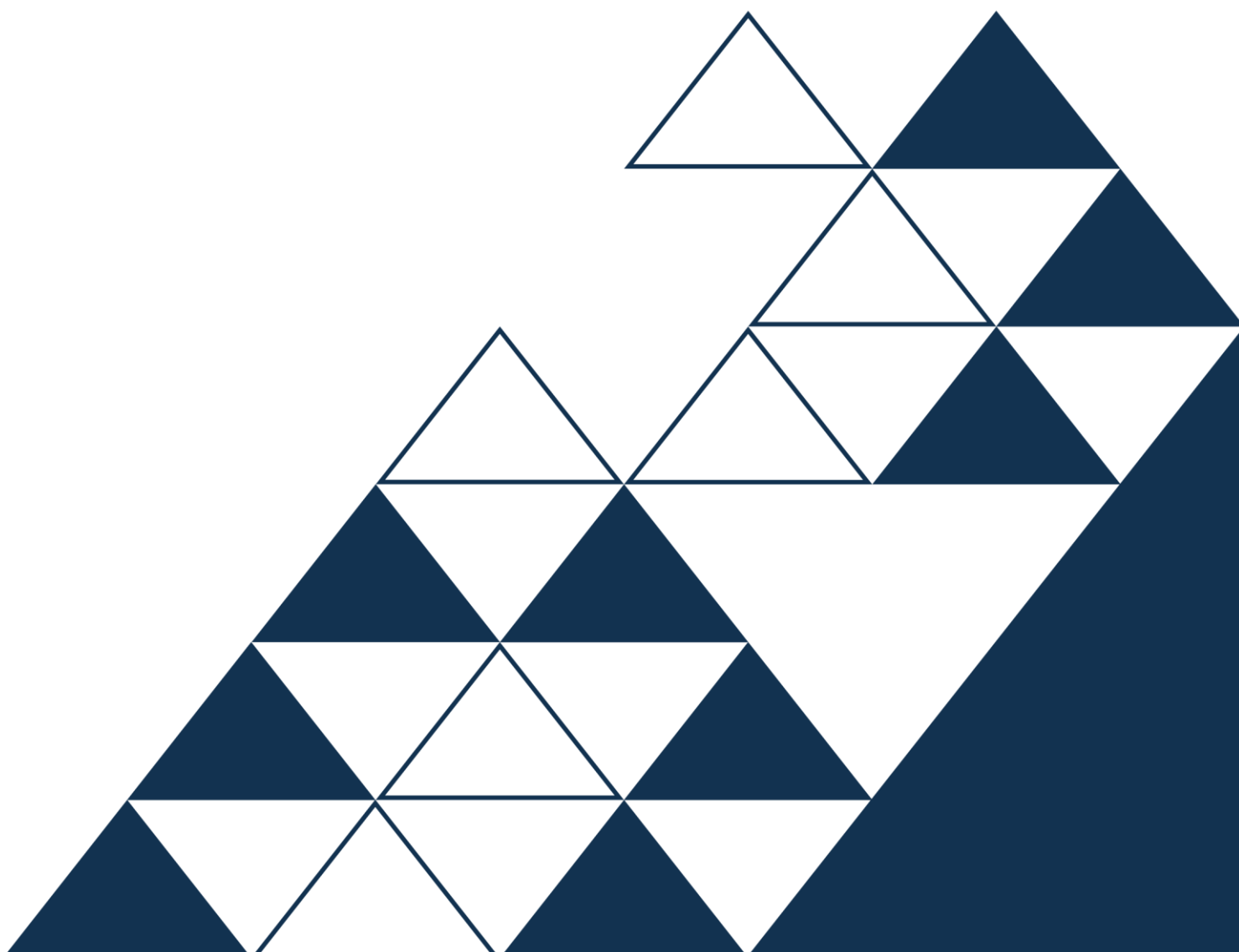


# Iwi Māori and the future of Waikato energy



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# Iwi Māori and the future of Waikato energy

## 1. Executive Summary

Iwi Māori are central to shaping Waikato’s low-emissions energy future. Their leadership, grounded in whakapapa and kaitiakitanga, connects deeply to the region’s hydro, geothermal, wind, and solar resources that underpin over one-third of Aotearoa’s national electricity (MBIE 2023; Transpower 2022). Iwi-led initiatives—ranging from geothermal partnerships and marae solar systems to hydrogen and bioenergy exploration—combine cultural responsibility with economic opportunity (Wairarapa Moana 2021; Eastland Generation 2020). Sector evidence shows these efforts align environmental restoration with innovation and resilience, demonstrating that iwi participation is essential to achieving affordable, secure, and sustainable energy outcomes across the region (He Ara Poutama 2022; Productivity Commission 2018). Wood energy and biogas offer near-term gains: wood fuels could replace ~40 percent of fossil process heat by 2050, and biogas can support hard-to-electrify uses and local resilience (MBIE, 2025a; 2025b).

