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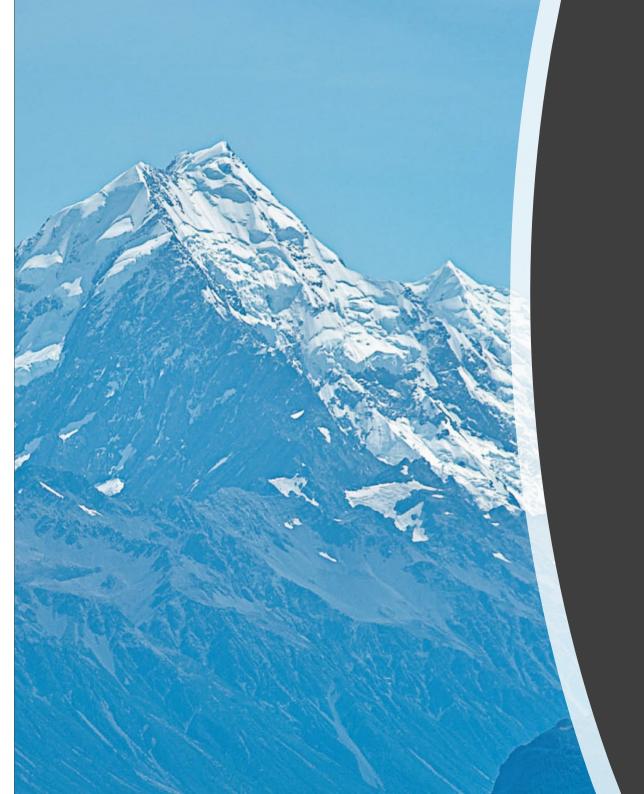
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### **EXECUTIVE SUMMARY**

- REDUCE | Methane 17% by 2035
- **HELP** | Solarise whānau homes and Marae
- **REMOVE** | Nitrogen Fertiliser by 2035
- DEVELOP | Marae as strong safe climate hubs
- **FIND** | Clean alternatives to diesel
- **INVESTIGATE** | Marine biodiversity initiatives
- **REINSTATE** | Climate focused Mahinga Kai programme
- EXPLORE | Native Tree planting
- INCENTIVISE | EV's, biking and public transport
- **RESTORE** | Ecosystems
- INNOVATE | By electrifying jetboats
- FUTURE PROOF | With renewable power projects





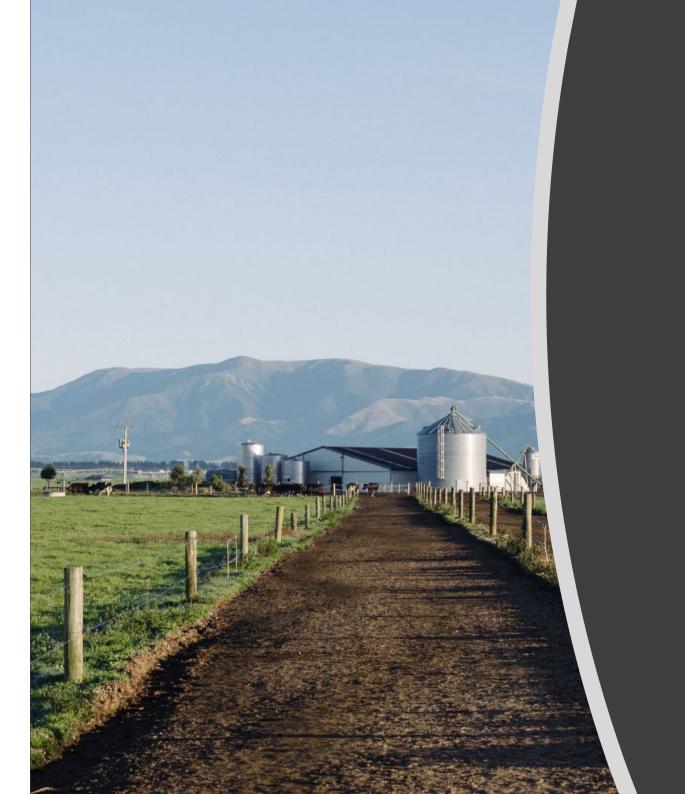
### Climate Change Overview



### Overview

- 2016: NZ signs Paris Agreement to keep global warming below 2 degrees Celsius, as close to 1.5 degrees as possible
- **2018:** He Rautaki mō te Huringa o te Āhuarangi
- **2018:** NTHC joins NZ Climate Leaders Coalition committing business to Paris Agreement targets
- 2019: First Ngāi Tahu Climate Change Symposium
- 2019: Zero Carbon Bill sets NZ target of net zero carbon emissions and 24-47% methane reduction by 2050
- 2020: NZ Parliament declares a Climate Emergency
- 2021: Climate Change Commission delivers final report to NZ Government.

