



Geothermal Powers the Agri-Food Sector





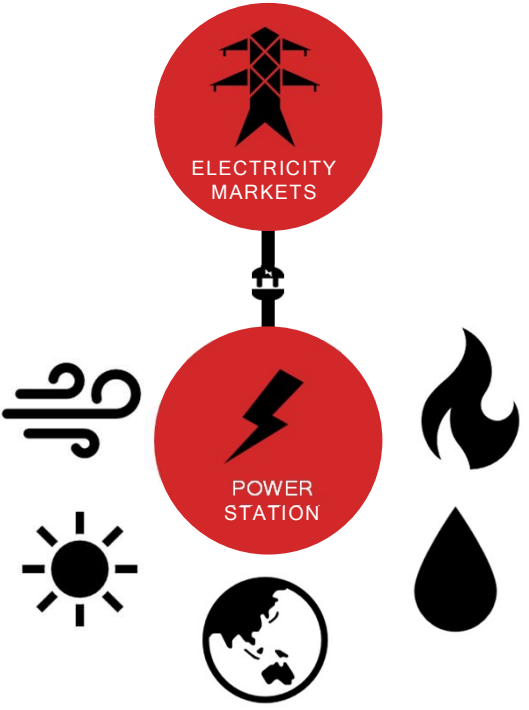
1 Terawatt of Geothermal



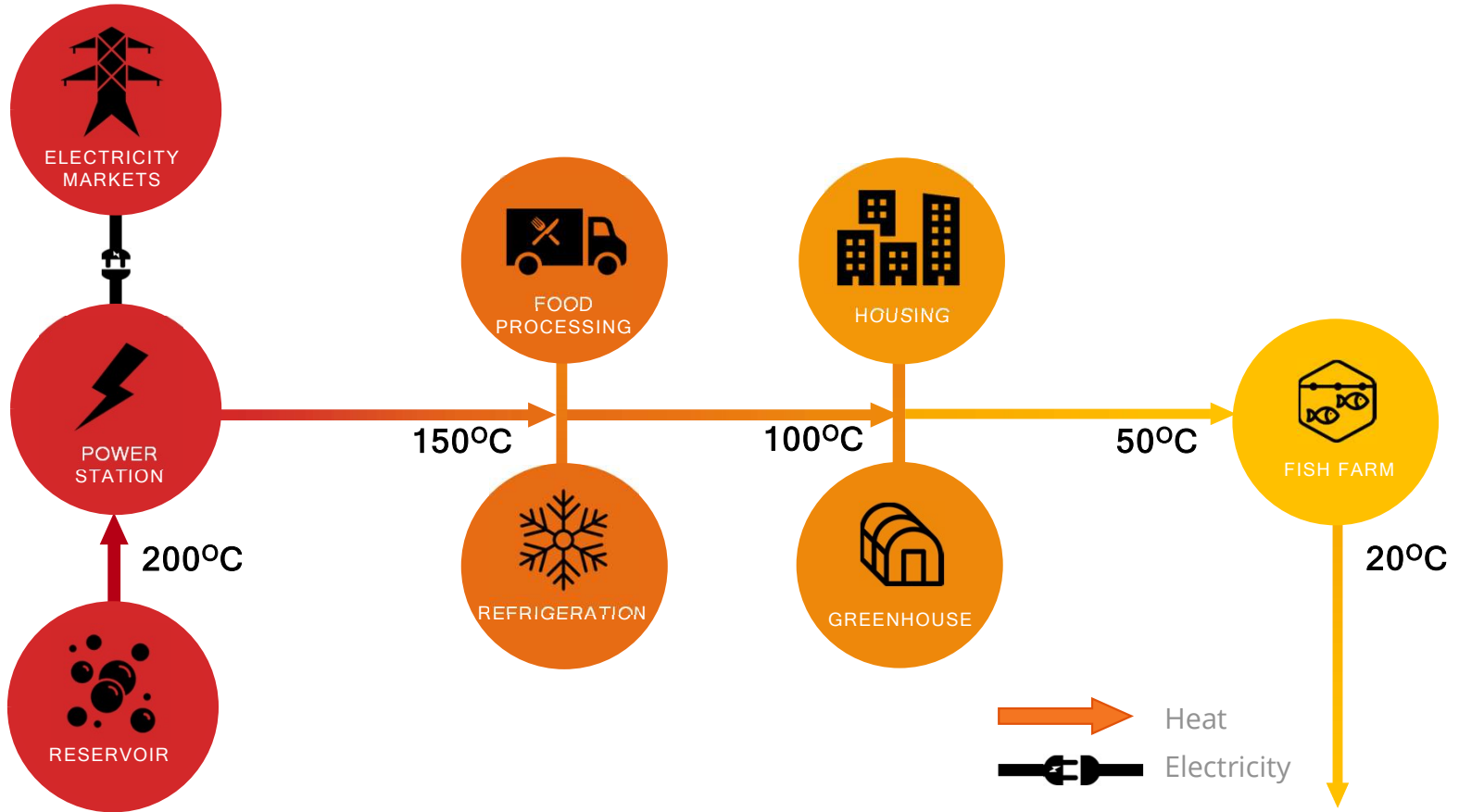
Electricity Plus



Electricity Generation



Cascade Use

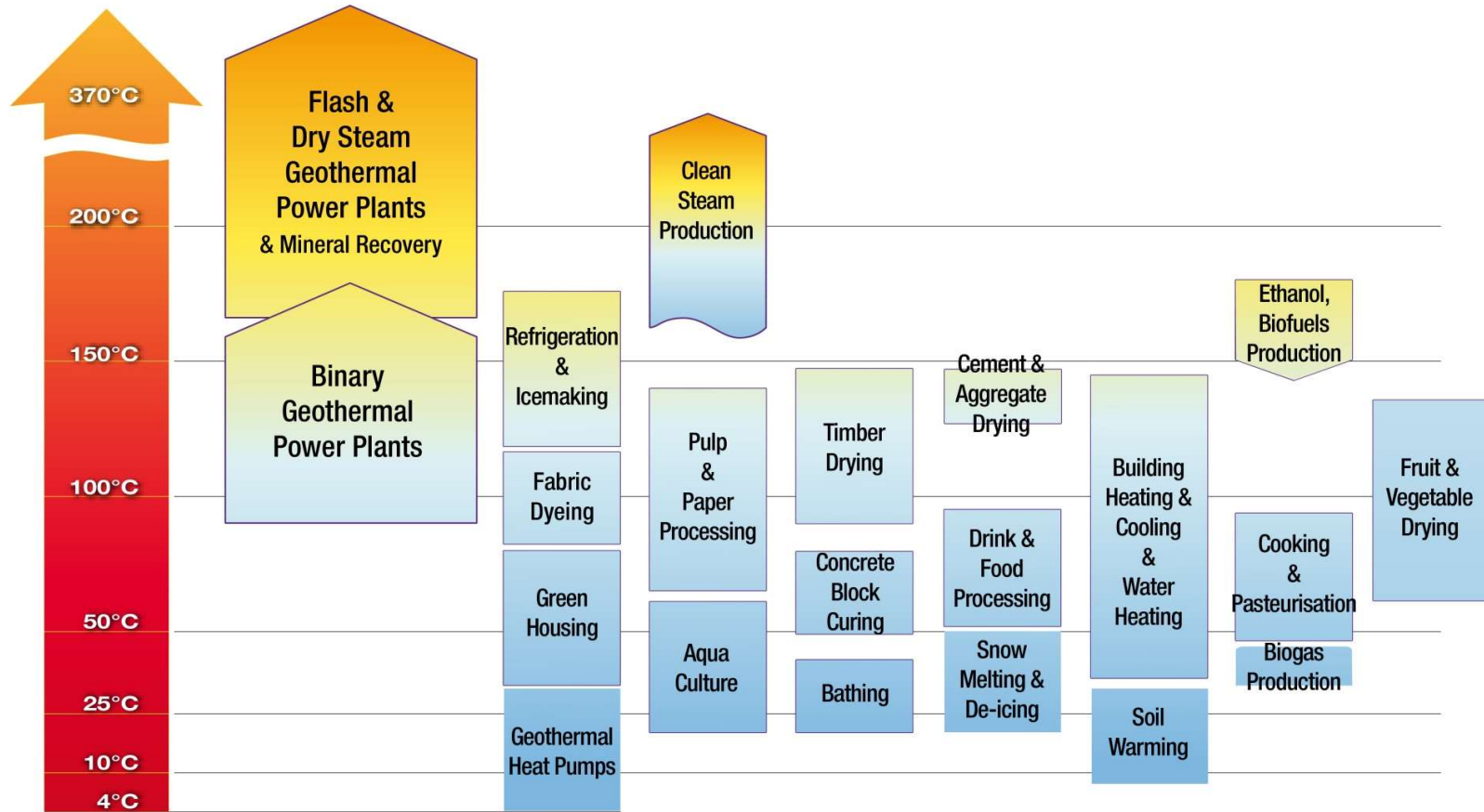


HIGH

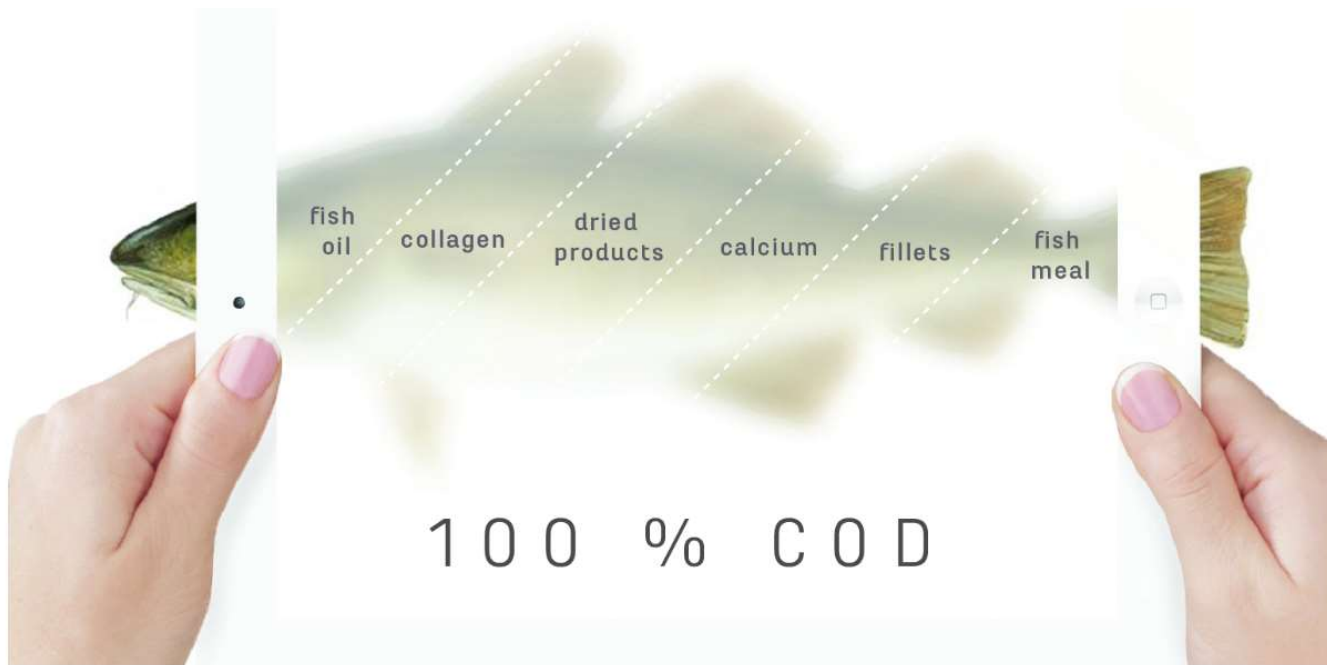
MEDIUM

LOW TEMPERATURE

Heat Use



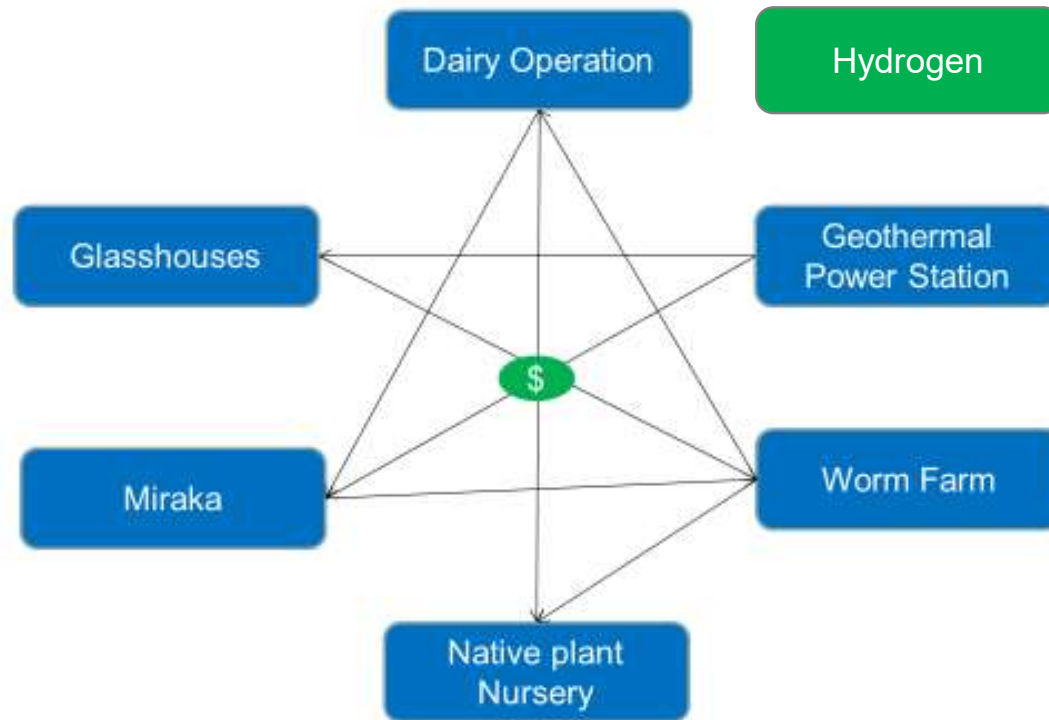
Lindal Diagram, 1973

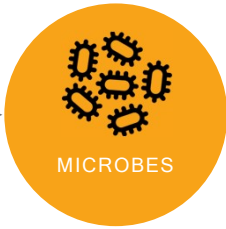
