



PALMERSTON NORTH CITY COUNCIL

MINUTES ATTACHMENTS
ENVIRONMENTAL
SUSTAINABILITY COMMITTEE

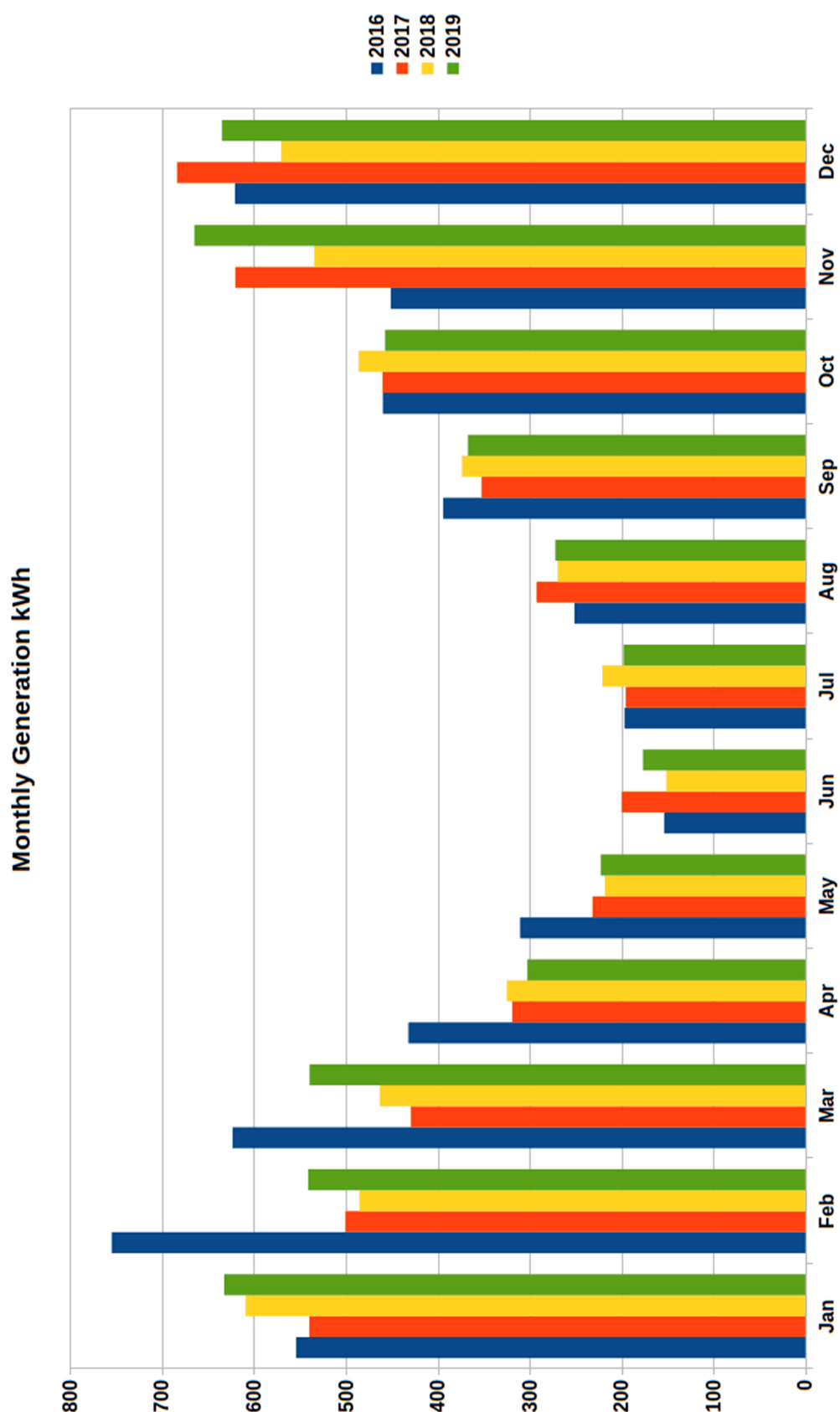
9AM, WEDNESDAY 12 FEBRUARY 2020

COUNCIL CHAMBER, FIRST FLOOR,
CIVIC ADMINISTRATION BUILDING,
32 THE SQUARE, PALMERSTON NORTH

ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING

12 February 2020

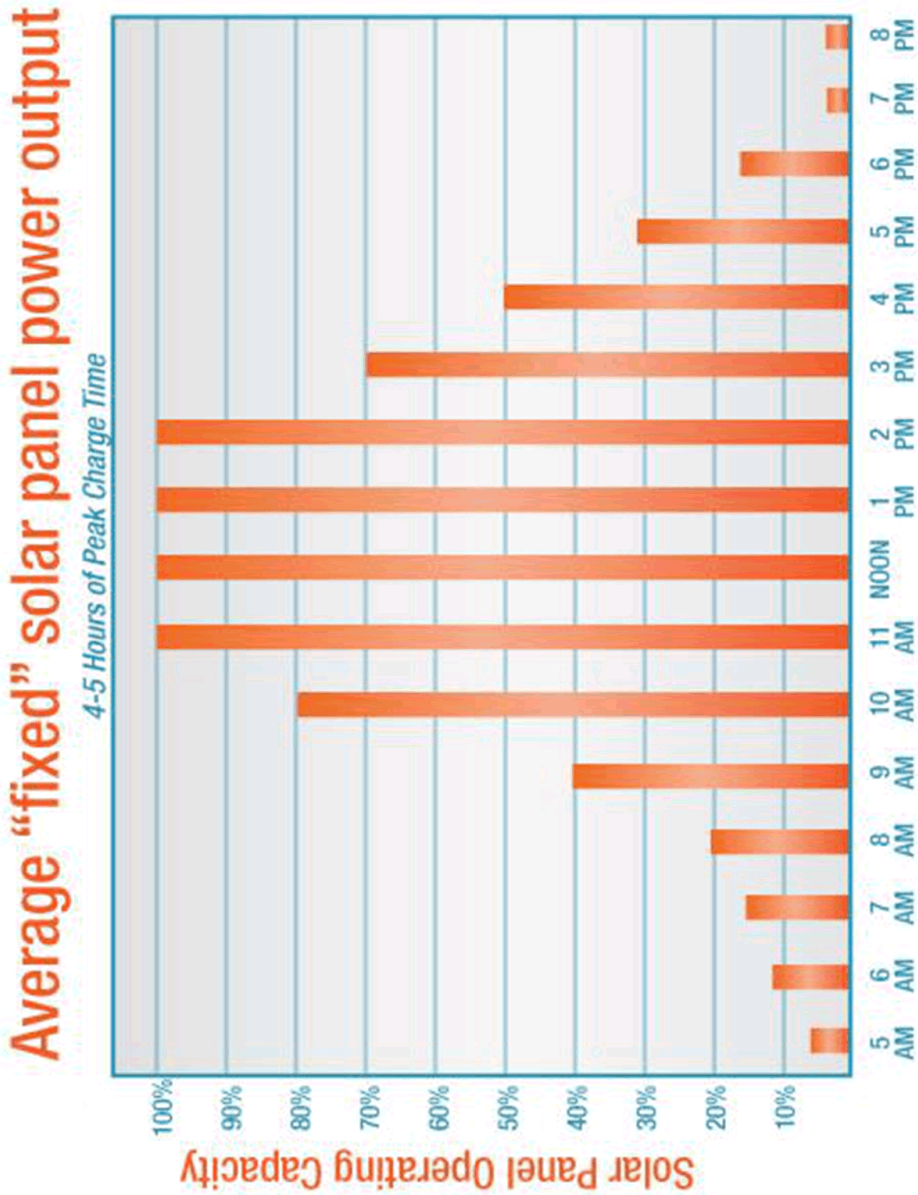
3	Public Comment	
1.	Mr Phil Stevens - public comment - solar electricity generation	4
4	Presentation - Mercury	
1.	Presentation - Mercury	8
5	Deputation - Environment Network Manawatu	
1.	Deputation - Environment Network Manawatu	23



If they use all that energy...

- 5,000 kWh per year
- \$ 0.30 per kWh tariff
- \$1,500 savings

But if they're not home during the day...

