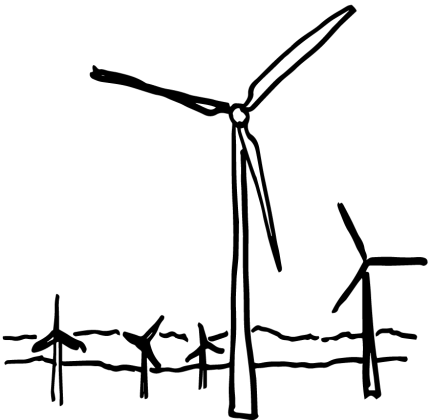
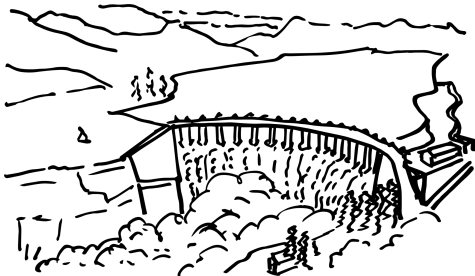
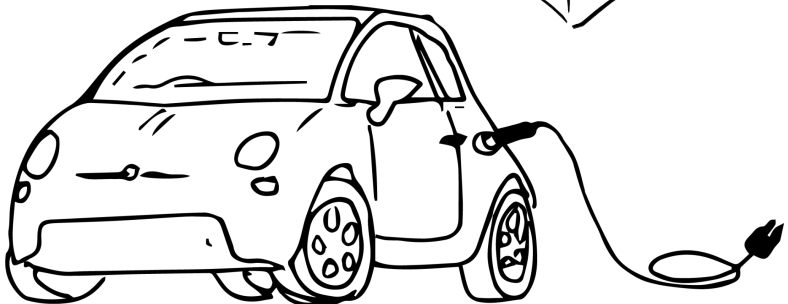


Rewiring
Aotearoa




The Electrification
of Everything




MY BACKGROUND



≡ FINANCIAL REVIEW 

— Exclusive

SEEK moves to strengthen graduate offering with GradConnection acquisition



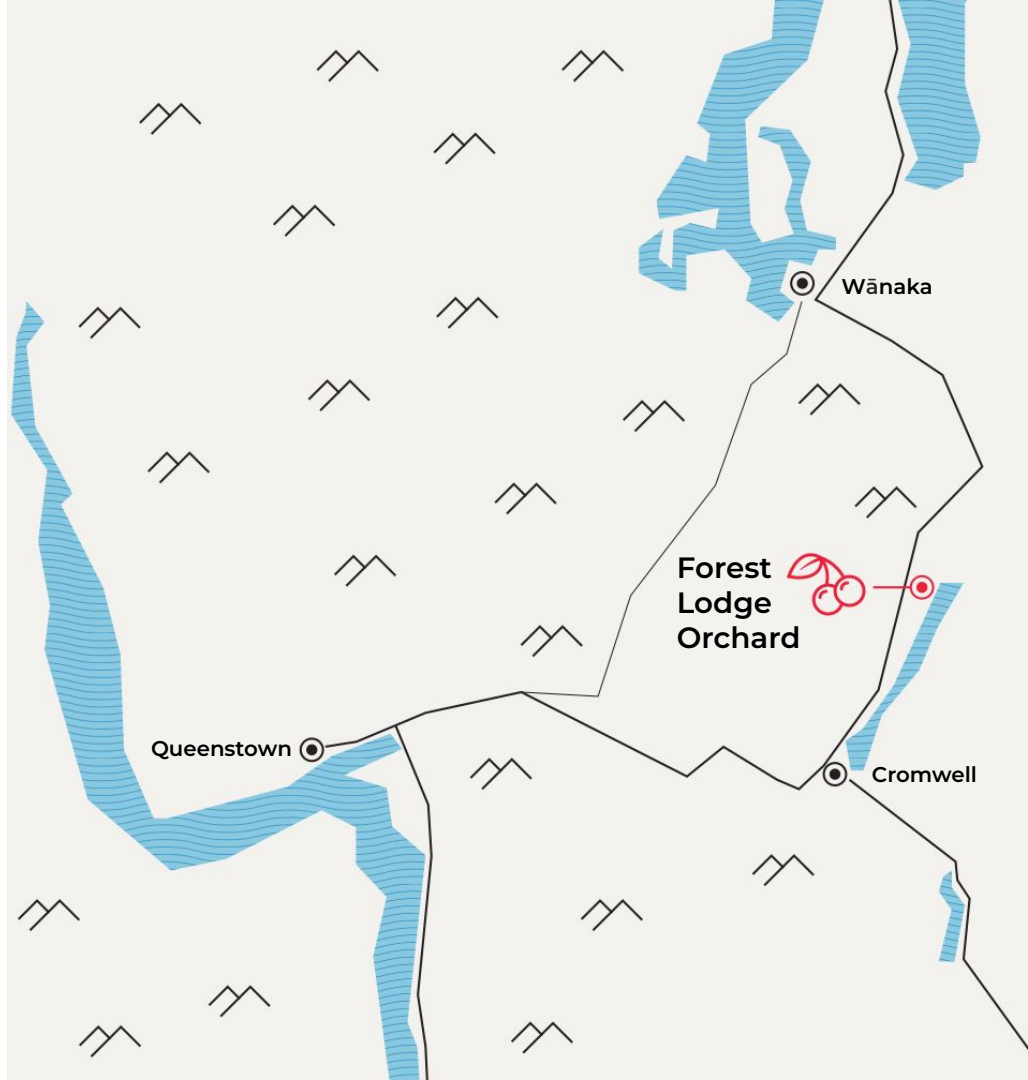
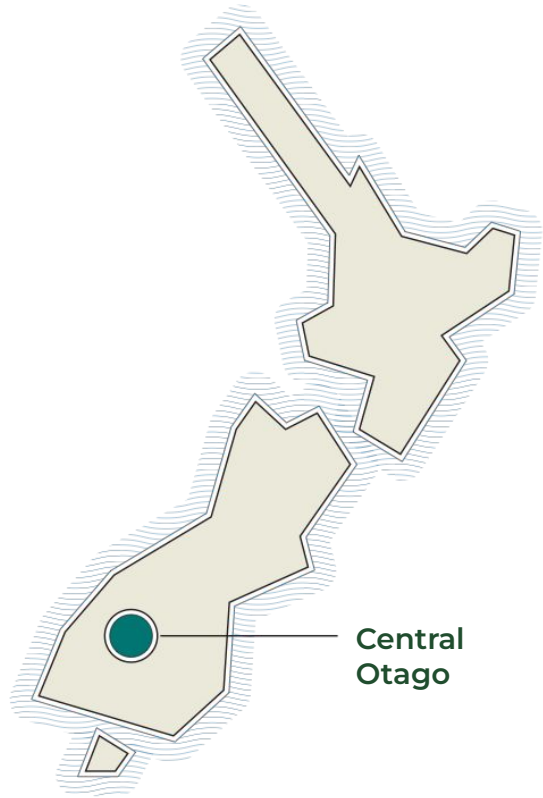
Online jobs classifieds and services business SEEK has acquired graduate job marketplace GradConnection in a move to target young jobseekers finishing up their education.

