

# Tuaropaki Trust

***“Building a Green Hydrogen Supply Chain in Aotearoa New Zealand”***

**Dave Binnie – GM Energy**



# Mihi

**Whakatauki** - Ancestral  
Proverb

*“Manaaki te whenua, manaaki  
te tangata, tera te ara  
whakamua”*

*“Care for the land, care for the  
people, that is the way forward”*

# Hapu of Mokai

Ngāti Haa  
Ngāti Moekino  
Ngāti Parekaawa  
Ngāti Tarakaiahi  
Ngāti Te Kohera  
Ngāti Wairangi  
Ngāti Whaita



# Tuaropaki

## The Trust is based on:

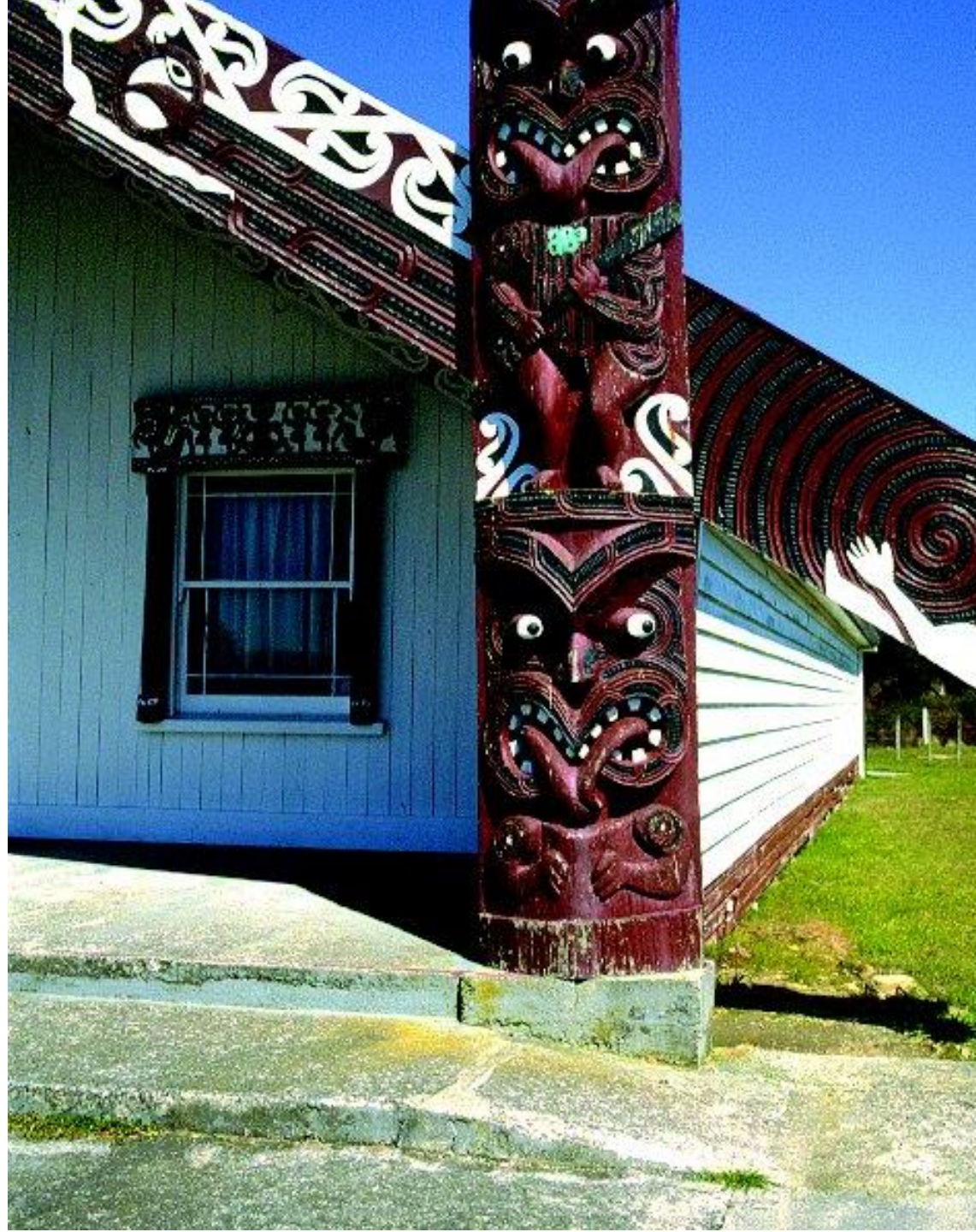
- Intergenerational investment
- 4,000 ha of whenua Maori, safeguarded for future generations
- 2,343 owners
- 10,000 + uri (descendants)
- Represented by 7 Trustees