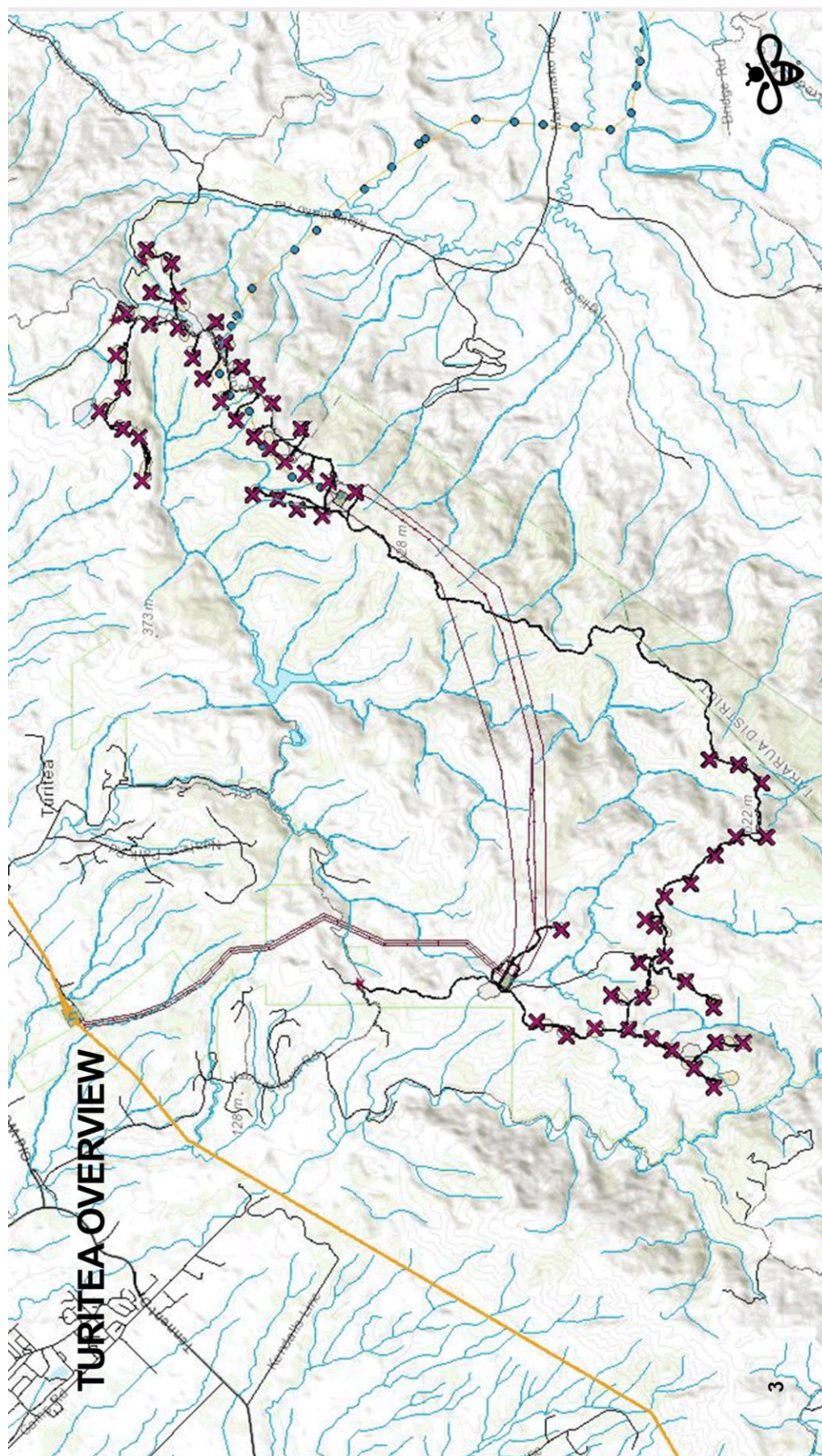


it's sold back to the grid at 1/4 the price!

- 3,500 kwh (weekdays)
- \$0.07 per kWh
- \$245 from feed-in tariff
- \$450 saved by using on weekends
- \$695 total



**WONDERFUL HOMEGROWN
RENEWABLE ENERGY.**



TURITEA MAKES A SIGNIFICANT CONTRIBUTION TO NZ'S ENERGY FUTURE

c.\$490m
TOTAL BUILD COST
including funding costs

222MW CAPACITY