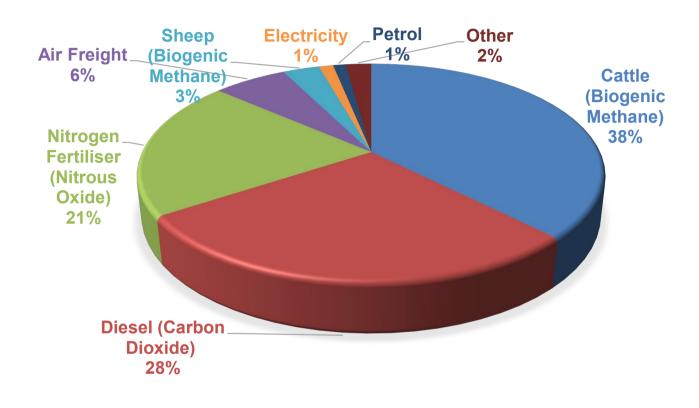
Te Rūnanga o NGĀI TAHU



### NGĀI TAHU EMISSIONS PROFILE



### NGĀI TAHU EMISSIONS 2020



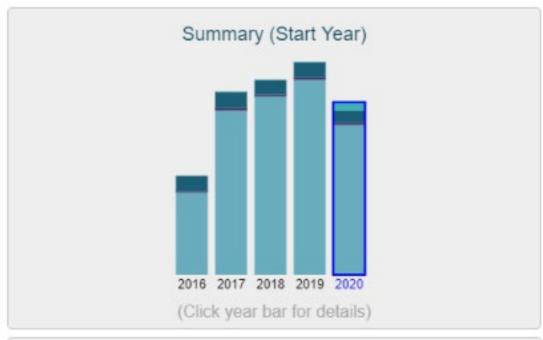
Cattle (Biogenic Methane)	38%
Diesel emissions (Carbon Dioxide)	28%
Synthetic Fertiliser (Nitrous Oxide)	21%

