.

Napier Port's Assets & Infrastructure team which includes environmental & sustainability subject matter experts, supported by others as required, are tasked with staying up-to-date with the latest climate-related research, facilitating regular risk assessments and performing detailed climate change analysis. The Board and Management of Napier Port are also continually monitoring developments to existing and emerging regulatory requirements related to climate change as part of their risk assessment processes.

In November 2020, Envirolink, Gisborne District Council, and Hawke's Bay Regional Council collaborated to commission a review of climate change projections and their impacts on the Tairāwhiti (Gisborne) and Hawke's Bay regions. This was conducted by the National Institute of Water and Atmospheric Research (NIWA)¹ and is used as the basis for the scenario analysis contained within our Financial Year 2021 (FY2021) and FY2022 reports. For our FY2023 and FY2024 reports, Napier

Port has drawn upon the findings of previous reports and data sources and has also incorporated data from various additional sources, including the Intergovernmental Panel on Climate Change (IPCC), to determine potential shifts in sea levels, wind patterns, temperatures, and extreme weather events. These data inputs enable us to analyse a range of potential future scenarios and assess how they may affect Napier Port's assets, operations, financial plans, and business model.

Future climate projections strongly depend on estimates for future global mean temperature rise resulting from greenhouse gas concentrations. In turn, those concentrations depend on global greenhouse gas emissions that are driven by factors such as economic activity, population changes, technological advances and policies for mitigation and sustainable resource use. This range of uncertainty has been considered by the IPCC. The IPCC Fifth Assessment Report considered 'scenarios' that describe concentrations of greenhouse gases in the atmosphere. These scenarios were called Representative Concentration Pathways (RCPs)². The IPCC's more recent Sixth Assessment Report (IPCC AR6) provides updated future climate change findings and projections. The IPCC AR6 refers to Shared Socioeconomic Pathways (SSPs)³ for future projected socioeconomic global changes used to derive greenhouse gas emissions scenarios based on different climate policies.

Differences between RCP findings and projections from SSPs stem from using improved models as well as a more precise estimate of historical warming⁴. While the scenarios represent the same amount of radiative forcing (i.e. RCP4.5 and SSP2-4.5 both represent 4.5Wm⁻² radiative forcing), the emissions pathway and socio-economic drivers to achieve this were revised, and predictions generally show higher levels of warming associated with SSP's than RCP's.

Timelines for warming have also changed; SSPs are focused around "pre-industrial" times which refers to 1850-1900, which is in line with the Paris Agreement. These pre-industrial levels are now what temperature increases are based off rather than the period between 1986-2005 as used in RCPs.

Therefore, a move to SSPs from RCPs is considered an evolutionary step given SSPs provide the most up to date climate change information and data for future climate scenarios.

For the IPCC global scale modelling to be useful for Napier Port's CCRA process the results need to be downscaled to a Hawke's Bay regional level. The partially available regional downscaling of the IPCC's AR6 has been utilised, however, at the time of writing this FY2024 report, not all downscaling information had been released. Regionally downscaled data not included in FY2024 is expected to be incorporated into future reports once available.

However, for risks and hazards associated with sea level rise and tropical cyclone intensity, relevant information from the IPCC AR6 has been downscaled to local levels and has been utilised by Napier Port.

Interim guidance from the Ministry for the Environment (MfE) recommends using existing data that has been based on modelling from the IPCC's Fifth Assessment Report with reasonable confidence, until newer data becomes available for areas where IPCC's AR6 findings have not yet been downscaled⁵.

The use of the 2020 NIWA report and the RCPs scenarios was central to modelling future climate change projections and impacts in our early Climate Change Related Disclosure Reports and is still relevant in this year's report where regional downscaled data from the IPCC's AR6 is not available.

The use of IPCC AR6 data saw the introduction of three SSP scenarios for the climatic effects of sea level rise, temperature increase, and tropical cyclone.

In addition to these SSP scenarios, and while we await the release of regionally downscaled IPCC AR6 data, our CCRA process continues to consider the following RCPs for some climate-related risks:

- RCP4.5 is a 'stabilisation' pathway that stabilises radiative forcing at 4.5W m⁻² in the year 2100 without ever exceeding that value.
- RCP8.5 represents continuing high global emissions without effective mitigation, which will lead to high greenhouse gas emissions (a high-end pathway).

The reason for choosing these two scenarios was to present a 'high-end' scenario if atmospheric greenhouse gas concentrations continue to rise at high rates (RCP8.5) and a scenario which could be realistic if moderate global action is taken towards mitigating greenhouse gas emissions (RCP4.5).

Where regional downscaling has been completed, our climate-related risk assessment process now considers three SSP scenarios identified as plausible outcomes.

- SSP1-1.9 is the 'sustainable' pathway (where global warming is limited to 1.5 degrees by 2100),
- SSP2-4.5 is the 'middle of the road' pathway (where socio-economic factors follow their trends, with no significant change in reducing current temperature rise projections)
- SSP5-8.5 represents 'the highway' pathway (effectively the worst case scenario where the world economy grows rapidly, but this growth is driven by fossil fuel exploitation and very energy intensive lifestyles).

These three scenarios were chosen to align with NZ CS, which requires three scenarios to be analysed:

- one where global temperature increase is limited to 1.5 degrees Celsius (with an emissions pathway aligned to SSP1-1.9),
- another where the temperature is 3 degrees Celsius or greater (aligned to SSP5-8.5)
- a third scenario of the reporting company's choice. Napier Port has chosen a scenario which looks to limit global temperature increases to a range between 2.1 and 3.5 degrees Celsius (aligned to SSP2-4.5). The reason for choosing this pathway is that SSP2-4.5 has been recognised by members of the climate science community as a most likely pathway to eventuate out of the five SSPs⁶.

For climate-related risk management, we believe a medium to long-term horizon is appropriate. This time frame is aligned with the economic lives of our infrastructure assets and Napier Port's asset management plan. As a result, we have used the following timeframes to assess the likelihood of climate-related risks and opportunities occurring under each scenario: Short-term 0-20 years (using RCP & SSP scenarios up until 2040); Medium-term 20-70 years (using RCP scenarios up until 2090 and SSP scenarios up until 2070); and Long-term 70 plus years (using SSP scenarios up until 2100).

In accordance with Napier Port's Risk Management Policy, we assess the significance of each identified climate-related risk using a likelihood and consequence matrix. The climate-related risk register assesses the likelihood of risks occurring during the short-term, medium-term and long-term timeframes outlined above, to recognise the longer-term nature of climate-related risks. This varies from the overall risk management framework which assesses the likelihood of a risk occurring based on whether it is probable to occur within the next 12 months. For both, the consequence of the identified risk is assessed based on the potential level of impact on our people, assets/infrastructure, operations and systems, environment, reputation and financial planning. Based on the likelihood and consequence, levels of risk are categorised as either very high, high, moderate or low. This allows us to determine the appropriate response for each issue identified. Climate-related risks and opportunities are assessed annually to ensure they continue to reflect material changes in our knowledge, business strategy, and operating environment.

Napier Port's CCRA includes parts of its value chain outside the operational control of its business. This includes climate change impacts affecting our key local growers and upstream transportation links. However, there are parts of the value chain that are excluded on the basis of immateriality and/or data collection complexity. For further value chain inclusion and exclusion please refer to the Scope 3 tables found in the metrics and targets section of the report.

During the 2024 financial year, using the process described above, we updated our Climate Change Risk Assessment – looking at infrastructure resilience, trade forecasting, land levels, weather conditions, emergency preparedness and habitat modification. The current assessment has identified 71 climate-related physical and transition risks and 24 opportunities. An overview of the top physical and transition impacts is contained in our strategy disclosures section.



Our climate-related risk management spans 50 years, aligning with asset management and scenario-based likelihood of risk occurring.

The diagram below depicts Napier Port's strategy and how we create value for all stakeholders.

S3

+ Strategy

NZ CS requirements. An entity must disclose:

- + A description of its current climate-related impacts
- + A description of the scenario analysis it has undertaken
- + A description of its climate-related risks and opportunities it has identified over the short, medium and long-term
- + A description of the anticipated impacts of climate-related risks and opportunities
- + A description of how it will position itself as the global and domestic economy transitions towards low emissions, climate resilient future state

Our Purpose Together, we build a thriving region by connecting you to the world

Our purpose is very clear: Together, we build a thriving region by connecting you to the world. To achieve this outcome, four long-term pillars form the basis of our strategy and guide our business planning:

- Networked Infrastructure - connecting customers' cargo to market and enhancing end-to-end supply-chain solutions via an integrated network of infrastructure assets, connecting the port with road, rail, sea and warehousing across New Zealand.
- Connecting with our Customers - a close connection with our customers enables us to know them, their businesses and the environment they are operating in, so we can develop innovative and efficient cargo solutions.
- Collaborative Partnerships - with others help us achieve a better outcome than we would on our own. Forming and fostering strong collaborative partnerships means we can deliver more for our customers and region than we could on our own; and
- Harnessing data and technology - our innovative technology delivers value to our business, our customers and others outside the port gate enabling the smooth flow of information and the optimisation of our operations and customers' supply chain with enhanced visibility.