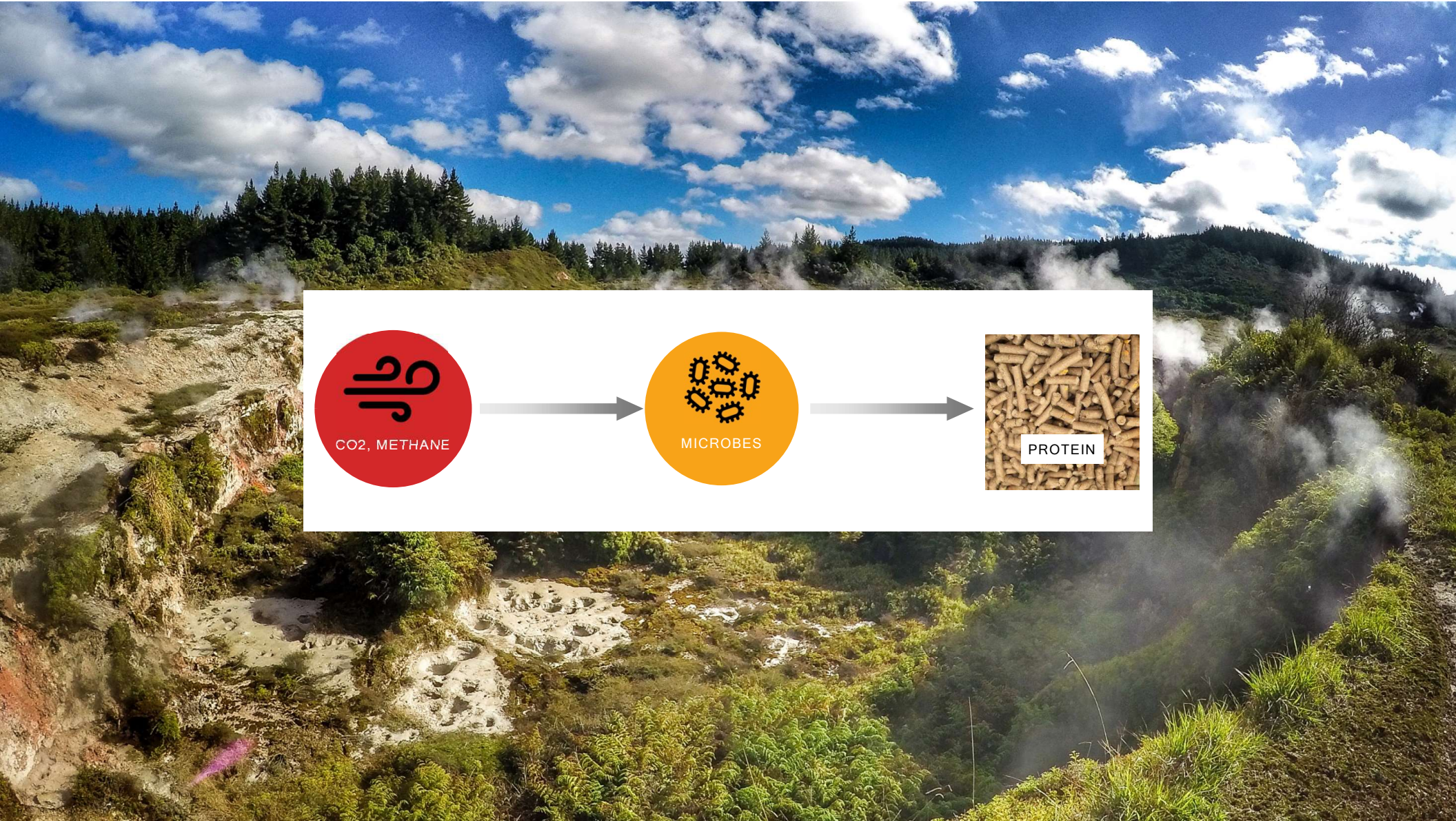


Industrial Processing











Access to water



Food Security

Photo: IRENA



Decarbonisation



Employment Opportunities

	Activity	Size of operation	Geothermal Energy Used	Geothermal Field	FTE*
Miraka	Milk processing facility	~300ML/year milk processed into milk powders and UHT	~2,400t/day clean steam from 2 pre-existing wells	Mokai	~120