840GWh PER ANNUM
NZ's largest wind farm by capacity and annual energy production
~32% increase in NZ installed wind

375,000
ELECTRIC VEHICLES
or 120,000 homes

2% INCREASE IN NZ
RENEWABLE ENERGY
from an existing base of c.84% renewable electricity generation

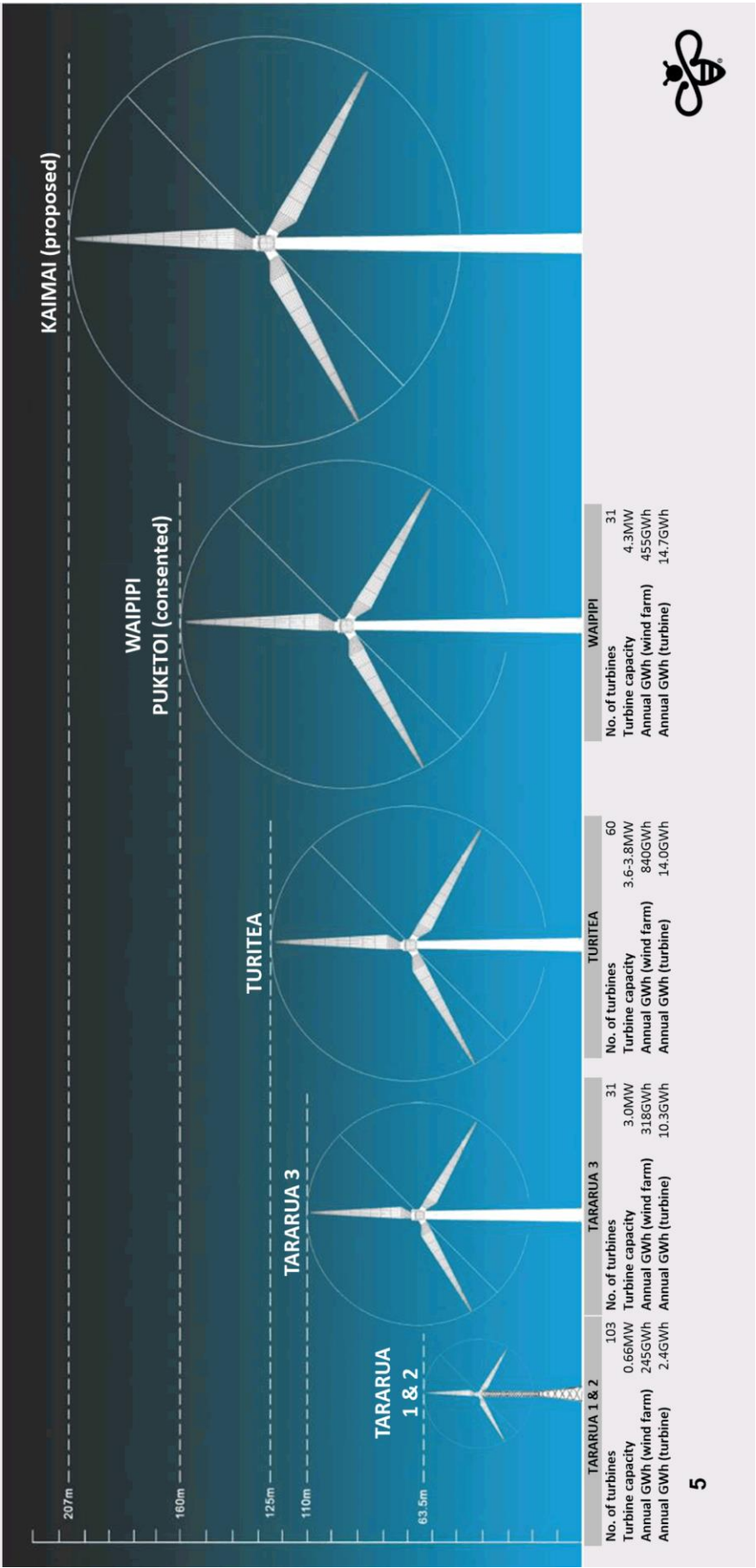
c.500 – 800 kT p.a.
CO₂e AVOIDED
through displacement of thermal generation