The acquisition, to be announced on Tuesday, will have SEEK buy 100 per cent of the Sydney-based start-up for an undisclosed sum. GradConnection was launched in 2008 by three New Zealanders, Mike Casey, Dave Jenkins and

RETURNING TO AOTEAROA



MT PISA



PLANT A CHERRY ORCHARD

Plant a cherry orchard

- 9300 trees (25km)



PLANT A CHERRY ORCHARD

Plant a cherry orchard

- 9300 trees (25km)
- 80T of cherries at full production



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- 3.8T of sequestration per annum



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- 3.8T of sequestration per annum
- 2.5T of fertiliser emissions per year



PLANT A CHERRY ORCHARD

Plant a cherry orchard

- 9300 trees (25km)
- 80T of cherries at full production
- 3.8T of sequestration per annum
- 2.5T of fertiliser emissions per year
- ~60T of carbon from diesel use



Bottom Up Climate Action

20 Machines. 60Ts of emissions.

Farm

- 2 Frost Fighting Fans
- 2 Irrigation Pumps
- Solar
- Batteries
- Golf Carts x 2
- Lawnmower
- Tractor
- Forklift
- Ute
- Car (x1)
- Power Tools

Household

- Hot Water Heat Pump
- Heat Pump
- Induction Cooktop
- Car (x1)
- Solar
- Batteries



Payback on diesel price

| | |
|--------------------|-----------|
| Electric | \$881,590 |
| Diesel | \$431,665 |
| Additional Cost | \$449,925 |
| Grants | \$141,030 |
| Energy Savings | \$30,684 |
| Market Payback | 15 Years |
| Payback with Grant | 10 Years |
| Carbon Saved | ~60T |

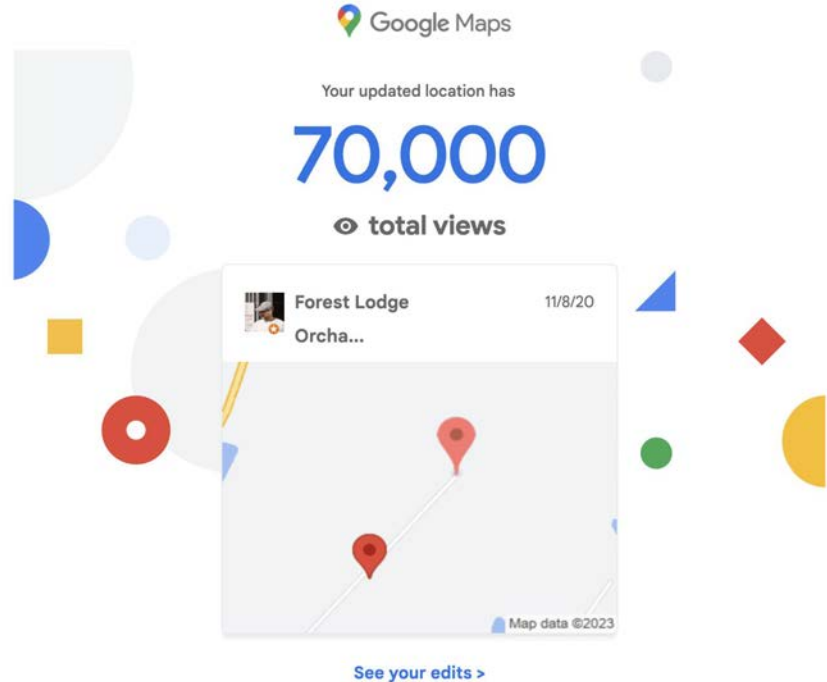
Every 50c increase in cost per litre of diesel takes a year off payback.