## Our Owners are:

- Descendants of the 7 hapu of mokai
- Extended family with genealogical links stemming back several generations
- Living in Aotearoa, Australia and the rest of the world

## Guided by our Principles:

- We will act as a beacon of hope and prosperity for our people
- Protect and advance the interests of our people
- Be at one with our cultural lands and resources
- Help build the capability of our people through positive support and encouragement
- Look after the land and the land will look after you





# A dire warning...another call to action

(extracts from 2022 IPCC guidance on addressing Climate Change)

The **good news** is that it can be done, in what Mr Guterres, UN Secretary General Antonio Guterres calls, “**a viable and financially sound manner**”

**3.2C** = “to avoid the fate of unprecedented heatwaves, terrifying storms, and widespread water shortages, we must keep the rise in temperatures at or under **1.5C this century**”

“Even with all carbon policies carbon in place at end 2020 implemented, the world will still warm by **3.2C this century**”

To stay under **1.5C** means that carbon emissions from everything we do, buy, use or eat must **peak by 2025**, and tumble rapidly after that, reaching **net-zero** by the middle of this century.

In context, the amount of CO2 that the world has emitted in the last **decade** is the **same amount** that's left to us to stay under **1.5C..and our emmissions are still rising!**

Key to our success will be how we **generate and use energy.**





# Insight that should guide us...

"We have every reason to believe that at some point the impact will be catastrophic,"

"Will that point come in 30 years, 50 years? We don't know precisely."

"Given how hard the problem is to solve, even if it's 50 years, **we need to act now.**"

**"We need to talk to everyone we know."**

**"We need to get comfortable with change"**

"Fossil fuels and the processes that result in copious amounts of emissions, are everywhere. To truly combat climate change, everyone in the world will need to change their mindsets and behaviour."

"Private companies cannot be the only ones doing the work to achieve net zero"

"Governments need to change and implement policies to encourage innovation and clean technology"

"Countries that build **great zero-carbon companies and industries** will be the ones that lead the global economy"

"Whoever makes big, affordable energy breakthroughs will find many willing customers"





# Why Green Hydrogen Matters?

- Consistent with Tuaropaki commitment to intergenerational investment and sustainability
- Credible, low carbon energy solution with many uses
- It is ready to deploy right now
- The best, current, alternative to fossil fuels in long haul, heavy transport



Play Halcyon Video

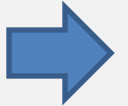
# We've made good progress...

Tuaropaki/Obayashi  
JV formed

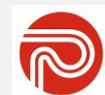
180tes per year  
production plant  
opened

Understanding our  
growing customer  
base

Consortium  
delivers fast  
refueller solution  
for Auckland



Toyota



2020

2021

2022

## ...through great partnerships!



# So, what have we learned?

- Green Hydrogen solutions are available right now
- Customer appetite is growing fast but they need confidence in product supply
- We can get close to our existing customers experience e.g. fill speed and waiting time
- Cost of supply will be more expensive than fossil fuels until technology advances or policy levels the playing field
- Creating great user experience overcomes fear of change
- Competitive rhetoric between advocates of Hydrogen, EV's and bio-fuels is growing



# How might we go faster?

“Nobody likes to listen to criticism. Perhaps that's why some people will try to shut it out, or even shout down dissent before it has a chance to develop. But that's a potentially fatal mistake for any company or field. Putting your fingers in your ears and saying “la la la” is not going to make anything go away.”



Listen and address the concerns of our Stakeholders openly

Collaboration has the power to spark innovation in the workplace because everyone brings a unique set of knowledge and skills to the table. Working together and embracing these differences gives birth to new ideas through the blending of unique viewpoints.



Create partnerships prepared to break the mold



# How might we go faster?

Act to level the playing field with fossil fuels

Accurately build in the cost of inaction or delay to traditional economic models

Value (\$) Hydrogen as a low carbon fuel

Ensure our ETS scheme drives actual emissions reduction now...not leaving it for future generations

Building out a reliable and efficient fuelling network is critical in accelerating Hydrogen in Transport

Build flexible capacity slightly ahead of demand

Consider co-located Hydrogen and EV charging infrastructure