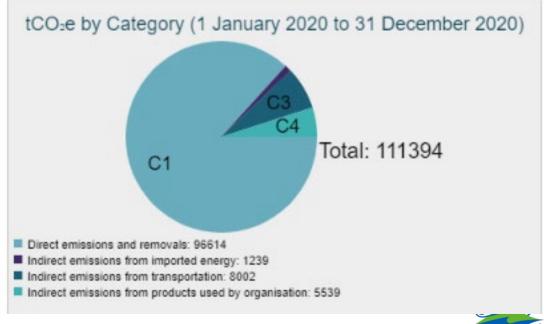
Source: Toitu emissions audit



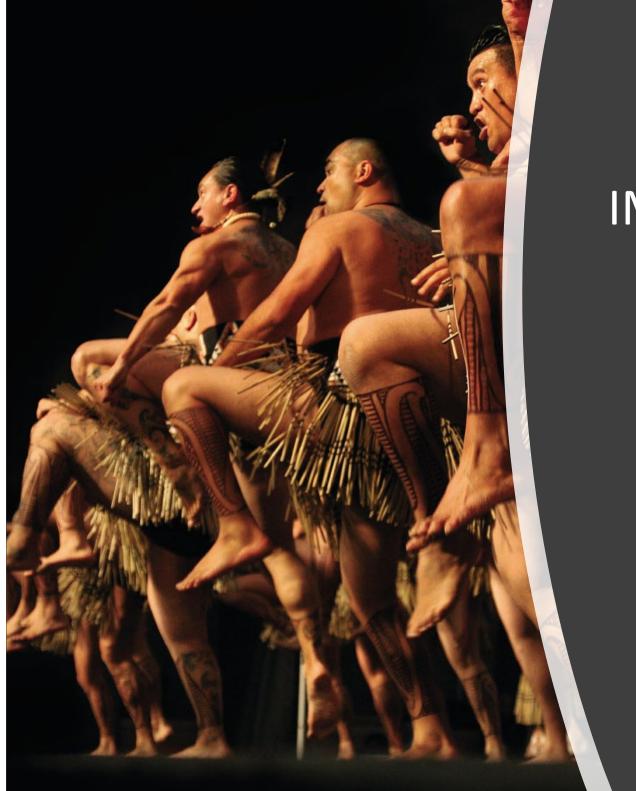


### NGĀI TAHU EMISSIONS PROFILE









# IMPLEMENTATION PLAN 2021



#### EIGHT KAUPAPA

Tahi | Greenhouse Gas Emissions

Rua | Marae and Whānau Resilience

Toru | Water

Whā | Operational Emissions

Rima | Ecosystems

Ono | Waste

Whitu | Renewable Energy

Waru | Education





# 1 | GREENHOUSE GAS EMISSIONS



#### AIM TO EMIT NET ZERO EMISSIONS

- Baseline assessments of emissions
- NT Farming cutting methane 8% by 2025
  13% by 2030 17% by 2035
- NT looking hard at diesel alternatives such as biofuel and green hydrogen
- Reducing car use by staff
- Passenger fleet 50% EV by 2025, 100 per cent EV by 2030
- Investigating **EV procurement** options for whānau and staff.
- Rental cars and taxis will be expected to be all EV in 4 years
- Half of Tourism's jet boat fleet will be electric by 2030 and fully electrified 5 years later.



## 2 | RESILIENCE



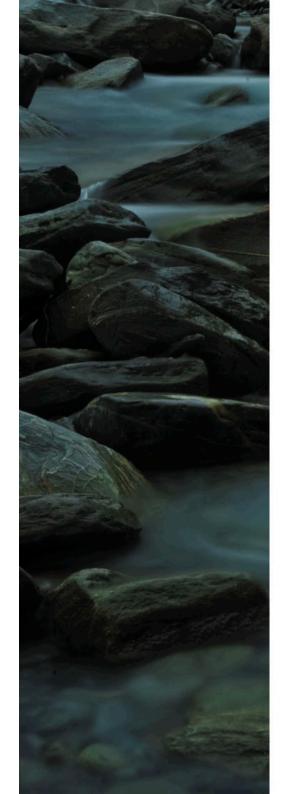
#### AIM TO MAKE MARAE HUBS OF SAFETY

- Marae resilience embedded in the Climate Strategy
- Critical area from first tribal Climate symposium in 2019.
- In times of climate emergency Marae can serve as safe and strong community hubs.
- We will assist Papatipu Rūnanga to establish climate response plans, working alongside Government.
- Identify green-tech solutions for Marae.
- Continue encouraging self-sufficiency in energy, water and waste
- Going beyond defensive survival plans to ensure thriving whānau in a climate-changed, low-emissions world.

Te Rūnanga o NGĀI TAHU



## 3 | WATER

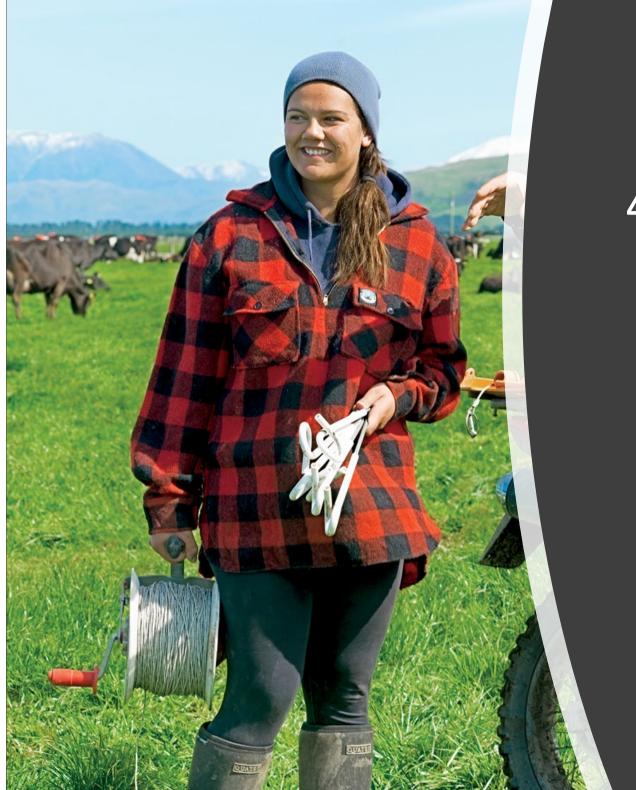


# THE AIM IS THAT WATER USE IS ENVIRONMENTALLY RESPONSIBLE

- Water also identified by both the tribal symposium and future fit wananga as area of concern.
- NIWA report describes temperature increases across the takiwā by up to 3C by the end of the century.
- Some areas will experience **drought** while others extreme rainfall and **flooding**, affecting freshwater availability.
- Water management plans developed across the group.
- NT farming will introduce variable rate irrigation and real time water monitoring

Te Rūnanga o NGĀI TAHU

• Surveys of critical waterways within commercial operations will be carried out to monitor aquatic life.