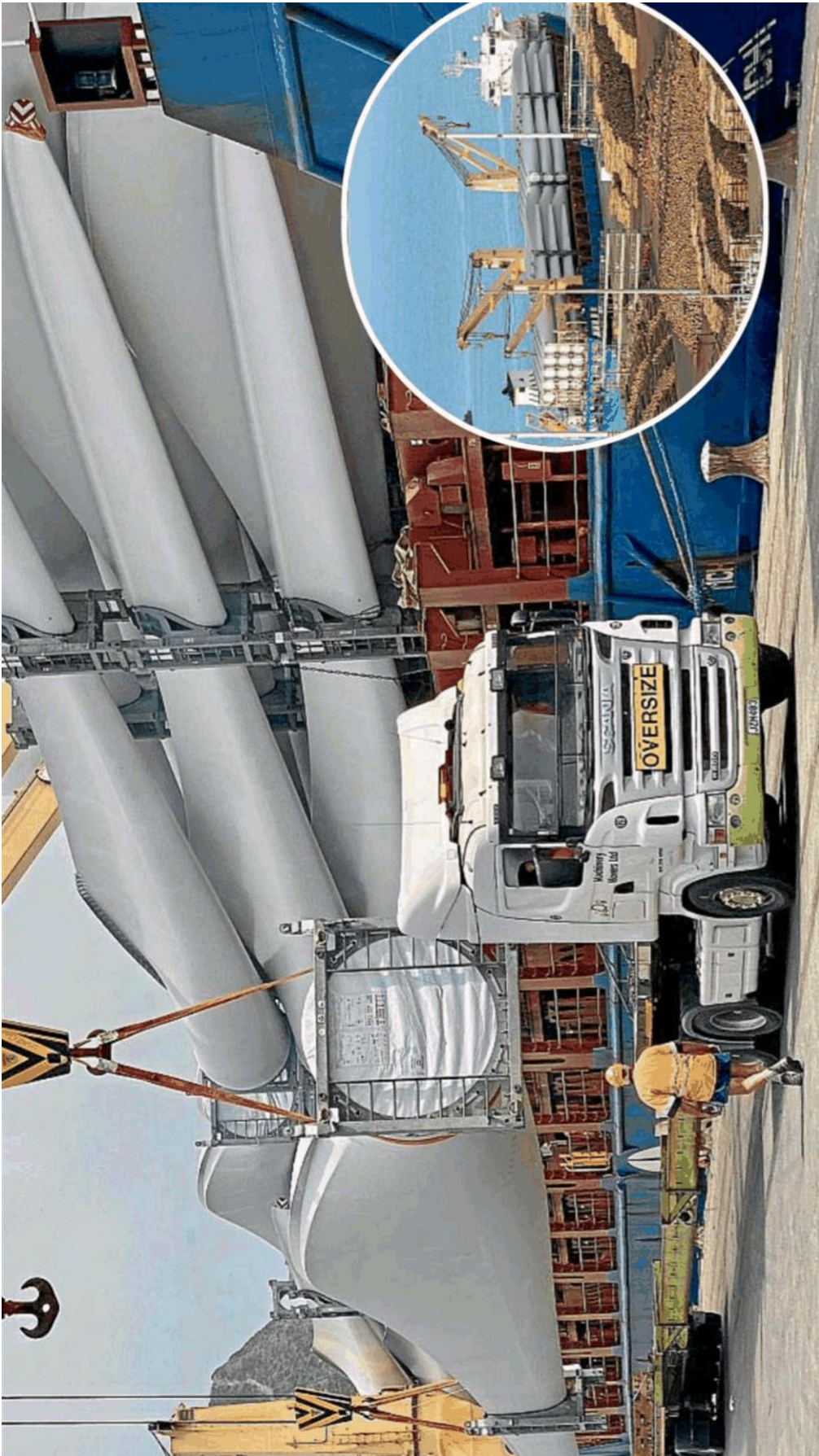
25 YEARS
TURBINE LIFE
supported by Service & Availability contract with Vestas NZ (based in Palmerston North)

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THE OPPORTUNITY IN WIND IS IMPROVING RAPIDLY





TURITEA RESERVE GETS ROBUST PROTECTION FROM THE CONSENTS

- > Consents tailored to the sensitive nature of the Turitea Water Catchment Reserve
 - PNCC municipal water supply
 - Sensitive flora and fauna
 - Dust, sediment & erosion controls and management around weather conditions
 - Particularly strict conditions on the western side of the ridge
- > Consents require:
 - Pre-construction surveys for snails, lizards/geckos, birds, bats
 - Management plans for any sensitive fauna found
 - Accidental discovery protocols for fauna (as well as archaeological finds)
 - Aquatic ecology baselining and water quality monitoring throughout construction
 - Minimisation, mitigation and offset planting for bush clearance required for the wind farm
 - Weed hygiene, site rehabilitation and revegetation