The Traction



THE TRACTION

A graphic celebrating a user's map edit. It features the Google Maps logo at the top, followed by the text "Your updated location has" and a large blue "70,000" with "total views" below it. A central map snippet shows a location named "Forest Lodge Orcha..." with a red pin and a date "11/8/20". The background is decorated with various colorful geometric shapes like circles, squares, and triangles.

Google Maps

Your updated location has

70,000

total views

Forest Lodge Orcha... 11/8/20

Map data ©2023

[See your edits >](#)

Your update is helping in a big way

You changed the location of Forest Lodge Orchard which has now been seen over 70,000 times. Thanks for making such a valuable edit to the [map](#).

[Contribute more](#)

THE TRACTION



THE TRACTION



THE TRACTION



THE TRACTION



THE TRACTION



OF VISITORS

Approximately 10,000 visitors in 3 years

SPEAKING EVENTS



SPEAKING EVENTS

Over 50 speaking events in the last 12 months

2023.
Then things
exploded.



And we didn't stop there

Stuff.co.nz

New Zealand's first electric tractor is here, but how does this line up with conventional farming?

New Zealand's first electric tractor arrived from California this week to a cherry farm just outside of Cromwell, Central Otago.

1 month ago



NZ Herald

Cromwell orchard launches New Zealand's first driver-optional, fully electric tractor

The MK-V Monarch tractor - the country's first driver-optional, fully electric tractor - was launched in Cromwell on Saturday.

1 month ago



Crux News

Cherry grower brings one of country's first electric tractors to Cromwell

This week Cromwell cherry grower Mike Casey has been using his new tractor to power an espresso machine and a toasted sandwich maker for...

1 month ago



Newstalk ZB

The first electric tractor has arrived in the country and is being trialled out

How do you feel about electric tractors? The first one arrived in the country this week and Forest Lodge orchard owner Mike Casey has been...