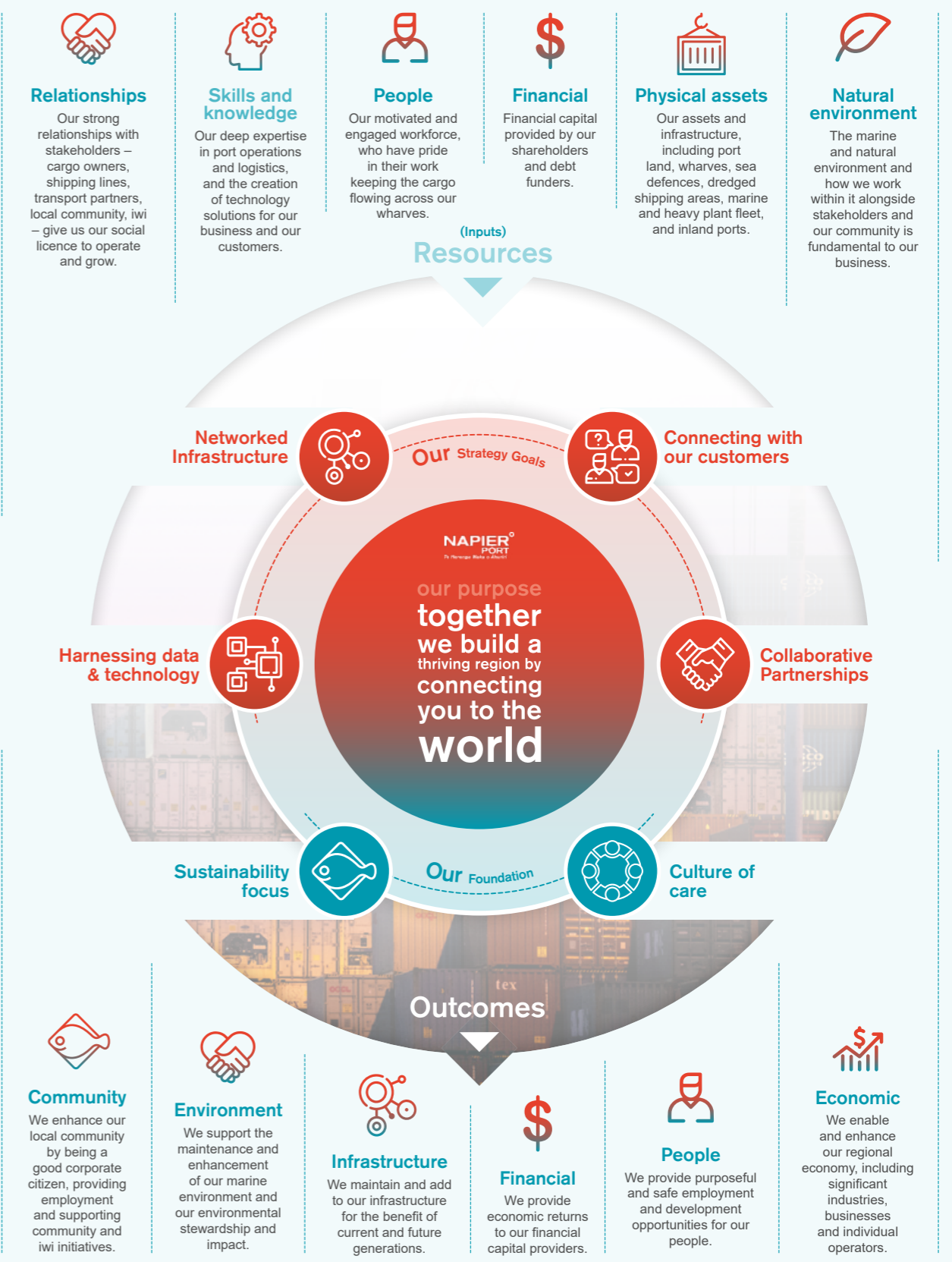
These four strategy pillars are underpinned by our foundation, which comprises:

- Culture of care - actively building a strong, resilient and agile workplace culture with a focus on health and safety attracts and retains our high-performing workforce; and
- Sustainability focus - enables us to create a positive legacy for future generations by nurturing people, planet, prosperity and partnerships actions.

A 10-year strategic roadmap is in place, and periodically this is reviewed and refreshed. Annually, business planning is undertaken which reviews strategic projects and allocates resource, targets, and accountabilities. In doing so, all teams understand what the business has prioritised year on year. This ensures alignment across our team to achieve our stated goals and deliver stakeholder value.

Our business is exposed to climate-related risks outside our port gate, including transport links and the impact of climate change on our community and customers. We work collaboratively with relevant territorial authorities and community groups, sharing information and developing solutions, to deliver a more resilient business and region.

How we Create Value



- Services Provided**
- Bulk cargo services
 - Container operations services
 - Marine services
 - Landside logistics services
 - Warehousing services

Napier Port recognises that climate change is currently impacting the way we operate in the following ways:

Current impacts of climate change

Current physical climate impacts

Tropical Cyclone Gabrielle in February 2023 caused widespread flooding and property damage to the Hawke's Bay region. Although the physical impact on Napier Port's infrastructure was not significant it was a reminder of the devastating impact severe weather events can have and the potential consequential effects arising from such events as flooding and infrastructure damage outside the port gate resulted in decreased cargo being exported from the region via our port. Such losses represent millions of dollars of lost earnings for Napier Port.¹

Current transition climate impacts

As part of its asset management programme, Napier Port is considering how it can utilise technological advancements and alternative equipment choices to shift its fuel intensive heavy equipment and marine fleet assets towards lower emission and more energy efficient options. However, much of this technology is still at an early development stage and therefore functionally unproven and carries additional cost premiums when compared with the traditional internal combustion engine equivalent. For example, this year Napier Port placed an order for five new Eco Reachstackers (container handling mobile plant) and commissioned one more, each carry a capital cost premium of approximately 15% over the price of the base model Reachstacker. Napier Port will continue to consider a broad range of objectives including the financial implications and its obligations as a lifeline asset and significant regional infrastructure as it considers pathways and the timeframes it adopts to transition its mobile plant equipment and marine assets.

The impacts of severe weather events such as extreme rainfall and tropical cyclones (like Cyclone Gabrielle) are having an adverse impact on our insurance renewal programme for our material damage and business interruption policies. As a result of Cyclone Gabrielle trading losses incurred by Napier Port, policy premiums and insurance capacity have been negatively affected, however the direct financial impact on insurance is not determinable.

¹The amount of insurance proceeds to compensate for Napier Port's lost earnings as a result of Cyclone Gabrielle are disclosed in the 2023 and 2024 annual financial statements of Napier Port Holdings

Future impacts of climate change

For Napier Port, a warmer world in 2100 consistent with the RCP8.5 and the SSP5-8.5 scenario would result in potential physical impacts on our infrastructure, create uncertainties as to how our region would be affected and be required to adapt, and what our business may look like as a result. The transition impacts of climate change caused by strong climate action policy will also create a mix of risks and opportunities for our business. We have identified and assessed these risks and opportunities, undertaking analysis of the potential impacts for our business.

The physical and transition risks included below are from Napier Port's CCRA (dated September 2024) and are rated very high, in accordance with the risk management policy and specific climate-related timeframes noted above. This assessment is based on the likelihood of the risk occurring (likely or almost certain) and consequence (greater than \$5 million), in at least the RCP8.5 or SSP5-8.5 scenario in the medium to long-term. Under the RCP4.5 (2 degrees or lower scenario) or SSP2-4.5 (3 degrees or lower scenario), these risks are also present, although they would manifest themselves at a later date.

From the analysis undertaken, at this stage, we do not consider that the effects of climate change materially change our overall

strategy. Sustainability will continue to be embedded into our ways of working as we continue to collaborate to look after people, planet and place, including completing the actions contained in our sustainability strategy.

The more financially material infrastructure improvement actions are required over the medium to long-term to ensure that we continue to have a resilient and agile infrastructure network. Planning to address this is being embedded within our overall infrastructure masterplan. In the short-term, we will continue to complete more detailed investigations of climate-related effects and ensure these are considered in Napier Port's master planning process.

To support our sustainability strategy action plan implementation we include climate-change considerations within Napier Port's procurement processes and policies. This involves consideration of alternative lower emission options related to plant and equipment procurement and, in the case of more significant investment business cases, emission scenario and financial analysis including the consideration of shadow emission pricing. Work in these two respective areas is ongoing.