ENVIRONMENTAL MANAGEMENT & CONTROLS



Stabilised access track and hydroseeded batters to prevent erosion

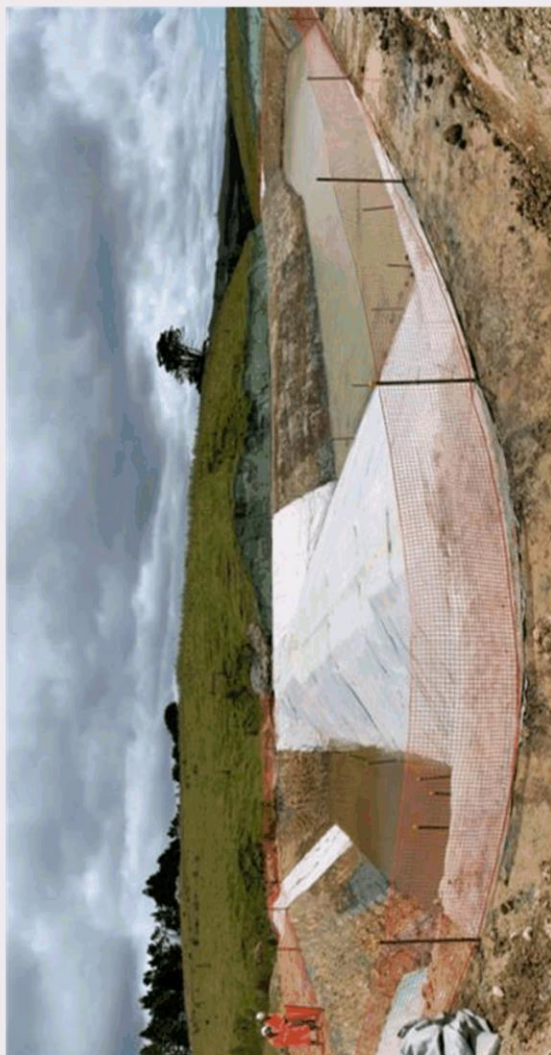


Super silt fences installed around access track construction to control any sediment runoff

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ENVIRONMENTAL MANAGEMENT & CONTROLS



New Sediment Retention Pond under construction at spoil disposal site



Pond outlet installed and pond operational



ENVIRONMENTAL MANAGEMENT & CONTROLS



Freshly hydroseeded batters at South Range Road



Grass starting to grow and stabilise batters after one week

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EXTENSIVE PRE-CONSTRUCTION ECOLOGICAL EFFORT

Birds 4 seasons of monitoring (Feb to Nov 2018) 5-minute bird counts, flight path monitoring and recording of incidental observations. 40 species recorded, including five At Risk species	Bats 239 nights of monitoring (Feb 2018 to April 2019) 344,360 audio files checked Number of bats recorded 0	Snails 36 hours of searching through Aug 2019 No evidence of Powelliphanta snails found	Lizards Several days of day/night searching Sept 2018 and April 2019; multiple checks of >100 artificial cover traps 3 Barking Geckos detected Ongoing management subject to Wildlife Act authorisation from Dept of Conservation
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LIZARD SPECIES RECOVERED TO DATE