1 month ago



Country Calendar

Appeared October 8th, 2023

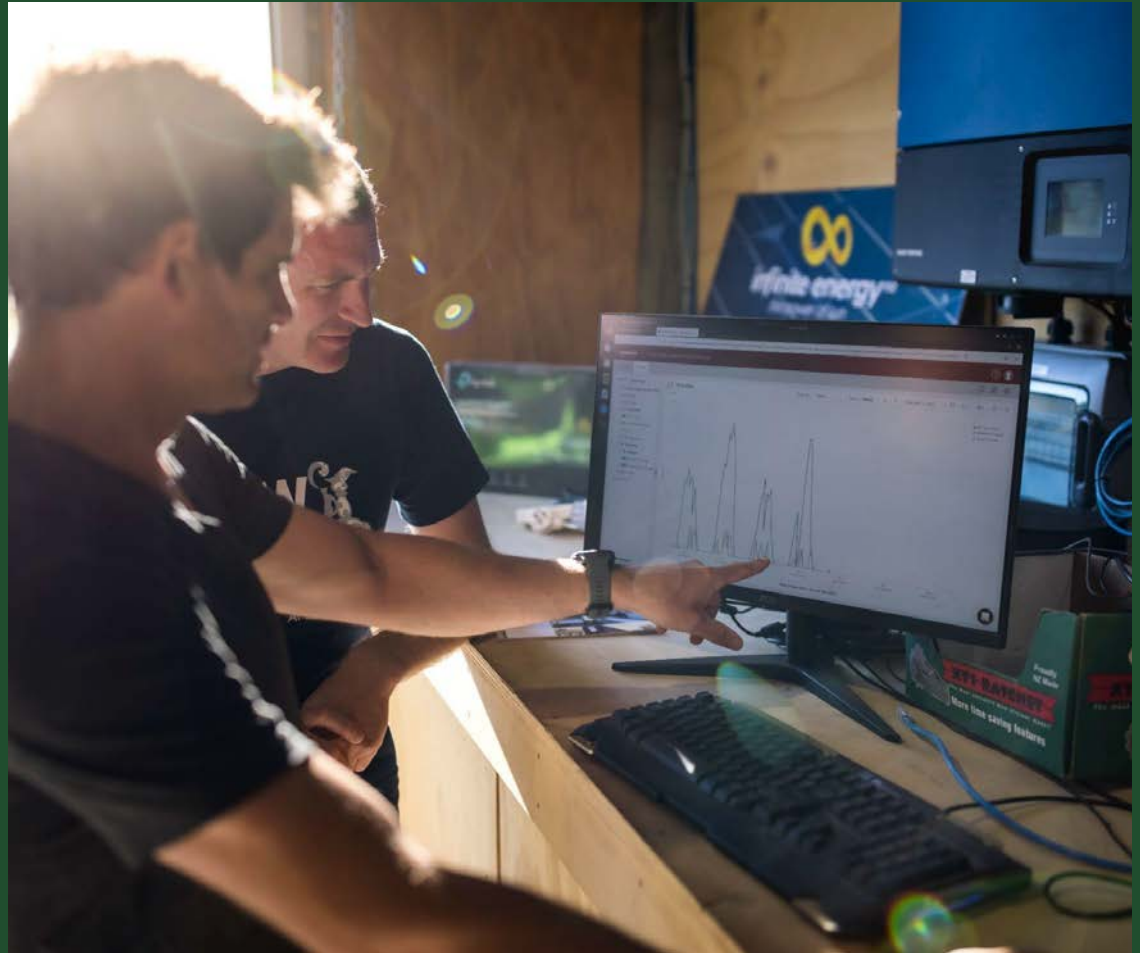
HYUNDAI
NEW ZEALAND
COUNTRY
CALENDAR



Political Interest



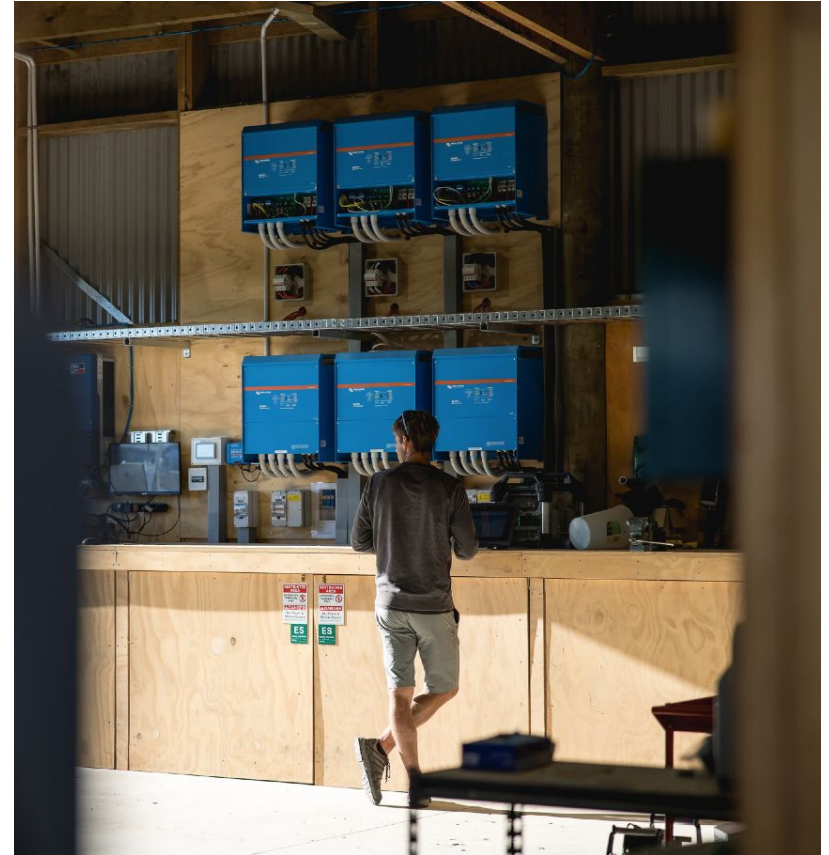
How can we scale
electrification
nationally?



Win the economic argument

- Save \$50,000 per year
- \$50k expected profit per hectare
- 16% increase in profit margin.

And an added bonus is we save 60T of emission on the farm and 10T of emissions in the household.