Physical Risks

Climate change related effects result in several risks to Napier Port infrastructure, due to its coastal location and susceptibility to sea level rise. All of our tangible assets are susceptible to physical risks today, including from acute weather and natural disaster events. Climate change modelling indicates that higher temperatures will increase the likelihood of extreme weather events that may affect operations and damage infrastructure and there will be ongoing impacts of sea-level rise, extreme rainfall, and intensifying tropical cyclones which may cause coastal inundation, erosion and flooding. Napier Port's breakwater and sea defence asset (our largest infrastructure asset with a net book value of \$157m in FY2024) is the most exposed to the impacts of climate change and accordingly forms an important part of our assessment of future physical climate risks.

The physical impacts of climate change considered most material to Napier Port are described over the page:

i) Increase in sea level

One of the major and most certain consequences of increasing concentrations of atmospheric greenhouse gases and associated warming is the rising sea level. SSP scenario modelling has confirmed the pace of sea level rising is also accelerating.

Interim guidance on the use of sea level rise projections from the Ministry for the Environment⁷ recommends using data from the NZSeaRise research programme, which uses SSP sea level data on a localised scale across New Zealand. This is a shift away from the RCP sea level rise based data used in the 2020 NIWA report. These projections include not only sea level rise (SLR) (relative to 2005), but also vertical land movement (VLM), from satellite data, at 2km spacing across all of NZ's coastlines. By combining both SLR and VLM, we can understand relative sea level rise (RSLR).

There are three sites in NZSeaRise within the Napier Port footprint and these sites are reportedly subsiding at an average rate of 3.01mm/year (2.93-3.14mm/year). When this rate of VLM is combined with the various rates of SLR, dependent upon the emissions scenario, overall RSLR is higher.

With sea levels continuing to rise, even under low emission scenarios, there is high confidence in the increased frequency and severity of coastal flooding⁸.

In respect of extreme coastal flooding, in the short term (2040), there is no difference seen between different SSP pathways and inundation risk remains manageable. However, projected temporary inundation in a one in one-hundred-year event shows

the previously identified northern log yard areas experiencing greater levels of inundation corresponding with escalating temperature over time. This trend expands under all SSPs in 2070, and eventually, in 2100 under all SSPs, coastal flooding projections show a large portion of the Napier Port site could be potentially impacted during a one in one-hundred-year event.

Furthermore, as sea levels rise, high-energy waves that strip sediment can reach higher up the shoreline and cause erosion⁹. Due to the nature of Napier Port, being built directly on the coast, coastal erosion could cause loss of usable land area and damage to existing infrastructure if not prepared for. Among the three beach areas within the port boundaries, risk exposure is materially present within the two easternmost stretches. Whilst these areas undergo continuous natural movements due to wave action, these areas serve as natural sea defences, safeguarding critical structures and operational zones from potential inundation.

In FY2024, the establishment of a rock bag revetment structure was commenced in the eastern beach area between the Plant Services workshop and eastern Security hut providing protection for infrastructure against coastal erosion. Climate-related risks such as an anticipated rise in RSLR, coupled with heightened cyclone/rainfall intensity, are expected to increase erosion forces in this area. In the long-term a more substantial hard structure may be required in this and other similar areas to provide long-term protection.

Risk Driver: Increase in Sea Level (RSLR)	
Scale	High to Very High
Likelihood	Almost certain
Timeframe	Medium to Long-term
Financial Implications	Fortification of eastern boundary sea defences: \$6-100 million (depending on the extent of engineered structure)
Methodology	Potential financial impact is estimated capital expenditure required, based on current civil construction costs in today's money
Risk Mitigation	<ul style="list-style-type: none"> Northern log yards may eventually need to be further developed to raise the level of pavement Ensure the western reclamation area is developed to levels to meet future mean sea levels due to climate change Detailed investigation and potential design of sea defences to provide long-term protection in the eastern beach area where a more substantial hard structure may be required in these areas and other similar areas in the long term

ii) Extreme rainfall events

Climate change is expected to result in an increase in the frequency and intensity of extreme rainfall events. The NIWA report notes that short duration rainfall events have the largest relative increases compared with longer duration rainfall events. Rainfall depths for 1-in-50 year and 1-in-100 year events are projected to increase across the greenhouse gas concentration scenarios and future time periods¹⁰.

Napier Port has seen minor issues with storm water management in recent years due to extreme rainfall events that the systems

were not designed for. The storm water system will be further compromised by sea level rise with more outlets likely to be below sea level which impacts the system's ability to discharge effectively resulting in backing up of storm water. This is likely to result in inundation if the extreme rainfall coincides with extreme sea levels. Detailed modelling is to be completed to better understand the system capacity both currently and under future scenarios so appropriate plans can be put in place. Likely options include additional drainage networks or pumping stations.

Risk Driver: Extreme Rainfall Events	
Scale	High to Very High
Likelihood	Almost certain
Timeframe	Long-term
Financial Implications	\$5-\$10 million
Methodology	Potential financial impact is estimated capital expenditure required based on the installation of two pumping stations and current civil construction costs in today's money
Risk Mitigation	<ul style="list-style-type: none"> Modelling of the stormwater system capacity under future scenarios Assess capacity of the outer breakwater drain under future scenarios and increased frequency of drain cleaning Likely mitigation options could include additional drainage works or pumping stations



iii) Tropical Cyclones

Tropical cyclones are predicted to be more severe under all temperature scenarios, yet there is still a large amount of uncertainty on the changes in frequency of tropical cyclones". Potential damage caused by tropical cyclones can be quantified using the power dissipation index (PDI), which considers maximum sustained wind speeds, and the distance/time the cyclone has travelled. Projections for future severity of cyclones aligned with SSP findings show increases across all scenarios, with the greatest increase in PDI seen in SSP5-8.5 (24%).

The implications of Cyclone Gabrielle provided insight into the susceptibility of Napier Port's breakwaters and sea defences to

damage. Anticipated synergies between relative sea level rise and the amplification of cyclone PDI appear to forecast an uptick in the magnitude of damage sustained per event. Such powerful weather events have the potential to dislodge or displace the armour units (akmons) that help protect the breakwater structure.

With a projected increase in cyclone PDI for storms arriving at Napier, proactive maintenance through a program of continual akmon renourishment is required, not only for dissipating wave energy and upholding the structural integrity of the breakwater itself, but also for the protection of the infrastructure sheltered behind it.

Risk Driver: Increase Tropical Cyclones	
Scale	High to Very High
Likelihood	Almost certain
Timeframe	Medium to Long-term
Financial Implications	\$10-\$15 million
Methodology	Potential financial impact is estimated capital expenditure planned plus potential enhancements in the medium term, based on current civil construction costs for shore protection in today's money
Risk Mitigation	<ul style="list-style-type: none"> The akmon unit "top-up" program is embedded within the Asset Management Plan and the post cyclone breakwater reinstatement works are due to be completed during FY2025



Transition Impacts

The transition impacts of climate change caused by strong climate action policy are also a mix of risks and opportunities for our business.

Government regulation to encourage a shift to a low carbon economy (like the Aotearoa New Zealand Emission Reduction Plan) may result in:

- increased fuel costs particularly for Napier Port's mobile plant;
- requirements to invest in new technologies, equipment and supporting infrastructure to move away from diesel powered plant; and
- policies to increase the use of rail which may require additional infrastructure investment and changes to Napier Port's operating model.

The transition impacts considered most material to Napier Port are:

i) Government Regulation to Encourage a Shift to a Low Carbon Economy Resulting in Higher Fuel Costs

Government policy may increase emissions taxes on fuel by greater amounts to encourage the significant reduction in emissions required to achieve net zero emissions by 2050. This will likely increase diesel fuel costs and operating costs for Napier Port which is currently reliant on diesel fuel to power tugs, mobile harbour cranes, and container handling equipment. By way of illustration using FY2024 data, a \$0.20 per litre increase in the cost of diesel would increase operating costs by approximately \$0.5 million per annum.

The higher fuel costs may encourage the shift to alternative fuels throughout the region which may ultimately reduce the fuel imported through Napier Port and the revenue that this generates.

Risk Driver: Government Regulation to Encourage a Shift to a Low Carbon Economy Resulting in Higher Fuel Costs	
Scale	High to Very High
Likelihood	Moderate risk in short term. Almost certain in medium to long term
Timeframe	Short to Medium term
Financial Implications	Unknown impact and timing
Risk Mitigation	<ul style="list-style-type: none"> Ensure fuel price escalation risk is considered in forecasting Implementation of sustainability strategy actions to reduce dependence upon and quantities consumed of diesel fuel

ii) Government Regulation to Encourage Shift to Alternative Fuels

Combined with the above it is highly likely there will be government policy to either ban, limit the procurement of, or otherwise disincentivise the use of, internal combustion engine powered machines and encourage a shift towards machines powered by renewable and low emission energies (e.g. electricity, hydrogen). It is expected that import restrictions will precede any outright ban of diesel equipment, which will provide some time to adapt.

Napier Port is expected to transition in a planned orderly way with emission reduction pathways under development as part of the wider sustainability strategy and through targeted emission reduction plans. The transition triggers are likely to be a mix of fuel and other price pressures, investment cycles, the availability of alternative energy equipment able to deliver comparable operational capability and resilience.