Ngahere gecko



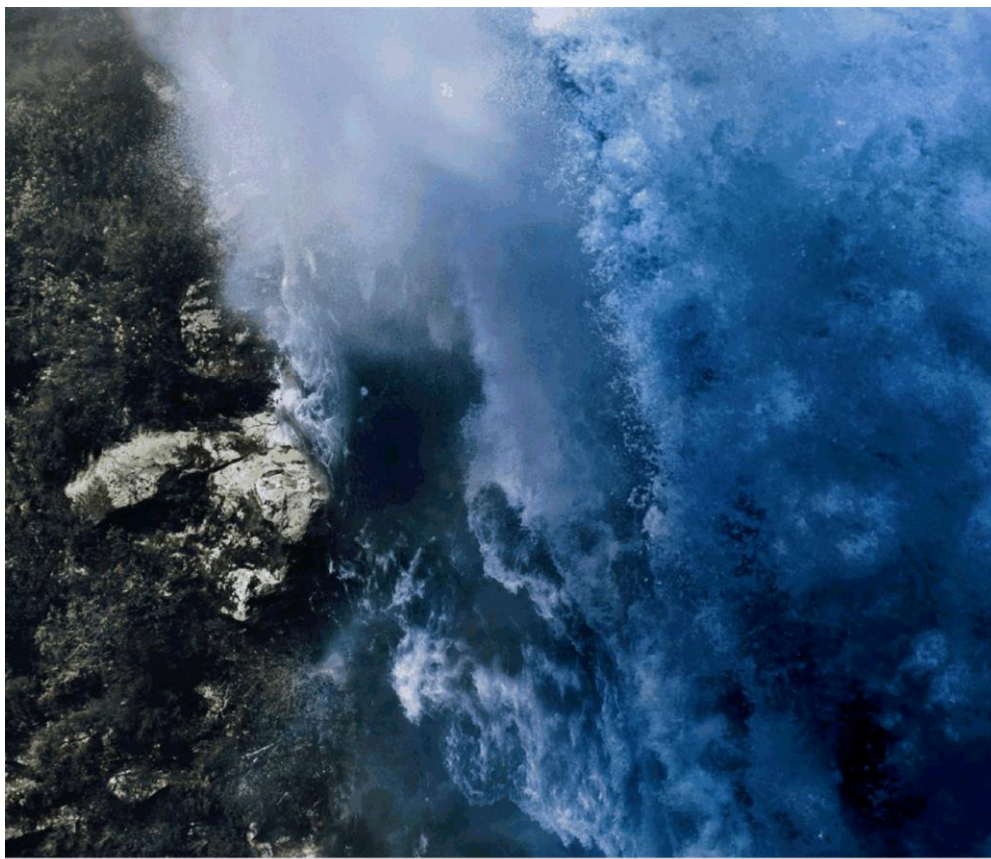
Wellington green (barking) gecko



Ornate skink

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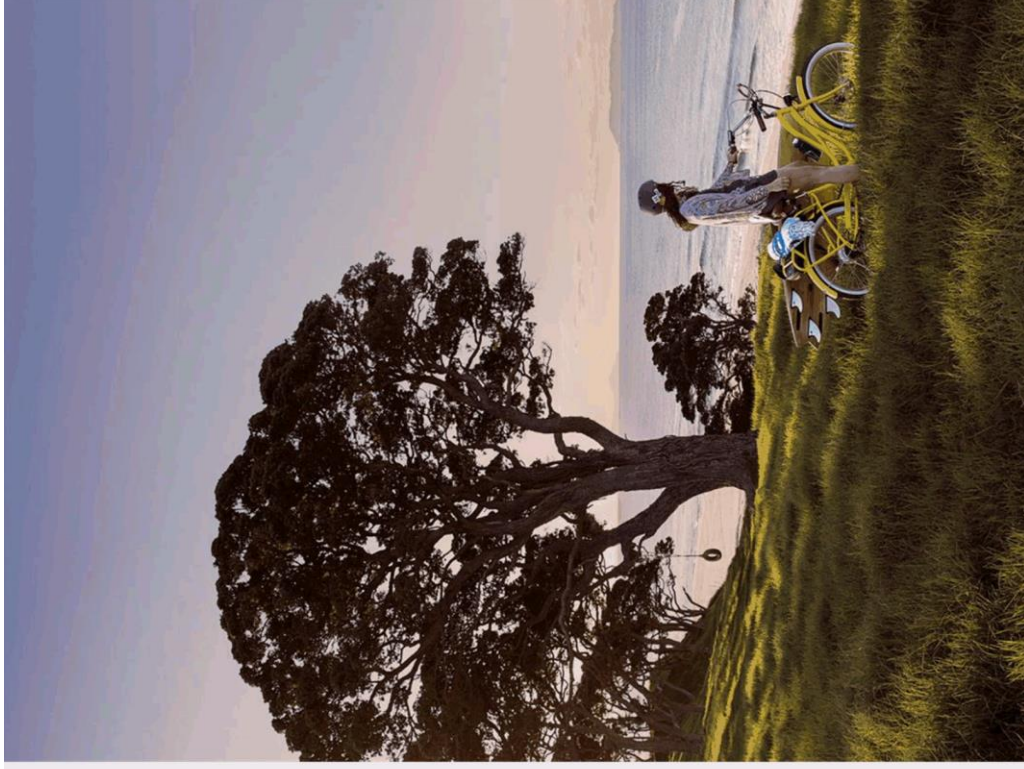
FURTHER ECOLOGICAL MANAGEMENT

- > All construction activities subject to Accidental Fauna Discovery protocol in consultation with Rangitāne o Manawātū, Dept of Conservation and Horizons Regional Council
- > Resource consents require mitigation planting that responds to indigenous vegetation cleared during construction
- > During construction an Aquatic Ecology Monitoring Plan applies
- > Site managed in accordance with a Pest Plant Management and Control Plan

COMMUNITY ENGAGEMENT

- > Community Liaison Group formed in May 2019
 - Public meetings initially monthly, now two-monthly
 - Primary purpose to manage construction effects
 - Small but regular turnout and good exchange of information both ways
- > Ongoing engagement with Rangitāne o Manawatū
- > Other initiatives
 - Mercury office space on the Square
 - Some project staff resident in Palmerston North
 - Other project staff in town part time
 - 0800 number – **0800 201 520**
 - Email address turiteawindfarm@mercury.co.nz
 - Website for updates www.mercury.co.nz/windupdates