SEANZ Case Study



Machinery
10 Years

- Or 15 years without grants



Solar Panels
10 Years

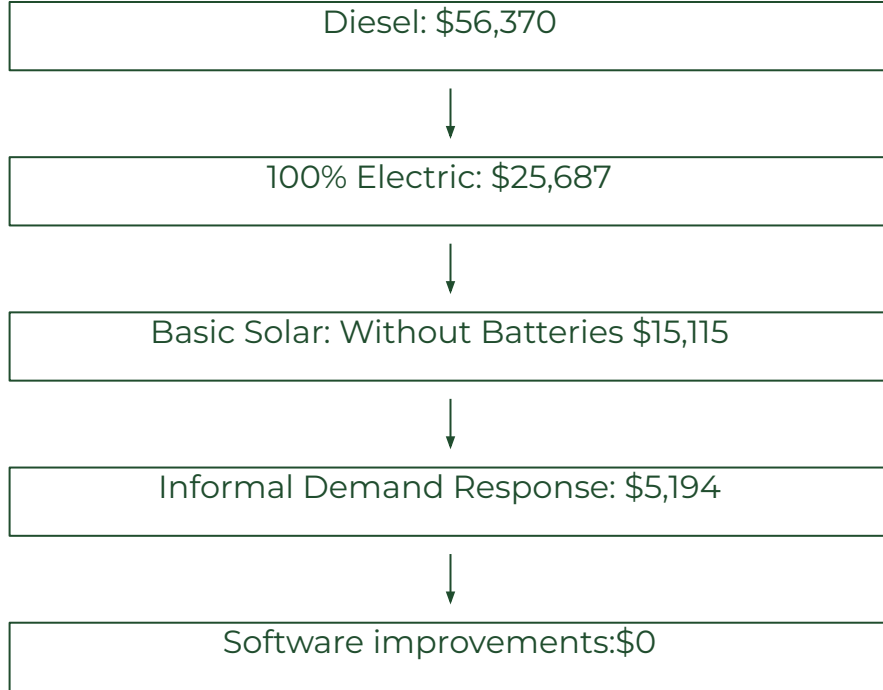
- 45 kW
- 30c to 6c per kWh



Batteries
13 Years

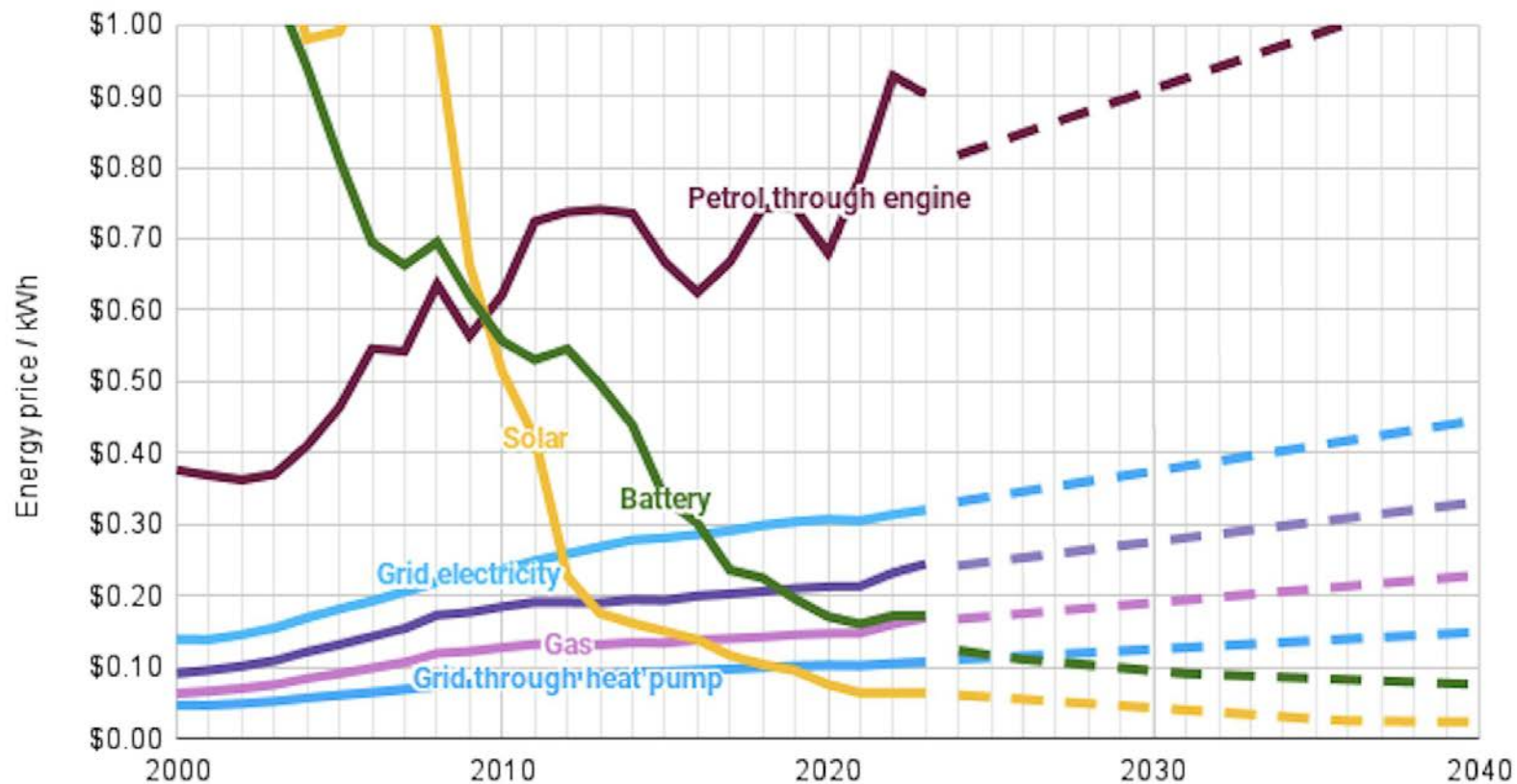
- 120 kWh
- 6c to 4c per kWh
- Resilience
- 75% lower line charge