The development of the required infrastructure is expected to occur over a longer period and require additional capital investment.

Our Electrical Master Plan outlines a pathway to meet future electrical demand. There are, however, numerous policy risks which may affect the electrification programme:

- A ban on the importation of diesel equipment within a short timeframe may result in the need to accelerate infrastructure investment, uneconomically extending the lifetime of existing plant or affecting expansion aspirations;
- An early ban in the importation of diesel equipment may result in effective and reliable alternative low emission options not being readily available;
- Policy that results in dramatic increase in fuel price may result in earlier than expected move to an electric fleet. If electrical infrastructure is not available, continued use of internal combustion engine powered equipment may result in higher than desired operating costs.

Failure to consider transitional climate-related risks throughout an asset's lifecycle during procurement may lead to stranded assets in the future whereby either the fuel required to operate them is either unavailable or cost prohibitive or equipment becomes technically obsolete and unserviceable. In particular, key plant such as tugs and mobile harbour cranes have operating lives of up to 30 years. To manage this transition risk, Napier

Port's Procurement Policy requires consideration of ESG factors alongside economic factors in significant expenditure and procurement decisions. Additionally, our approach to asset management ensures periodic reviews are undertaken to evaluate aspects such as remaining useful life, and the residual value of key assets potentially impacted by climate-related pressures

Risk Driver: Government Regulation to Encourage Shift to Alternative Fuels	
Scale	High to Very High
Likelihood	Almost certain
Timeframe	Medium to Long-term
Financial Implications	Unknown impact and timing. The FY2024 net book value of diesel powered machinery held by Napier Port is \$52m
Risk Mitigation	<ul style="list-style-type: none"> Consider flexibility in electrical infrastructure development as part of the Electrical Master Plan Consider future fuel cost risk and other ESG matters in equipment purchasing and investment business cases Consider equipment that can be retro-fitted in investment decision making process Regularly assess the remaining life and residual value of key equipment because of climate-related changes

iii) Rail

Rail transport typically has significantly lower emissions per tonne compared to road freight, and provides other benefits, in particular reducing the number of trucks on New Zealand's roads. In the short-term, a lack of national and regional rail infrastructure is and will remain a major hindrance to a significant step change in the use of rail. In the medium term, it is likely that road transport will continue or accelerate the adoption of green energy technology to reduce their emissions.

In the long-term (70+ years), it is expected that New Zealand's rail network will be effectively emission free, running on alternative fuels such as hydrogen for long haul routes or potentially a fully electrified network, which may result in a significant uptake of rail. A significant increase in cargo transported by rail would require changes in Napier Port's operational layout and associated infrastructure investment.

Risk Driver: Government Regulation to Encourage Increased Use of Rail	
Scale	High to Very High
Likelihood	Almost certain
Timeframe	Long-term
Financial Implications	\$10-\$15 million
Methodology	Potential financial impact is a high-level estimate of capital expenditure required, in today's money
Risk Mitigation	<ul style="list-style-type: none"> Changes to Napier Port's operational layout in line with existing provisions in the Master Plan to increase our on-port rail infrastructure Further consideration of climate change related effects will be included in Napier Port's master planning process

iv) Commercial Impacts

Whilst the extent of potential impacts are not conclusive, available data suggests climate change may negatively affect Hawke's Bay's primary industry with potential for crop production disruption, heightened pest and disease spread, and destabilised growing conditions. Forestry, agriculture and horticulture are all significant primary industries within the Hawke's Bay region, and Napier Port plays an important role within these industries, by connecting suppliers with international customers. These sectors are vulnerable to the impacts of climate change (i.e. potential increases in rainfall intensity, mean temperatures and drought severity) while changes in production may not directly affect Napier Port, there is a significant indirect risk to revenue should these industries suffer from the effects of a changing climate.

Drought, in particular, has been highlighted as one of the key risks for Hawke's Bay, with some of the largest increases to the annual number of days of soil moisture deficit compared to other parts of the country¹². The largest impact is expected to be in the meat industry with increased drought frequency resulting in changes to pasture composition. Increased droughts coupled with occasional heavy rainfall could have major adverse effects on soil stability.

The meat industry is a significant exporter through Napier Port and drought therefore poses a risk to revenue in the medium term and almost certainly in the long term. Other industries such as horticulture and forestry are in a better position to manage the risk of drought through various practices, although horticulture will have an increased reliance on water security.

Risk Driver: Drought	
Scale	High to Very High
Likelihood	Almost certain
Timeframe	Medium to Long-term
Financial Implications	\$15-\$20 million Trade loss exposure estimated as 15%-25% of annual (TEU) exports
Methodology	Potential financial impact is an estimate of the annualised impact on trade volume in today's dollars assuming a complete loss of current refrigerated container trades without replacement by other substitute produce
Risk Mitigation	<ul style="list-style-type: none"> Napier Port has limited direct control in managing this risk. Napier Port will keep an active interest in potential impacts and how that might change export volumes, shipping patterns and changes in exports through the regular master planning process

Transition Opportunities

Addressing climate change potentially offers various chances for growth and improvement. These include the opportunity for Napier Port to become more resource-efficient, using cleaner energy sources, creating innovative service offerings, and enhancing supply chain resilience.

Opportunities may include a reduction in recurring expenses over the long term or additional revenue streams from requirements for ships to use shore power while in port and opportunities to partner in the supply chain to provide low carbon or zero emission solutions for customers.

Additionally, climate change might create new opportunities as crops dynamically shift, allowing the horticulture sector to cultivate new thermally resistant species and varieties. Napier Port considers that if climate change alters the primary sector, crop substitution opportunities will become available.



+ Metrics and Targets

NZ CS Requirements. An entity must disclose:

- + The metrics that are relevant to all entities regardless of industry and business model
- + Industry-based metrics relevant to its industry or business model used to measure and manage climate-related risks and opportunities
- + Any other key performance indicators used to measure and manage climate-related risks and opportunities; and
- + The targets used to manage climate-related risks and opportunities, and performance against those targets.

Greenhouse Gas (GHG) Emissions Methodology

Napier Port has been measuring its Scope 1, 2 and limited Scope 3 emissions for several years which have been reported in the Annual Report and on the Napier Port website. During FY2021, we reviewed and redefined our GHG inventory to enable a better understanding of our emissions profile. During FY2022, our focus was creating the baseline year, so we took this expanded GHG inventory and collected the associated data to create a new base year for emissions reporting. Reported emissions for FY2022 included a wider range of scope 3 emissions (including freight and employee commuting) and was externally certified by Toitū Envirocare. Reported emissions for FY2023 and FY2024 have been collected and certified on the same basis as FY2022 (our baseline year). The FY2024 audit certification can be found on our website at:

www.napierport.co.nz/sustainability/Toitu-Independent-Audit-Opinion-2024



The certification means we've measured and managed the operational emissions of our organisation in accordance with ISO 14064-1:2018 and the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004).

Defining our (GHG) emissions inventory

We worked with an external consultant, BraveGen, to define our GHG inventory scope to reflect best practice including identifying a wider range of Scope 3 emissions. This expanded definition of our GHG inventory has been used to determine and report our emissions from FY2022. This provides a better understanding of our emissions profile, identifies where opportunities for reductions are, enables the setting of GHG targets and measures, and reporting overall progress. The GHG emissions sources included

in this inventory were identified with reference to the methodology in the GHG Protocol and ISO 14064-1:2018 standards. We use BraveGen's GHG emissions inventory software to record and report these emissions. With a robust emissions inventory in place the same GHG emission sources were able to be reported on in FY2023 and FY2024 and compared to our FY2022 base year.

Under the GHG Protocol, these emissions are classified under the following categories:

Scope 1 – Direct GHG emissions occurring from sources that are owned or controlled by the company.

Scope 2 – Indirect GHG emissions occurring from the generation of purchased electricity, heat and steam consumed by the company.

Scope 3 – Emissions that occur because of the company's activities, but from sources not owned or controlled by the company.

The emission sources in Table 1 have been included in the inventory, including the source, methodology and the level of uncertainty. The primary source of emission factors for calculating emissions data is obtained from the Ministry for the Environment emissions guidance (MfE, 2023). The latest relevant Ministry for the Environment emission guidance available at the beginning of each reporting period has been used consistently for the entire reporting period.