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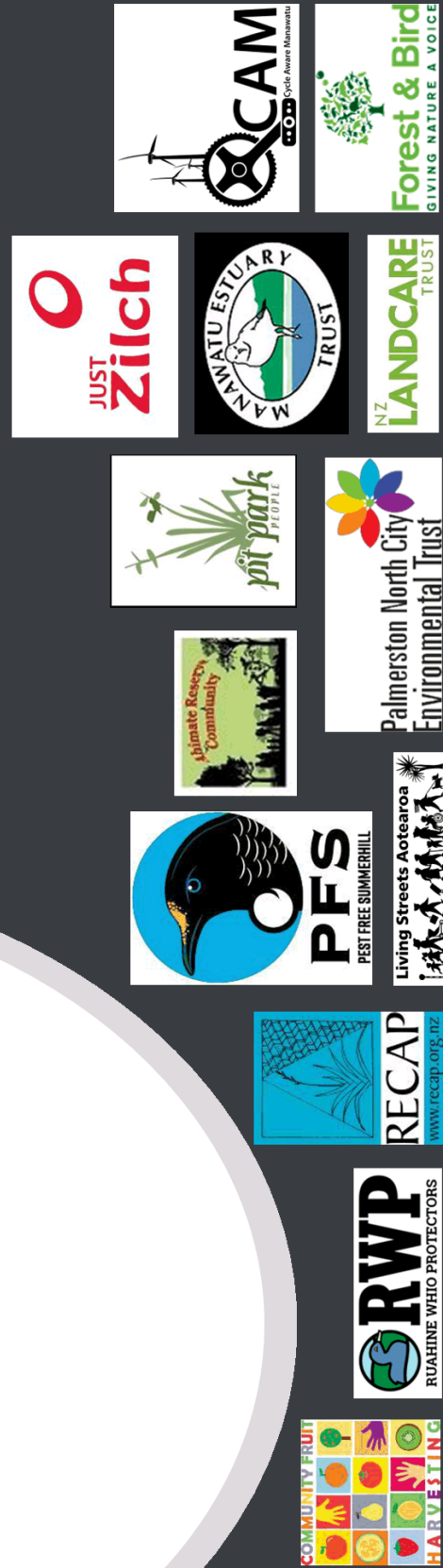






Who are we?

- Environment Network Manawātū (ENM) was formed in 2000 by 8 environment groups
- It is an umbrella organisation to improve communication, coordination, and networking
- ENM currently has 54 member groups and affiliates, active in areas ranging from biodiversity and freshwater enhancement, to sustainable living and urban planning.





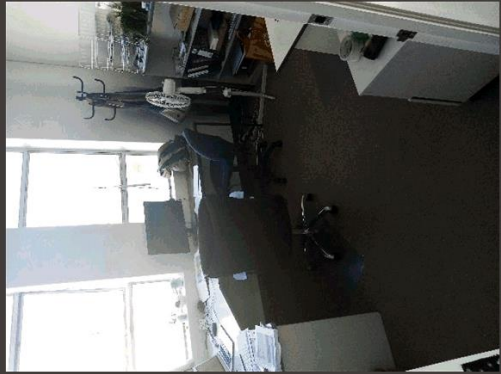
What have we achieved?

- Primary organisation in the region for accessing environmental information
- With 54 member groups – that makes us one of the largest regional environmental networking organisations in NZ.
- Recent accolades include being runner up in the Keep New Zealand Beautiful Awards for the Palmy Plastic Pollution Challenge and publicity of the project through the recent report from the Office of the Prime Ministers Chief Science Advisor