Farm Energy Costs

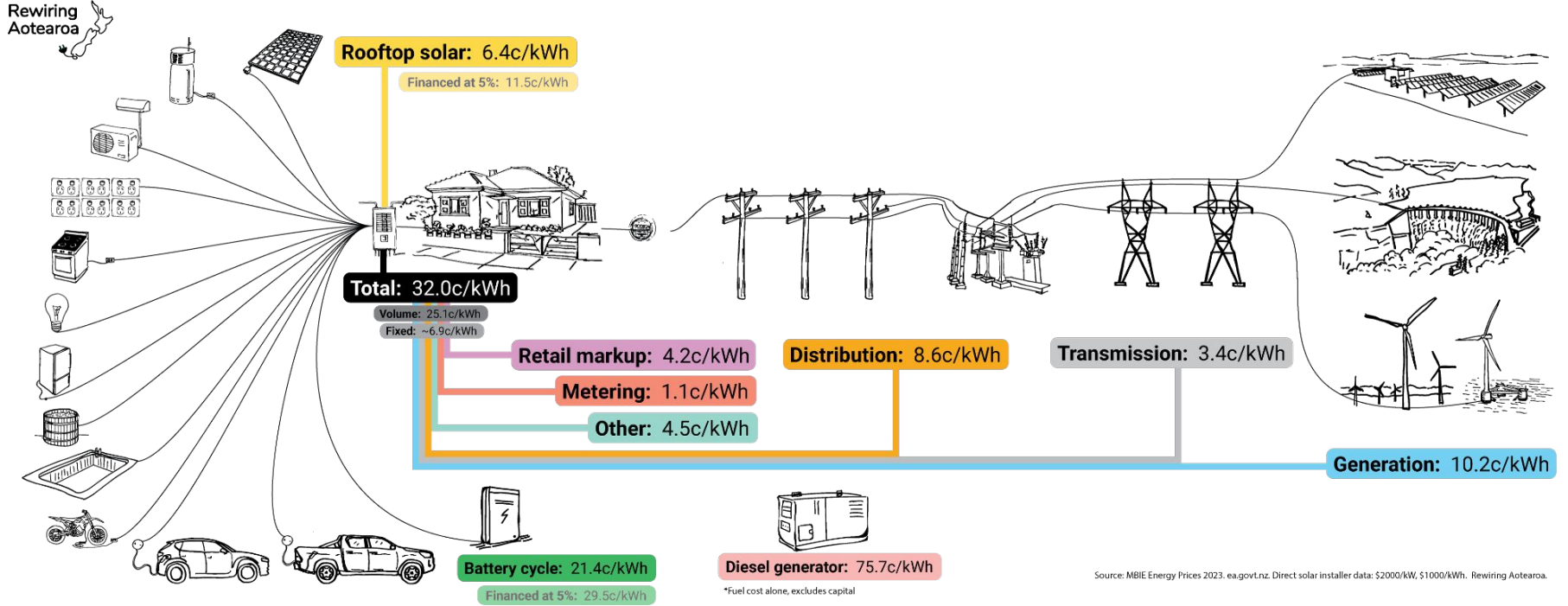


Cost of energy per kWh with CPI, energy productivity, and predicted costs.

Retiring Aolazaroa, Stats NZ Quarterly CPI History 2023, MBIE Energy Prices 2023, WRELE forecasts, Micah Ziegler and Jesika Trancik (2021), Petrol productivity 0.3, Heat pump 3.0, Resil 1.0.



APPENDIX 4D



Can the grid
handle it?

