John Campbell

CEO, Our Energy

Atawhai Tibble

our energy

presents

Manaaki Economy: The Kia Whitingia model

Reducing Energy Hardship Conference - May 2024

Outline

1. Introductions:

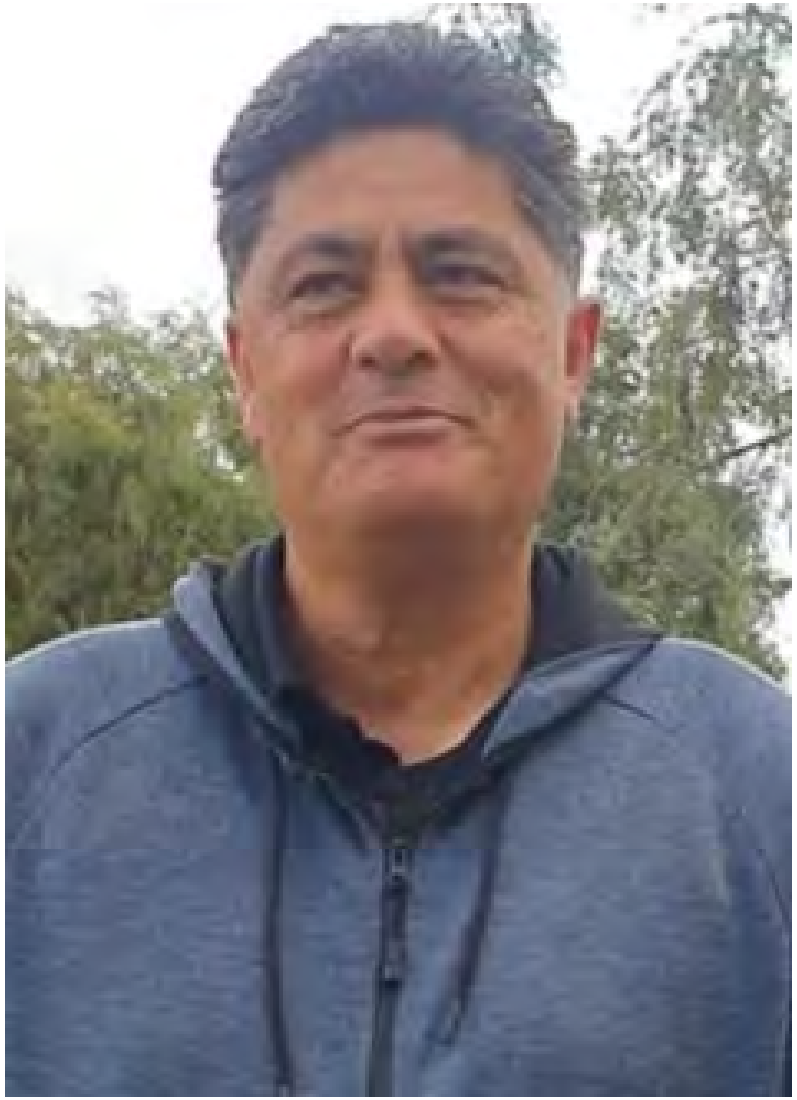
   Atawhai Tibble (Ngati Waewae, Ngati Parewahawaha, Ngati Tuwharetoa, Ngati Raukawa, Ngati Porou);

   John Campbell (Born, bred, departed, returned Wellingtonian, Founder & CEO, Our Energy).

1. Kia Whitingia: The Manaakitanga Economy.

2. Case study summary - prepared for Global Observatory on P2P Trading.

In memory of Graeme Everton



“My philosophy, I think, goes back to the reason that we're doing this: the valley is and wants to be independent, it wants to chart its own way, it wants to be able to lessen its unbalanced relationship with the Crown.

So that's the background to this. But we're also very practical because we’ve got to live day to day, and we’ve got to make a living for our families. So we're not averse to say that there's a bit of business involved in this”