# 4 | OPERATIONAL EMISSIONS



# THE AIM IS TO TOTALLY ELIMINATE ANY HARMFUL GAS, SOLIDS OR LIQUID POLLUTION.

- NT will implement soil reports, construction guidelines, looking for non-hazardous alternatives for chemicals that are presently being used.
- This includes farm fertiliser which can have a polluting effect on freshwater.
- Huge plus here for **Greenhouse Gas reduction**.
- NT's profile shows 21% of our emissions are Nitrous Oxide from fertiliser.
- Cutting Synthetic Nitrogen fertiliser use by 10% year on year will allow us to remove one fifth of our total emissions by 2035.





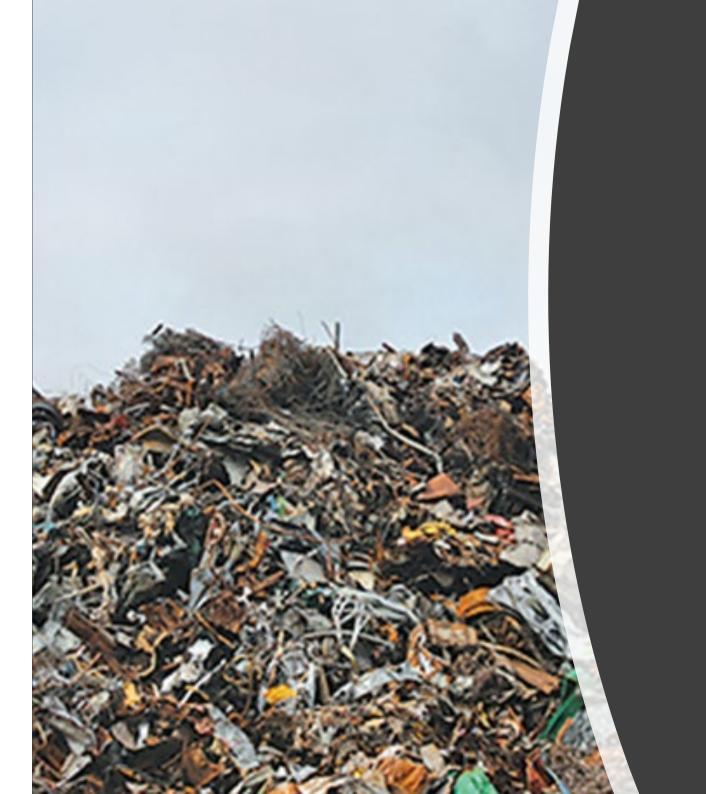
5 | ECOSYSTEMS



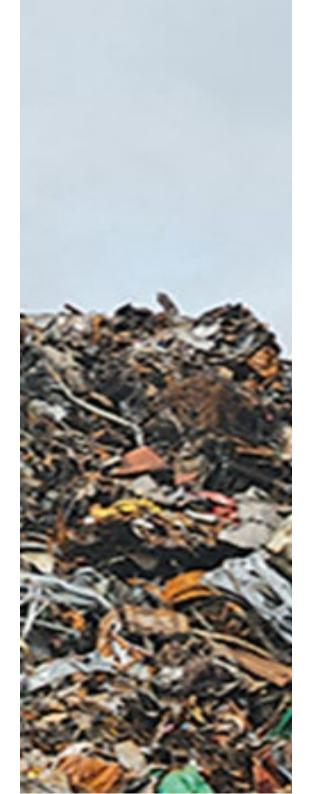
# THE AIM IS TO ENSURE THAT NONE OF OUR OPERATIONS ENCROACH ON ECOSYSTEMS

- Climate change will have a profound effect on the ecosystems especially the ocean - a big carbon sink
- Flow on effects for key kaimoana species.
- We will be identifying **biodiversity initiatives** in the marine environment.
- Wetlands and Native Forests too are crucial long-term absorbers of carbon
- Large scale planting native trees on marginal land being investigated
- Other initiatives ecological monitoring, working with mana whenua on ecosystem rejuvenation initiatives and reinstate the **Mahinga Kai fund** with a climate lens.