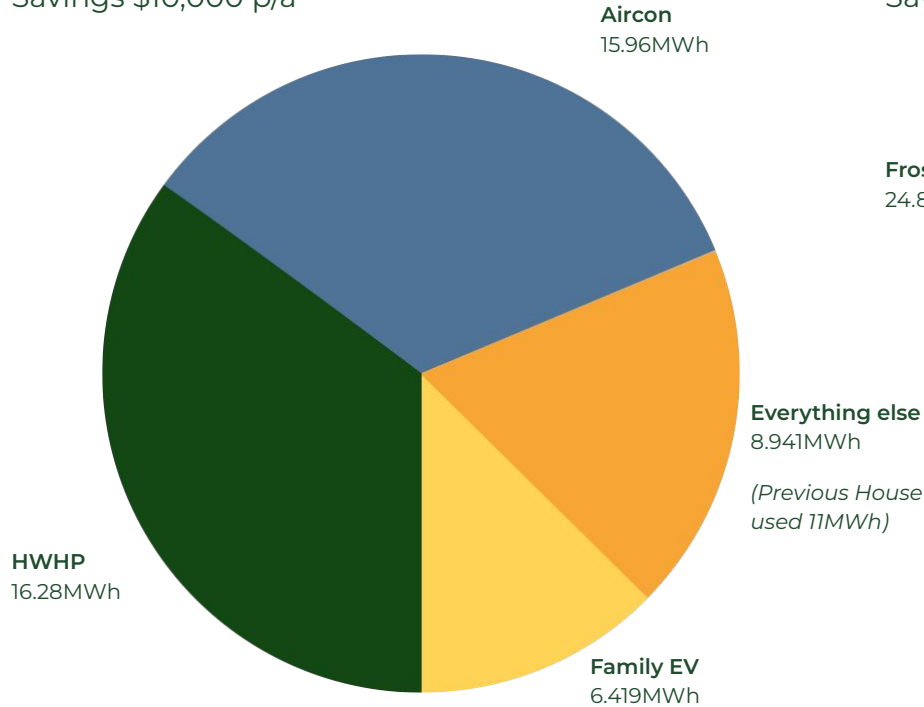


Consumption Breakdown

Household

47.69MWh total

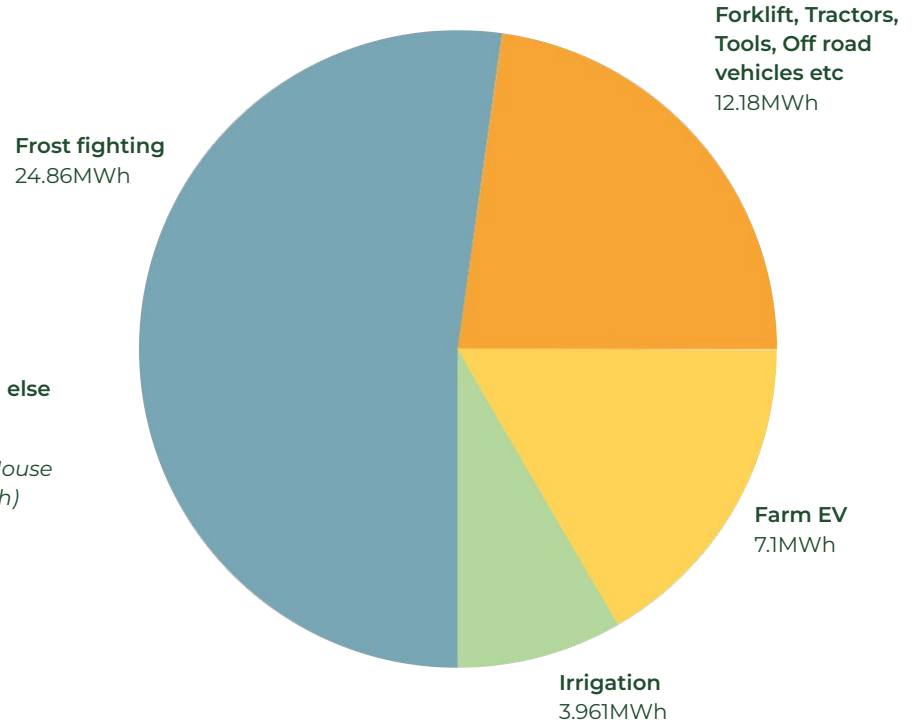
Savings \$10,000 p/a



Orchard

49.111MWh total

Savings \$50,000 p/a

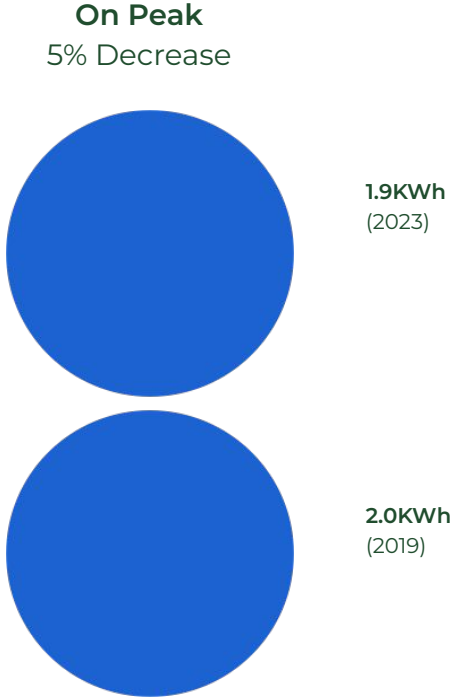
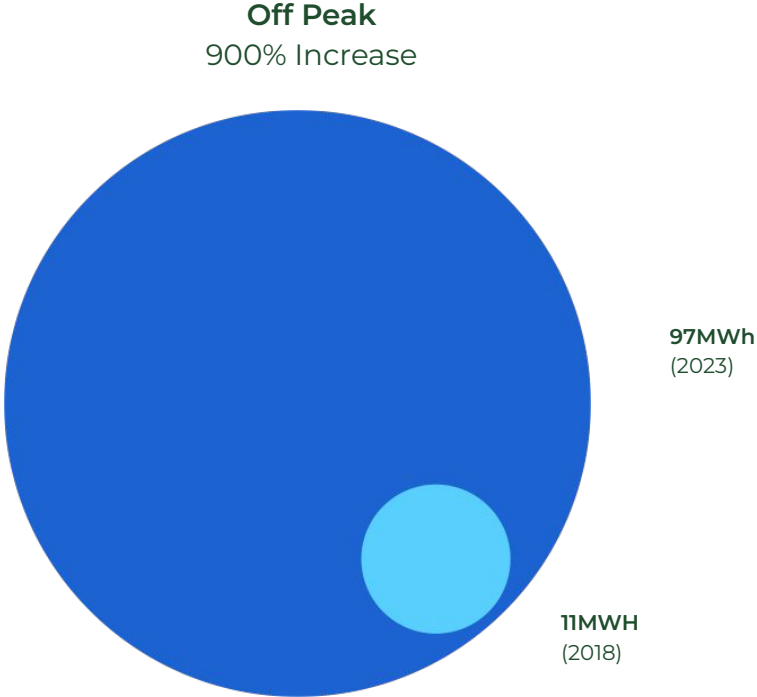


SCARY?