Tenon	Timber Drying	150,000m ³ /year of timber dried	Geothermal heat plant with an installed capacity of 27 MW to heat 9 timber drying kilns. Consented take of 4110 tonnes/day of ~209°C fluid	Tauhara	265
Huka Prawn Park	Aquaculture tourism (Prawns)	~7.8 tonnes of prawns produced per year	450 tonnes/hour (~115°C) cascaded fluid from binary plant	Wairakei	60
Asaleo Care	Tissue & Toilet Paper Manufacturing	~50,000 tonnes/year of tissue product	254,510 GJ energy from geothermal steam (2016)	Kawerau	~200
Norske Skog	Paper production (Newsprint)	~150,000 tonnes/year paper production	3600 tonnes/day consented (~185°C). Including TA3 generator producing 9MW using 140t/hr steam	Kawerau	161

* FTEs = Full Time Equivalents. These numbers include all people working onsite at the operation, and excludes suppliers of steam and other contractors e.g. maintenance etc (Blair, 2018)



Community Benefits

GEOHERMAL

Investment

- Water access
- Food security
- Decarbonising economy
- Creating employment opportunities
- Increased prosperity of indigenous peoples, women and local communities

You can make reliable electricity from it too!





Raising our voices



**HE KAI
KEI AKU
RINGA**

'There is food at the end of my hands'

A person (or people) should use their abilities and the resources around them to create success for them and future generations