Table 1

Scope	Emissions Category	Activity	Data Source	Data Collection Unit	Methodology, Data Quality, Uncertainty (Qualitative)
Scope 1	Mobile Combustion	Diesel fuel for: *Mobile plant (cranes, forklifts & trucks) *Floating plant (tugs and pilot vessel) *Vehicles	Invoice/Fuel records from provider	Litres	Fuel based method. Accurate records from billing system. Low uncertainty.
		Purchased Electricity	Electricity consumption	Invoice/Billing data from supplier	kWh
Scope 3	Business Travel	International air travel Domestic air travel	Air New Zealand Emissions reports	TCO2e	High quality data and low uncertainty due to accuracy of reports provided by airline.
	Upstream transportation and distribution (Freight as a Service)	Out of region cargo coming into Napier Port via rail and road	Monthly reports from relevant departments	Tonne/Km	Manual process. Potential to miss data. Medium to low uncertainty.
	Employee Commuting	Emissions from the use of personal vehicles to commute to and from work	Manual data collection. Survey completed by staff, average distance is from suburb using GIS mapping	pkm	Higher level of uncertainty due to calculation assumptions e.g. an assumption has been made that people are commuting 5 days per week (for all available working days). For those that have not completed the survey, it is assumed 75% drive a petrol car and 25% diesel. High/medium uncertainty.
	Purchased good & services (Water supply)	Water consumption at all Napier Port sites that operate within organisational boundary	Invoice data from Napier City Council	K/litres	Assume all water usage use is captured on invoices. Accurate records from billing system. Low uncertainty.
	Fuel and energy related activities	Transmission and distribution losses associated with Scope 2	Invoice/Billing data from supplier	kWh	Accurate records from billing system. Sub metering used for billing. Low uncertainty.
	Waste generated in operations	Emissions associated with end-of-life waste disposal to landfill. Emissions associated with waste sent to recycling facilities	Monthly reports from Waste Management	Tonnes	Assumed weights correct. Low uncertainty.

Additional Scope 3 categories are not reported where they are not relevant to our business and/or not technically feasible or cost effective to be quantified. The excluded Scope 3 categories are shown in Table 2 below:

Table 2

Scope	Emissions Category	Activity	Reason for Exclusion
Scope 1	Fugitive Emissions	Refrigerant used by: <ul style="list-style-type: none"> Office buildings Vehicles 	Estimated to be immaterial. Difficult to obtain data.
Scope 3	Purchased goods & services	Any purchased goods and services not identified within the inclusion table	Emission sources difficult to obtain and possibly unreliable.
	Capital goods	Capital goods purchased outside of significant projects and purchases	Estimated to be immaterial. Difficult to estimate due to the range of emission sources and lack of data.
	Indirect GHG emissions from products used by an organisation	Emissions associated with major construction projects	Estimates involved. Long supply chains. Medium to very high uncertainty. No material activity.
		One time capital goods	Estimated to be immaterial. Estimates involved. Long supply chains. Medium to very high uncertainty.
		Freight for goods purchased	Estimated to be immaterial. Manual process across multiple departments. Medium uncertainty.
	Indirect GHG emissions from transportation	Fugitive emissions from refrigerant leakage from containers	Estimated to be immaterial. Shipping lines own the containers and are responsible for refrigerant maintenance.
Use of sold products	Visiting vessels fuel use while within Port boundary	Unclear boundary and difficult and costly to calculate. No immediate data available. High uncertainty.	
Scope 3	Not deemed to be relevant to Napier Port		
	Upstream leased assets	Leased buildings and assets where a port entity is a tenant (electricity, fuel and gas) if not included in Scope 1 & 2	No data available/Not relevant
	Downstream transportation and distribution	On road vehicles or rail delivering cargo (outside Port boundary)	No data available/Not relevant
	Processing of sold products	Processing of wholesale products sold in the reporting year by downstream companies	No data available/Not relevant
	End of life treatment of sold products	Rendering waste	No data available/Not relevant
	Franchises	Applies to franchise operations	No data available/Not relevant
	Investments	Applies to financed emissions and the downstream impacts of investment and lending activities	No data available/Not relevant

Organisational boundaries were set with reference to the methodology described in the GHG Protocol and ISO14064-1:2018 standards. Within the GHG Protocol, Napier Port has elected to use an operational control consolidation approach to account for emissions. Accordingly, any joint venture partnership is excluded as there is no operational control.

Industry Based Metrics

Napier Port measures and reports total Tonnes of Carbon Dioxide Equivalents (tCO₂e) and tCO₂e per tonne as our industry based metrics as they are considered to be most relevant to our business activity and the entire New Zealand port industry, whether significant container operations exist or not.

Napier Port is a participant in the NZ Ports Environmental and Sustainability Group (NZ Ports) which has a mandate to investigate forming a common approach to measuring and reporting on carbon emissions that would fairly represent comparable industry climate-related risks and opportunities. Specific guidance is also being considered for developing Scope 3 inventory guidelines, together with calculation tools tailored to NZ Ports' needs. This work is expected to be completed during FY2025.

Napier Port is currently using an internal shadow emissions price per tCO₂e when undertaking emission scenario and financial analysis when assessing procurement and business case opportunities. The central base price used is aligned to the central region carbon shadow price as developed by New Zealand Treasury (FY2024: \$100/tCO₂e), however this may be varied depending on the analysis being undertaken.

Capital Deployment

Napier Port undertakes long term planning including an infrastructure master planning and financial models to capture its current plans and forecasts. Financial forecasts incorporate future climate related spending plans where identified and quantifiable, and in the cases where future spend is considered probable but not yet reasonably quantified, general capital provisions are incorporated into forecasts and reviewed periodically.

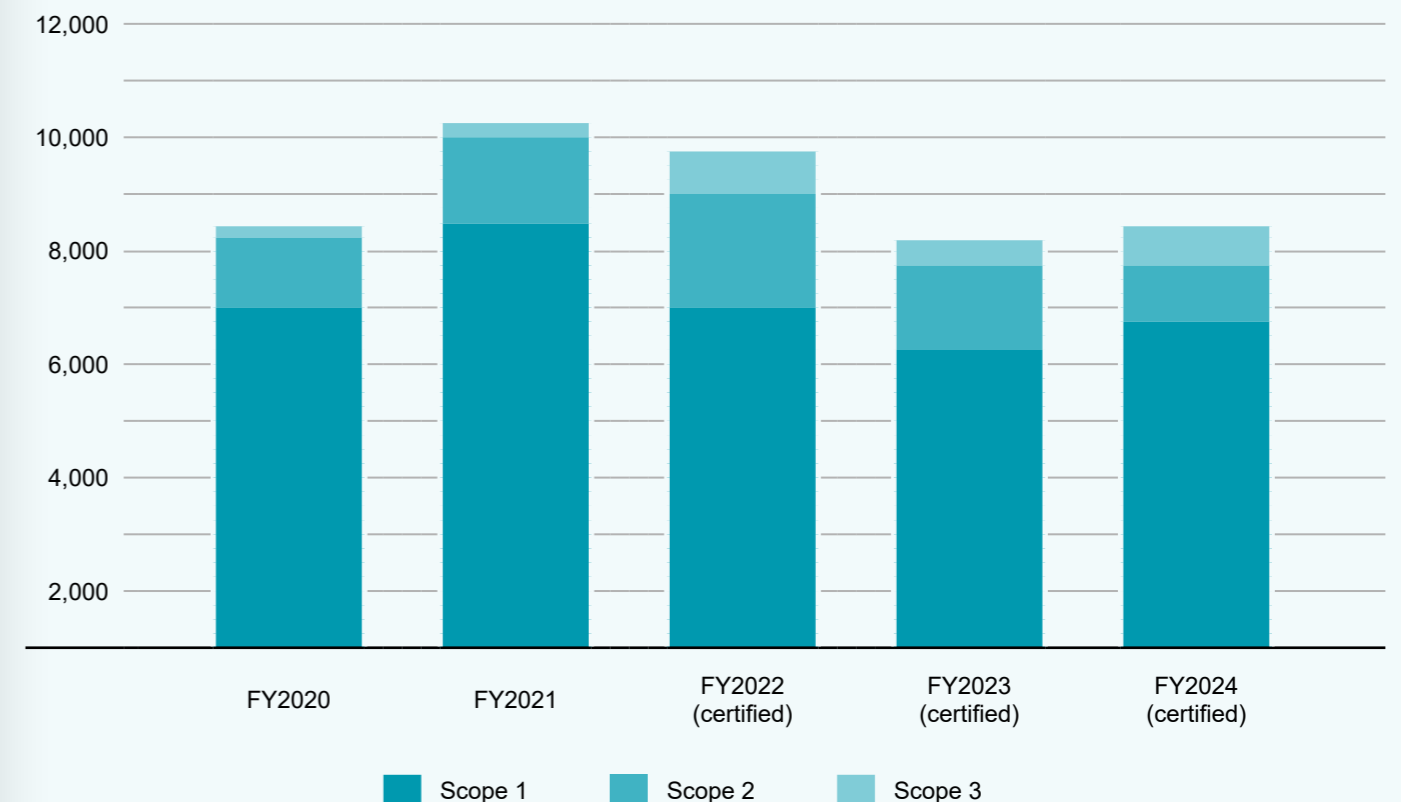
To date, Napier Port has had limited expenditure directly and solely related to climate-related risks and opportunities. It is currently undertaking capital works to reinstate sections of its sea defences that experienced some damage during Cyclone Gabrielle in 2023 and to deploy rock bag protection to its eastern beach area to protect against future site and infrastructure damage from erosion. Additionally, Napier Port is currently in the process of renewing elements of its mobile plant fleet with lower emitting replacements. The combined value of these projects is approximately \$14.7 million to the end of FY2024, and for which additional spend is being incurred in FY2025.