**We have increased our electricity
consumption 900%. Is that scary?**

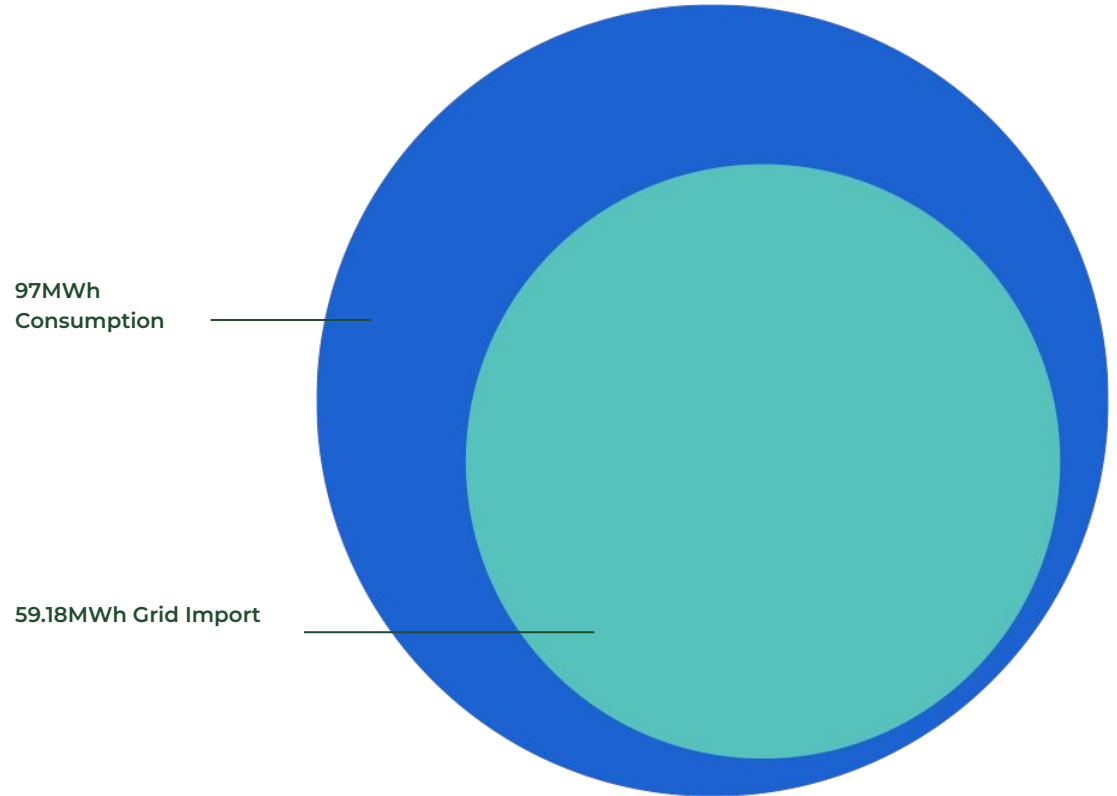
Smart Electricity Consumption

No distribution or transmission infrastructure investment required to support my orchard or household electrification.



Rooftop solar benefits

- 40% decrease in grid take



TOTAL DATA COLLECTED: 353 DAYS, 1 HOURS.

NOW SHOWING: 1 YEAR VIEW

OUTCOMES

TOTAL ROLLING 30 DAYS
12,355 kWh

AVERAGE DAILY
441 kWh

SPOT PRICE

15c
CURRENT PRICE



EFFICIENCY

\$9,748
ELECTRIFICATION

VS

\$56,563
DIESEL POWER

\$26 per day

83%

More efficient

\$154 per day

56%
GRID SUPPLY



44%
GENERATED

82%
CONSUMED

18%
EXPORTED

ENERGY IN

52,131 kWh
GRID SUPPLY
\$12,262 EST COST
INCLUDES LINE CHARGE OF \$4300

41,186 kWh
GENERATED
\$6,290 EST VALUE

77,484 kWh
ENERGY CONSUMED
\$11,834 EST COST



16,459 kWh
ENERGY EXPORTED
\$2,514 EST VALUE

ENERGY OUT

DINNER TABLE CONVERSATIONS

If we electrify every fossil fuel appliance and machine in the world at its natural end of life we will keep global warming to 1.8C

Tong, D., Zhang, Q., Zheng, Y. et al. Committed emissions from existing energy infrastructure jeopardize 1.5 °C climate target. *Nature* 572, 373–377 (2019). <https://doi.org/10.1038/s41586-019-1364-3>

DINNER TABLE CONVERSATIONS

If we electrify every fossil fuel appliance and machine in the world at its natural end of life we will keep global warming to 1.8C

- But we want 1.5C

DINNER TABLE CONVERSATIONS

If we electrify every fossil fuel appliance and machine in the world at its natural end of life we will keep global warming to 1.8C

- But we want 1.5C
- We keep buying new fossil fuel machines

CONCLUSION

We need to make
sure everyone's
next purchasing
decision is
electric.



CONCLUSION

Let's make a
whole heap of
world firsts