## 6 | WASTE



## THE AIM IS TO ELIMINATE ALL AVOIDABLE WASTE GENERATION

- Reuse, recycle, or otherwise repurpose any remaining waste.
- Organic waste at landfill a substantial producer of biogenic methane 9% of Aotearoa's emissions.
- Carry out a baseline assessment of waste outputs, including end of life disposal requirements in all purchasing.
- By 2025 60 per cent of all operations and partners will have waste reduction targets and monitoring and we are aiming for a paperless office by 2030 with digital publications only.





# 7 | RENEWABLE ENERGY



# AIM TO BE NET CONTRIBUTORS TO THE ELECTRICITY GRID

- Government aim is to build a 100% renewable electricity grid in partnership with iwi/Māori.
- **Solar power schemes** now cheapest source of power in history.
- Plan includes initiatives to produce our own green energy.
- Developing a sizeable source of renewable energy within the takiwā such as a solar or wind farm.
- Investigating funding options for **solarising** group buildings and whānau homes.
- With closure of Tiwai Point Smelter possibility of Green Hydrogen production - export earner as well as diesel alternative for freight trucks.





### 8 | EDUCATION



# AIM TO ENSURE ALL STAKEHOLDERS ARE ON BOARD WITH NT'S CLIMATE DIRECTION

- An effective, targeted Communications and Engagement
  Plan is key to the internal and external success
- Educational and digital media to facilitate two-way exchange with whānau and Papatipu Rūnanga
- Socialise NT's response to the climate emergency to stakeholders and the wider community
- A bi-annual Tribal Climate Change symposium so office and holdings remain in touch with grass roots – next 2022
- Make sure implementation plan is regularly revisited and reinvigorated
- Refresh the 2018 Strategy to reflect the Tribe's evolved thinking, embodied in this plan.





### **WE WILL:**

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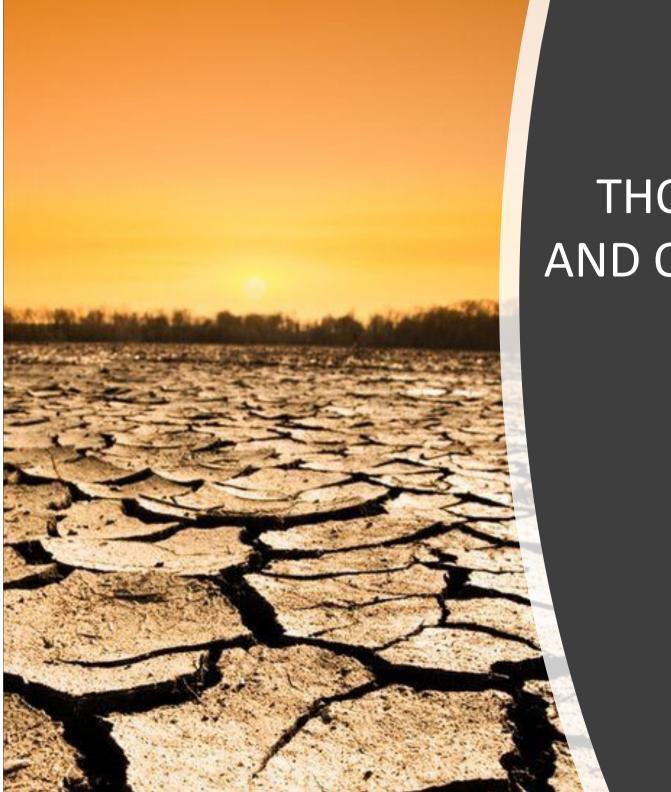




### **NEXT STEPS:**

- Amend Draft Implementation Plan to incorporate feedback from Te Rūnanga
- Engage with Papatipu leaders to gather their reflections on the draft Implementation Plan.
- Final Plan will be provided to Te Rūnanga for endorsement at August 2021 hui.
- For each of the 86 action points costing bands and emissions impact will be established.
- Strategy and Influence and NTHC will continue mahi already underway to update 2018 Climate Change Strategy.





THOUGHTS AND QUESTIONS



#### **BUT WE'RE SO SMALL**

Power of setting a good example to other organisations, companies and countries

#### WHY SHOULD NZ FALL IN LINE?

Export markets might penalise us if we fail to take action

#### IT'S HAPPENING SO SLOWLY

Yes, it's incremental – but your mokapuna will still ask what did you did to stop it

#### THIS WILL COST US

Dragging our heels will cost more in the long run.