GHG Emissions Reporting

In FY2024, our total carbon emissions were 8,740 tCO₂e, which was an increase of 0.3% from 8,712 tCO₂e tonnes in FY2023.

This is shown in Figure 1 below.

Figure 1: Total Carbon Emissions tCO₂e



FY2024 Scope 1 emissions (tCO₂e) were 6,785 tonnes, up 506 tonnes from the 6,279 tonnes recorded in FY2023. Higher volumes following the recovery from Cyclone Gabrielle resulted in increases in crane, truck and stationary energy (diesel generators) fuel usage while reduced marine emissions attributed to fewer vessel calls and secondary movements provided a partial offset. Prioritising the use of our more fuel-efficient tug, Kaweka, wherever possible added positively to the marine offset.

The reduction in forklift emissions is related to the acquisition during FY2023 of two Eco Reachstackers, which are classified as forklifts in our emissions analysis, and have contributed to the decrease in fuel usage for the forklift fleet during FY2024. Fuel usage data collected so far has shown the Eco Reachstackers fuel usage averaging 17 litres of diesel fuel per hour compared with the legacy Reachstackers which average up to 25 litres per hour - this represents a 32% reduction.

Our purchased electricity (Scope 2) emissions decreased to 1,012 tonnes from 1,487 tonnes in FY2023. This reduction has occurred despite a 10% increase in electricity consumed during the year. The main driving factor behind the decrease was the material

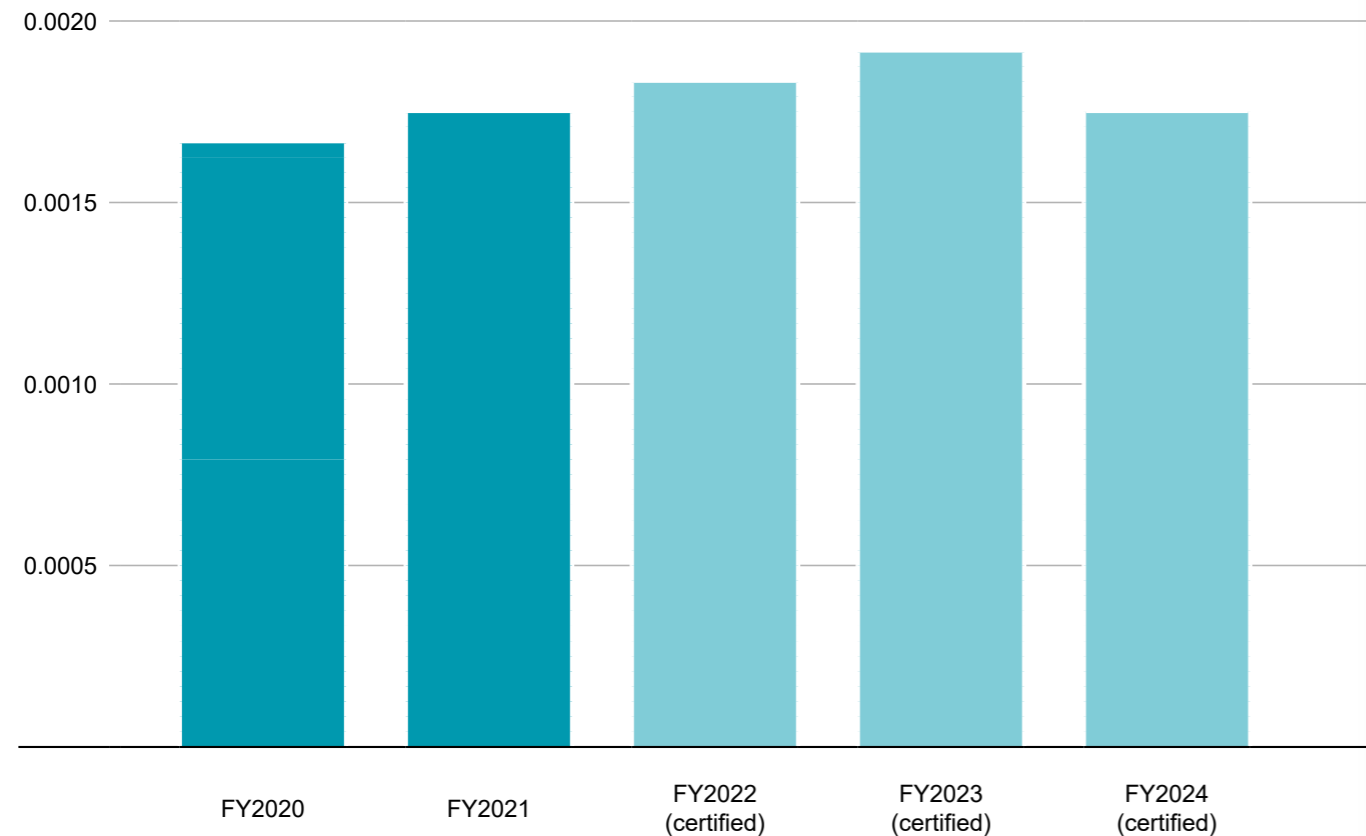
drop in the Ministry for the Environment purchased electricity emission factor, which is used to convert electricity consumption into tCO₂e.

Partially offsetting the Scope 1 increase is a small decrease in Scope 3 emissions.

Scope 3 emissions decreased to 943 tonnes from 947 tonnes in FY2023. The main contributors to this decrease were a reduction in waste/recycling emissions and transmission & distribution losses (T&D) emissions. The waste/recycling reduction is attributable to a reduction in container throughput through our warehousing operations and our depot container services contractors. The T&D emissions decrease is linked to the Scope 2 purchased electricity emissions reduction. Offsetting the overall decrease was an increase in employee commuting emissions.

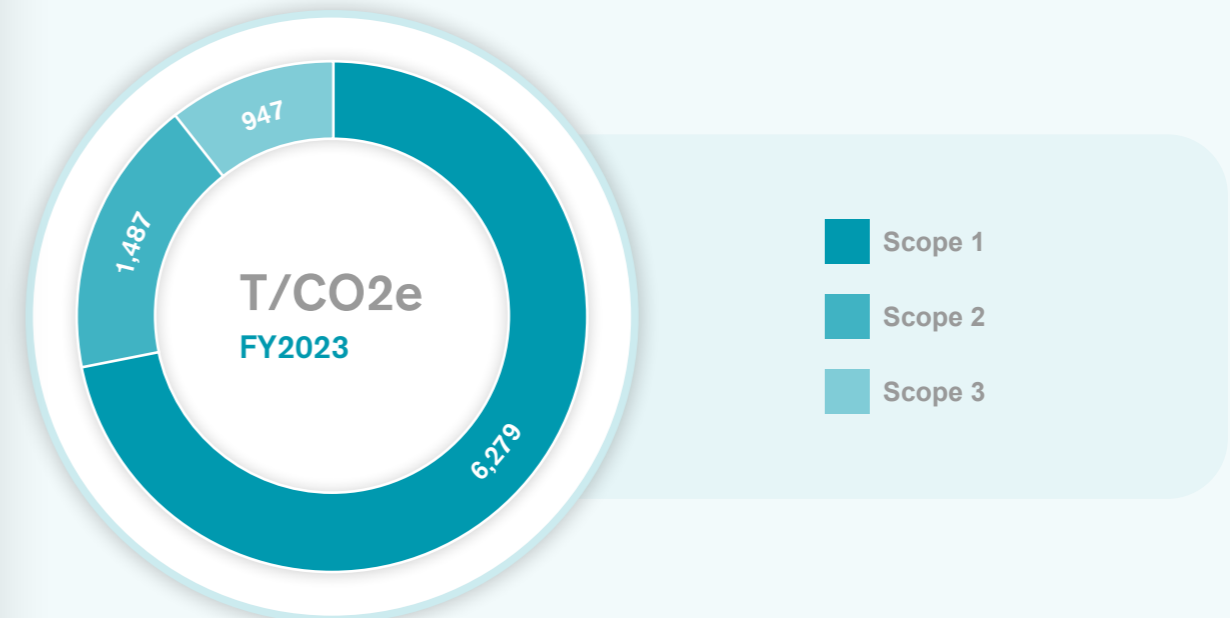
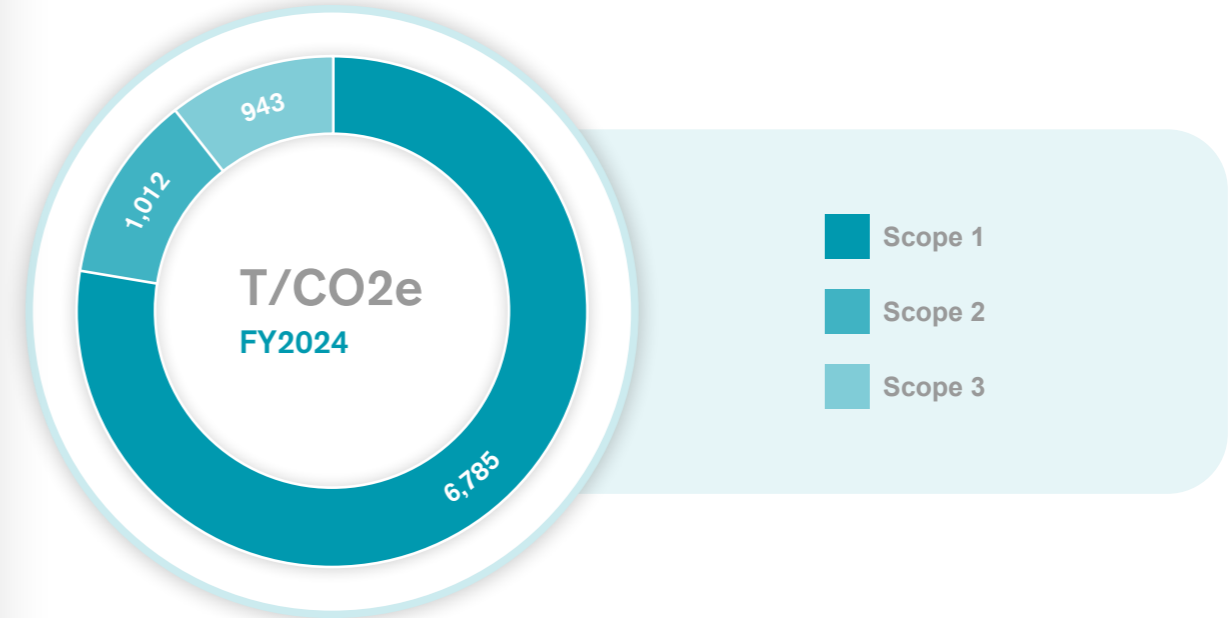
Our 'per cargo tonne' intensity metric decreased 7.2% from 0.00189 t/CO₂e in FY2023 to 0.00175 t/CO₂e in FY2024, as shown in the below chart. This is primarily attributable to being able to hold overall FY2024 emissions to a small increase (0.3%) despite an 8% increase in annual tonnage for the year.