https://youtube.com/shorts/DYwptDtv0_M?feature=share

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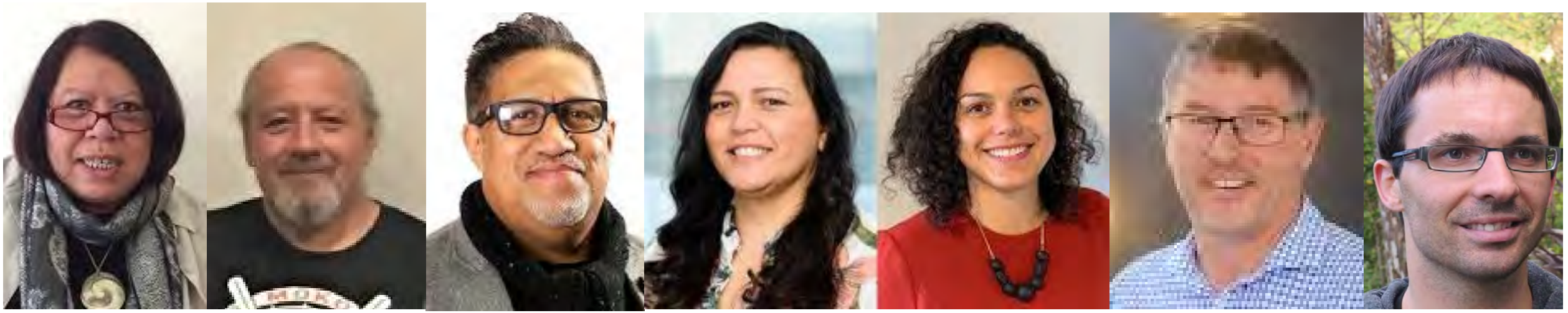
The Kia Whitingia team



MANAAKI ECONOMY

The Kia Whitingia Model ©

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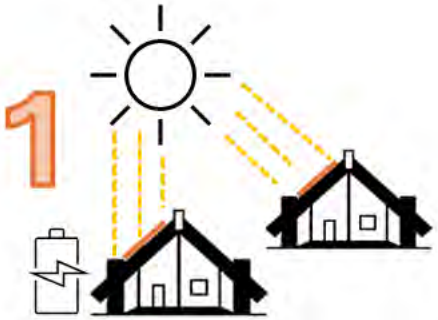

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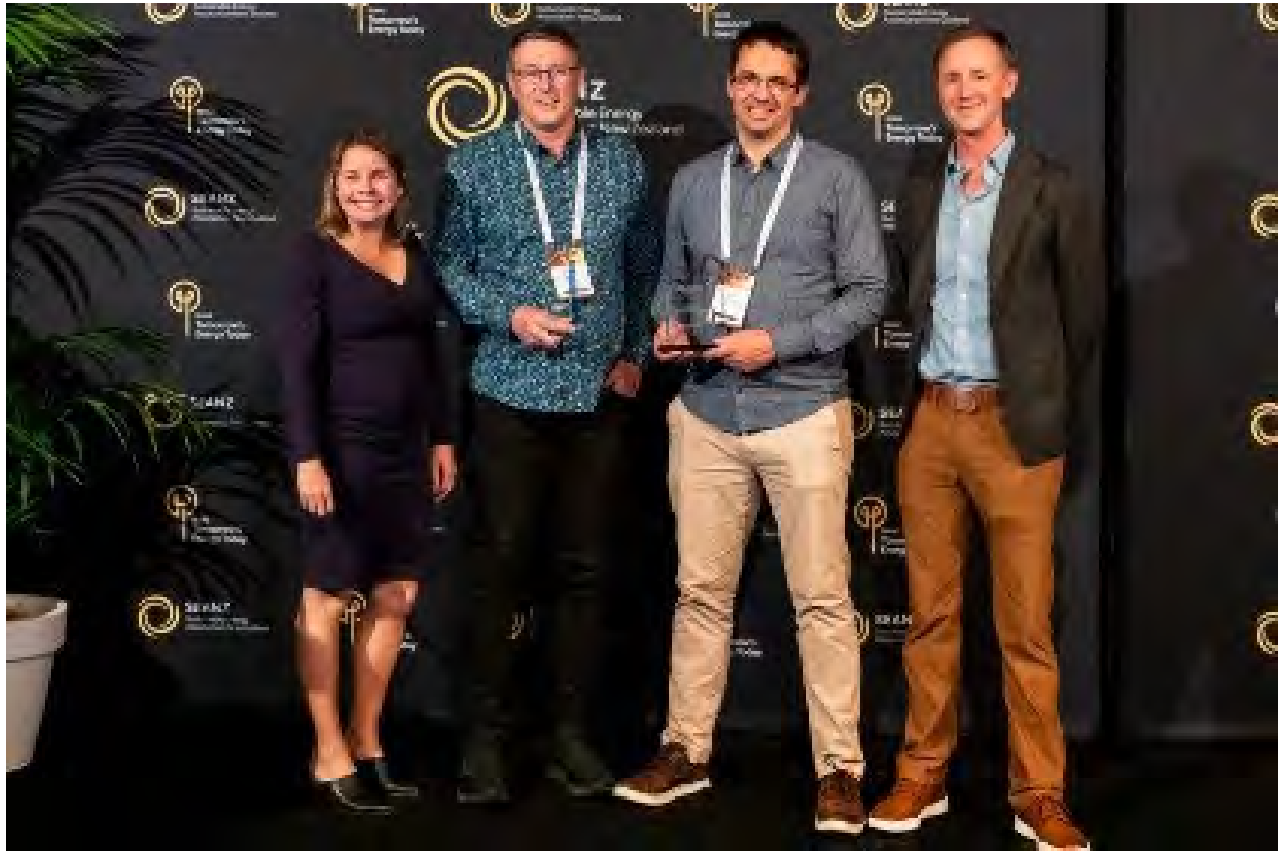
Key facts