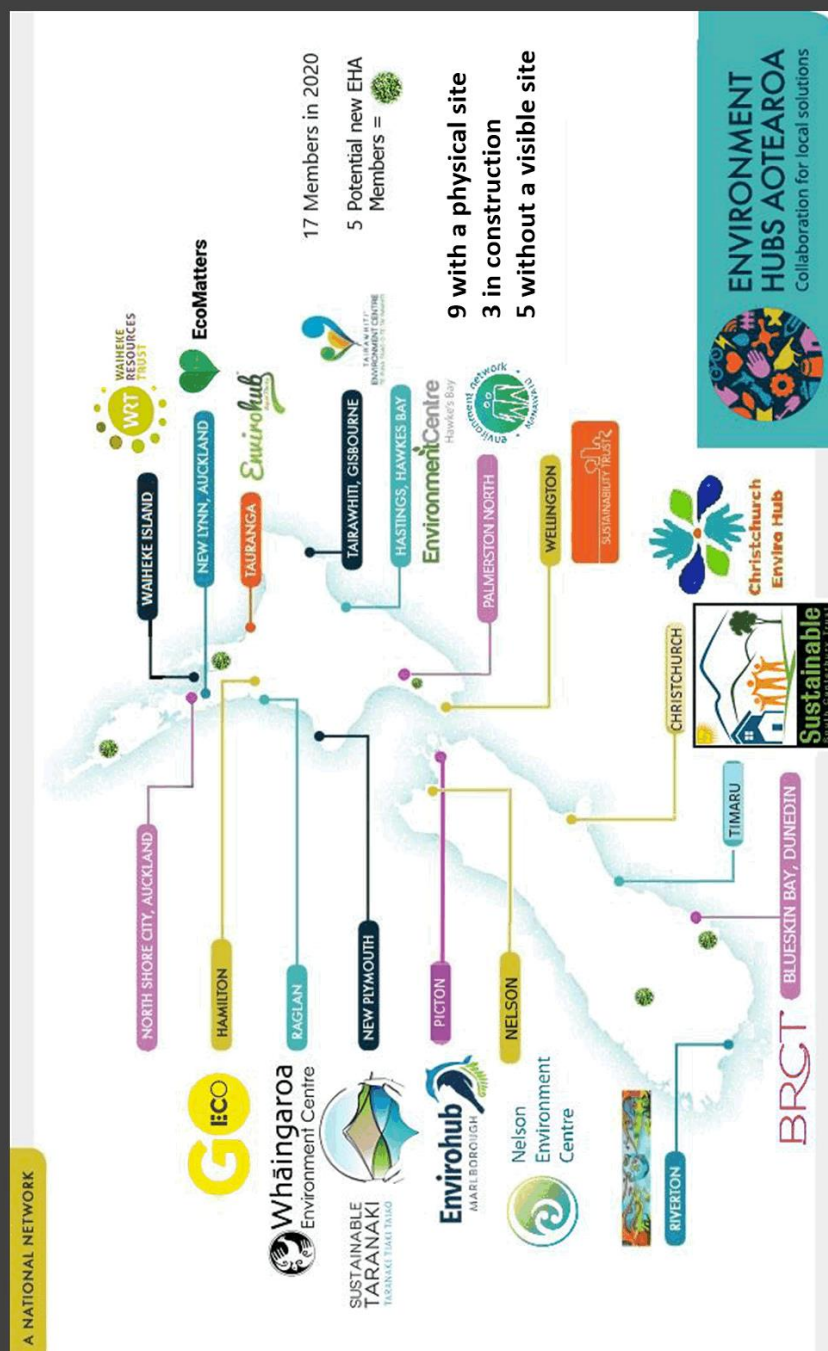


What are the challenges?

- Presently – ENM has very little public visibility and are in very cramped conditions for the kind of service we would like to see available.
- ENM is housed on the third floor in a small office on The Square.
- This has now become too small for the number of staff we house and the vision we have for the environment sector within Palmerston North City.



What's the vision?



A physical space – enabling a host of new opportunities

Waste

Water

Transport

Food

Energy

Climate

Ecosystems

Oceans

Buildings

Ecomatters Trust – New Lynn, Auckland



- Composting
- Zero waste
- Recycling – Upcycling
- Water advice line
- Rainwater collection workshops
- Cycling advice
- Community gardens
- Native plant nursery
- Low carbon workshops
- Housing audit
- Stream restoration
- Ecomatters store
- Social housing
- Weeds workshops

Sustainability Trust - Wellington



- E-bike hire
- Zero waste
- Recycling – Upcycling
- Home insulation
- Energy audit
- Heating, lighting, solar installation
- School and community education
- Fully upcycled centre
- Housing audit
- Gardening workshops
- Retail shop
- School holiday programme
- EV car and bike promotion

South Coast Environment Centre - Riverton



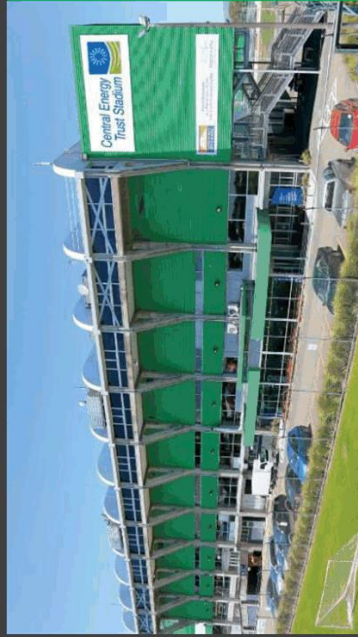
- Composting
- Recycling
- Open orchard
- Permaculture
- Seed saving
- Organic food co-op
- Education
- Warm home workshops
- Estuary care
- Beach cleanup
- Gardening
- Heritage crafts
- Retail shop
- low income support

PNCC's Eco-city Strategy

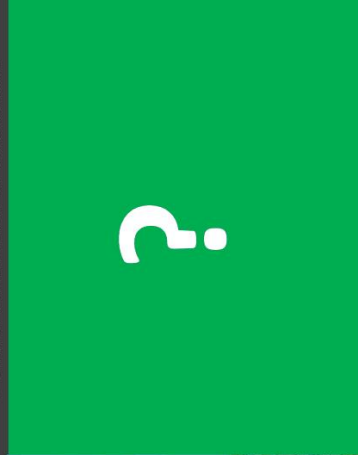
Goal 4: An eco-city

Our aspiration is to be a future-focused city that plans for and cares about the future, enhancing its natural and built environment. Our city will realise the benefits to society from creating clean energy, lowering carbon emissions, and reducing our ecological footprint.

Sport



Environment Sector



Recreation



Culture



Art

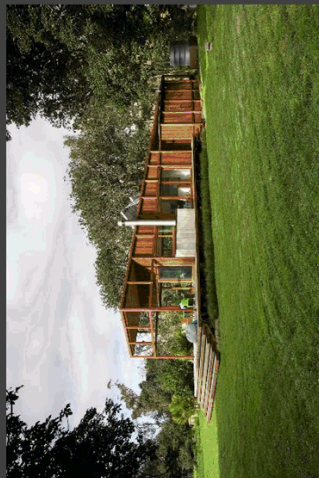


Community



Where to from here?

- ENM would be hugely grateful in PNCC's support of finding us a new premises, with higher visibility and more space as an interim measure.
- This must be low cost to enable ENM to continue delivering its existing work programme. Any savings in rent would be a huge bonus.
- Ultimately, an office type space is going to greatly limit the kind of services that ENM and its member groups could deliver through an environment centre.



- A very visible, large (1000+m2), greenfield site where the sector can build a centre would be the most ideal.
- This would give space for the additional centre infrastructure (gardens, nursery, show homes) and be able to operate social enterprises – providing ongoing funding and cementing Palmerston North's position as a true Eco-city.