Figure 2: Carbon Emissions tCO₂e Per Tonne



Key insights into our carbon footprint and our FY2024 emissions are represented by the charts below:

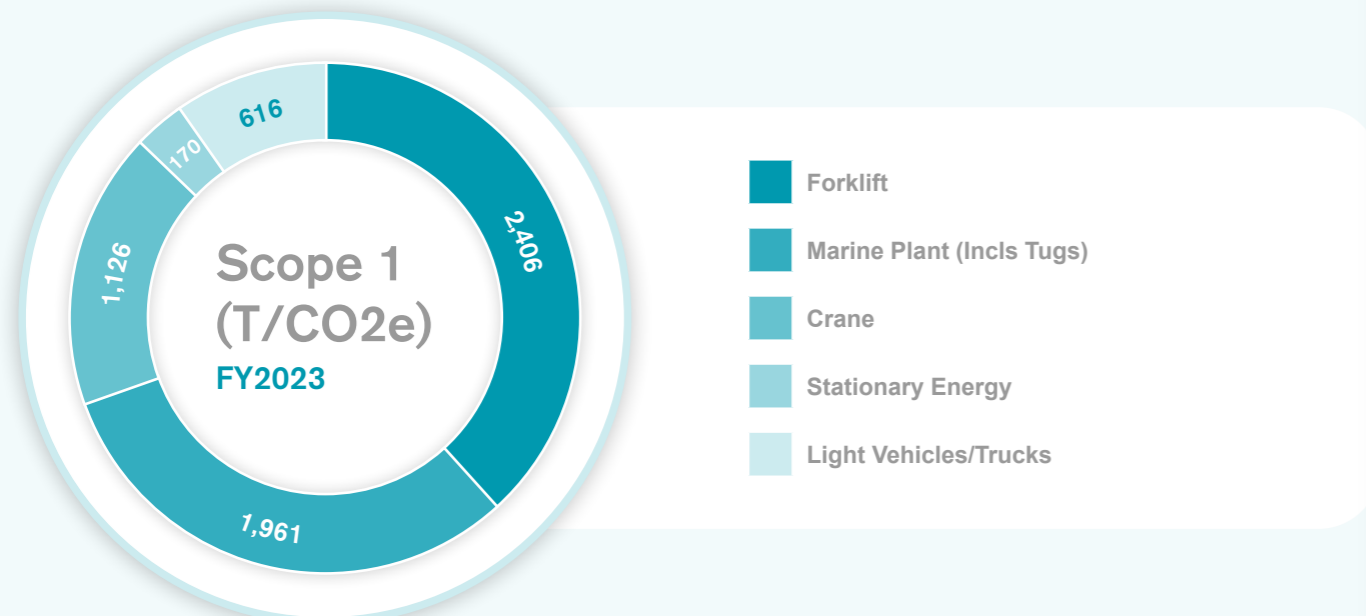
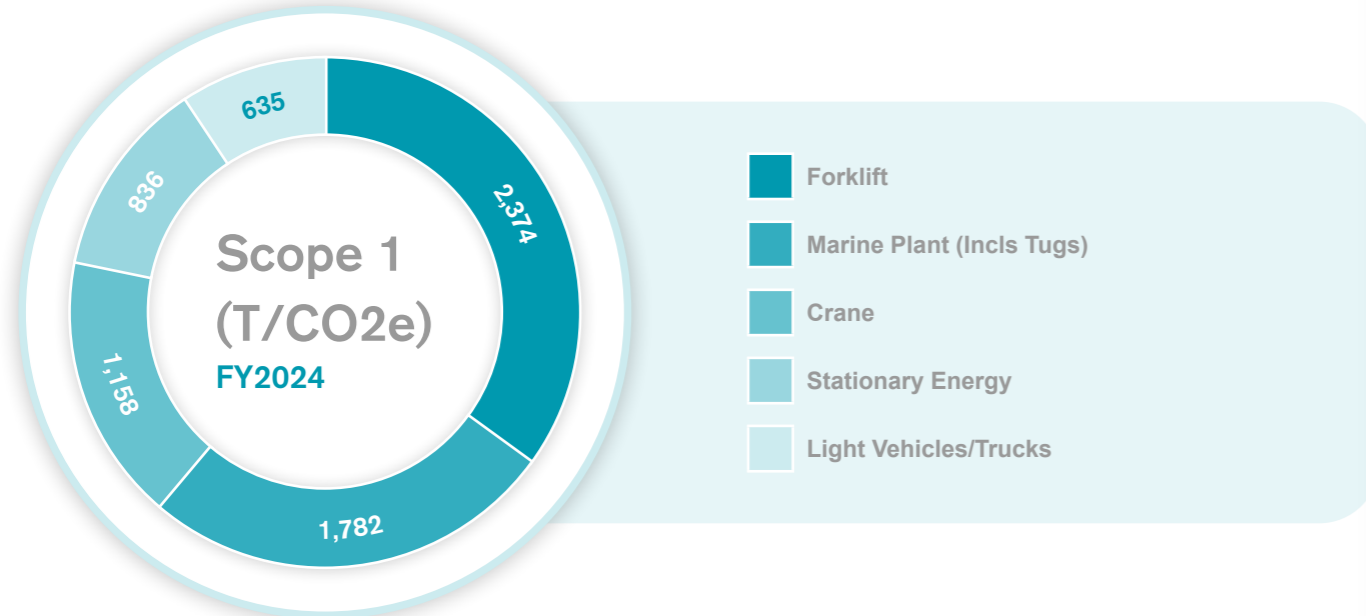
1) Total emissions broken down by scope



2) Scope 1 emissions broken down by top emission sources

Scope 1 emissions produced by mobile plant and marine assets contribute 77% of Napier Port's total FY2024 emissions (up from 72% in FY2023). The emissions source with the biggest change was stationary energy which saw a 393% increase when compared with FY2023. This is attributable to FY2023 reefer TEU volumes being impacted by Cyclone Gabrielle resulting in lower than anticipated stationary energy emissions for the year. FY2024 saw a 28% increase in reefer export TEUs which required the hire of additional generators to manage the increased volumes.