Location	Te Reureu Valley, Halcombe
Duration	April 2022 - ongoing
Funding source	Māori and Public Housing Renewable Energy Fund
Project lead	Te Reureu Kotahitanga Ltd on behalf of Ngāti Pikiahuwaewae (Ngāti Raukawa ki te Tonga)
Project partners	Our Energy, McNae Solar
Current participants	24 (including 15 whare whānau)
Generation	150 kW (5 x marae, 3 x whare)
Storage	120 kWh (NZ’s first community battery)

Ara Ake Innovation Award 2023



- Recognises innovative outside the box thinking, based on a solution or solutions that challenge traditional models & ways of doing things.
- May be a technology solution, a process to achieve better outcomes for PV and/or BESS, a new PV based business model, and/or a different approach to a common problem around PV installation.
- Should challenge existing processes or technology with the ability to be scaled & made available to the wider industry/markets.

Case study summary

Prepared for Global Observatory on P2P Trading (thanks to Anna Berka & Vikram Subramania).

Capturing community value:

- Local trades at $0.06 / kWh (~60% cheaper than market).
- Excess over and above local trades is sold to wholesale market with revenues channelled into a community fund for later redistribution amongst community members, ie, wholesale risk circulated back into community as a benefit.

Flexibility in action:

- Community battery;
- Remote management of electric water heating (Rheem).

Impact highlights

Lower electricity bills for five marae, allowing redirection of capital towards facility upkeep and services for whānau, hapū and iwi.

Lower electricity bills for 15 households, via matching of demand with solar produced (and now battery storage exports) by marae.

To date, household participants have saved 20% compared to regional average electricity prices and, if we include community pool distributions, 33%.

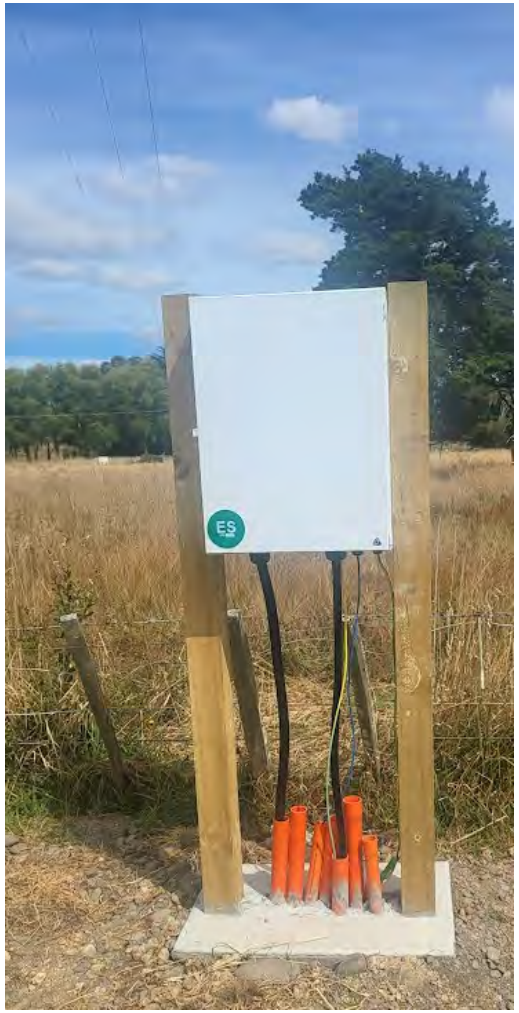
Community support and confidence for further collective and commercially financed projects involving hapū across the region.

Building connection to hapū and marae, fostering a sense of community and identity to “chart its own way”.

For starters, being a collective, what you're doing is you're creating your own reality and your own system - you're actually taking control of it. **That's all about tino rangatiratanga.**

Rowena

Quick energy geek spot



The 36kW / 120kWh (3 phase) battery, installed by McNae Solar, is the first community battery in New Zealand.

Obstacles and challenges

Support from the community and Marae leadership

Technical challenges, performance of hardware and software

Unforeseen circumstances and restricted timeline

Availability of funding for sub-scale projects - seed capital and operational costs

Regulatory barriers & competition

Insights and learnings

Develop strong educational component to engage end-users from the outset.

Build fewer larger installations on commonly owned infrastructure, such as community facilities (better return on investment and also simplifies implementing effective demand side management).

Align solar and meter installation to earn revenues from Day 1.

Work with a coalition of the willing to demonstrate benefits.

Concluding energy geek spot