The make-up of Scope 1 emissions is represented in the charts below:

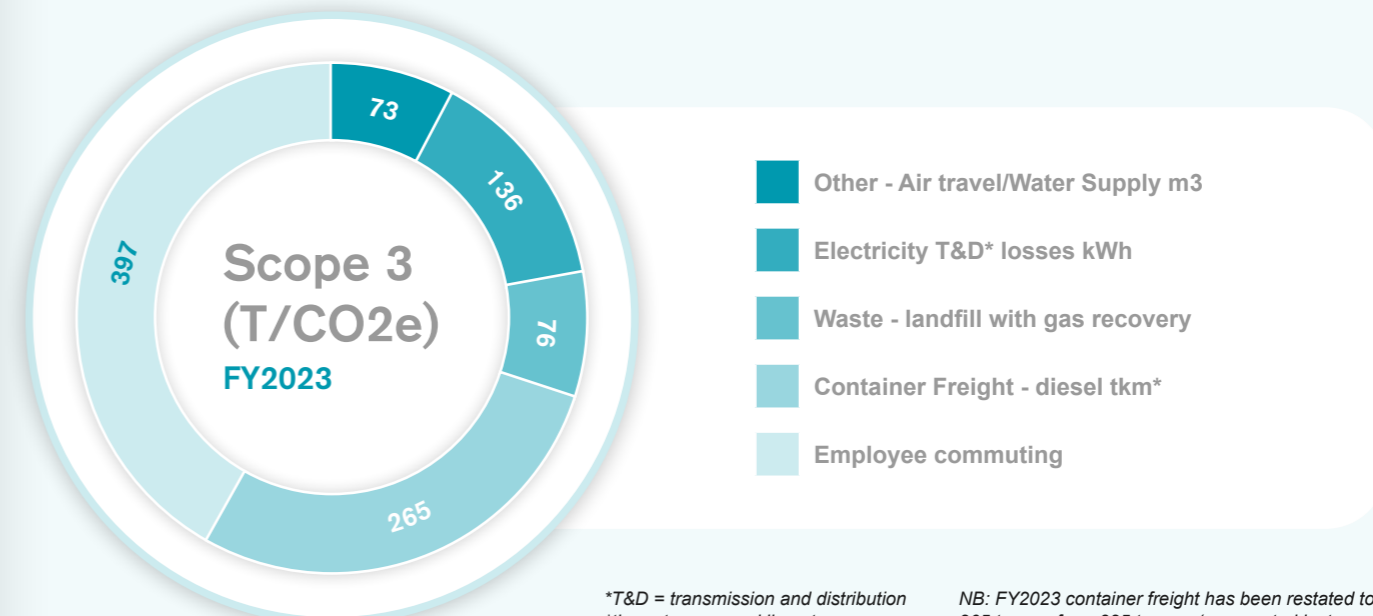
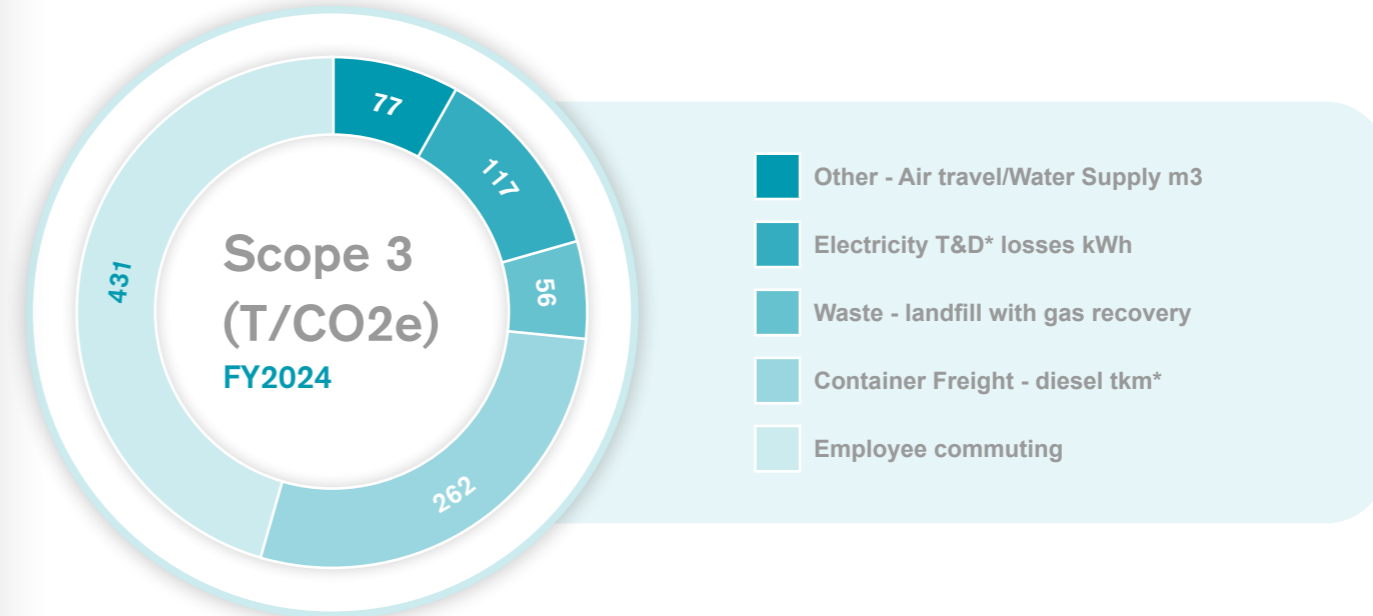


3) Scope 2 emissions broken down by top emission sources

12% of Napier Port's total FY2024 emissions related to Scope 2 emissions (FY2023: 17%), which arise from purchased electricity off the national electricity grid. Consistent with FY2023, the top emission sources within this category are powering reefer containers, operational wharf and street lighting towers, and tug shore power and related infrastructure.

4) Scope 3 emissions broken down by top emission sources

11% of Napier Port's total FY2024 emissions related to scope 3 emissions which is consistent with FY2023 (11%). Breaking down the Scope 3 emissions data further, 46% of total Scope 3 emissions are attributable to employee commuting and 28% is attributable to freight (trains and trucks) operating between Napier Port and Manawatu Inland Port.



*T&D = transmission and distribution
*tkm = tonnes per kilometre

NB: FY2023 container freight has been restated to 265 tonnes from 325 tonnes (as reported last year)

Setting Targets - Decarbonising Napier Port

Napier Port is committed to decarbonisation and reaching net zero greenhouse gas emissions by 2050. Our initial Emissions Reduction Strategy illustrates incremental progress over time aligned to the removal of technological and economic adoption barriers whilst considering the potential impacts. Consequently, Napier Port is not able to set any realistic short or medium time-bound reduction targets at this time. Achievable reduction targets will be set once the appropriate asset masterplans have been refreshed to incorporate the feasible emission reduction technologies required to achieve the ultimate net zero by 2050 outcome.

Our sustainability strategy includes placing a focus on climate action and energy and supporting national net zero 2050 targets. As a result, our initial Emissions Reduction Strategy was developed, providing a framework for possible adoption of low emission technology and to establish a high-level pathway for Napier Port to reach net zero by 2050.

At a high level, the strategy aims to:

- Focus on the reduction of diesel consumption given it is the primary source of our current emissions
- Align investment in low emissions technology with:
 - Our asset renewal program
 - Any future transformation of Napier Port container terminal operating modes
 - The availability of emerging technology

- Grow our electrical infrastructure through potential electrical capacity upgrades
- Establish a decision-making framework that considers low emission technologies and incorporates emission considerations in investment or business development decisions.

This strategy framework will continue to be further developed and involves further investigations into the viability of alternative fuel sources and the array of new low emissions technology.

Current emission reduction initiatives integrated within our business:

- The operation of three Eco Reachstackers and a further five on order with delivery due during FY2025
- A continual program of light retrofitting with low energy consumption LED alternatives to our light towers and storage sheds
- Replacement of clear lite cladding systems to reduce the need for interior lighting during daylight hours
- Deliberate deployment prioritisation of lower fuel consuming tugs
- Reduction in unproductive usage (idle) hours across our container handling mobile plant through the leveraging of IOT data and technology systems
- Procurement policy commitments to consider and evaluate renewable energy technologies and outcomes as a step within the procurement of higher value assets.

Underpinning our existing Emissions Reduction Strategy and supporting our wider Sustainability Strategy, Napier Port currently has the following initiatives underway, each with the potential to support the decarbonisation of our operation:

- Progressing a decarbonisation and alternate energies assessment to evaluate in further detail, potential future pathways of reaching net zero emissions
- Awaiting the delivery of seven battery electric forklifts for use within our PortPack operation
- Continual refinement of existing operating modes and the identification of new modes to extract improved working efficiency
- Partnering with equipment suppliers to evaluate proof of concept renewable energy alternative equipment.

The decarbonisation and alternate energies assessment will evaluate currently available renewable energy alternatives, their wider adoption for use, and the whole-of-life cost and impact to integrate into our operations. Aligned with broader industry momentum and appreciating economic factors, a key output is expected to be the delivery of a more detailed action plan for progressing decarbonisation within our operations.

Napier Port's Sustainability Strategy and Action Plan is available on our website at:

www.napierport.co.nz/sustainability-strategy-and-action-plan



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Te Herenga Waka o Ahuriri