Māori values provide the foundation for equitable and sustainable energy planning (Royal Society 2017). Energy is understood as a living system with mauri, requiring balance between people and the natural world (Marsden 2003). Kaitiakitanga emphasises intergenerational stewardship, whakapapa defines accountability to place, and mātauranga Māori integrates traditional knowledge with modern science (Harmsworth & Awatere 2013). Together these guide energy use toward reciprocity, collective benefit, and cultural integrity. Ensuring equitable access to reliable and affordable energy, alongside opportunities for iwi co-investment, training, and leadership, strengthens community wellbeing and regional resilience (Te Puni Kōkiri 2021).

The Waikato Regional Energy Strategy commits to practical partnership between iwi Māori, WRC, and the energy sector. Priorities include improving access to finance, data, and infrastructure; embedding iwi aspirations in planning; and participating in decision-making and monitoring frameworks. The establishment of an Energy Forum, shared data systems, and joint evaluation processes will track progress across cultural, social, environmental, and economic outcomes. Success will be measured when iwi Māori are fully enabled as partners, innovators, and beneficiaries in a fair, secure, and sustainable Waikato energy future.

## 2. Purpose and Context

Iwi Māori are important partners in shaping Waikato’s transition to a secure, low-emissions, and affordable energy future (MBIE 2023). This report recognises iwi perspectives, aspirations, and leadership within the regional energy system and outlines how Waikato Regional Council (WRC) will enable, support, and advocate for increased participation and shared outcomes (He Ara Poutama 2022). Current Government directions emphasise secure wood-fibre supply, practical end-user switching, and assessing biogas within asset, waste, and emissions plans (MBIE, 2025a; 2025b).

Energy underpins regional wellbeing — from whānau homes and marae to farms, industries, and transport (Royal Society 2017). Waikato is the electricity powerhouse of Aotearoa, producing over a third of national electricity, largely through hydro, geothermal, and emerging renewables (along with some fossil fuels) (Transpower 2022; MBIE 2023). Iwi connections to these resources are deep and enduring, grounded in whakapapa to the Waikato River, geothermal fields, mountains, and coastal winds (Marsden 2003; Harmsworth & Awatere 2013).

Across the region, iwi are progressing renewable ventures that combine commercial viability with cultural responsibility — geothermal partnerships around Taupō, marae-scale solar, and early exploration of hydrogen and bioenergy (Wairarapa Moana 2021). These initiatives support emissions reduction, energy equity, and local economic opportunity (He Ara Poutama 2022; Productivity Commission 2018).

Iwi-led energy development strengthens regional resilience and supports the transition to a low-emissions economy (Royal Society 2017). The strategy’s intent is to ensure iwi perspectives and priorities are reflected across planning, investment, and decision-making.

Key messages:

- Iwi Māori are central to Waikato’s energy system and transition to a low-emissions future.
- Cultural values — including kaitiakitanga — support sustainable and equitable energy planning.
- Iwi initiatives already demonstrate innovation, social benefit, and regional leadership.
- Partnership-focused delivery supports energy security, affordability, and environmental sustainability.

### 3. A Māori Worldview and Energy

Energy is part of a living system that connects atua, whenua, wai, te taiao, and tangata. It is a flow of mauri that sustains life and binds all forms of existence (Marsden 2003). From a Māori worldview, energy is not a commodity to be consumed but a taonga to be respected and managed with care (Royal Society 2017). Sector evidence shows that energy generation, transmission, and use should maintain balance in the natural world and uphold the wellbeing of people and communities (Harmsworth & Awatere 2013; MBIE 2023).

Iwi Māori engage with energy as iwi, hapū, marae, landowners, whānau, ratepayers, and consumers. Their interests span every part of the system—from protecting waterways and geothermal features, to renewable generation on Māori land, to ensuring reliable and affordable supply for whānau and marae (Te Puni Kōkiri 2021). These overlapping roles reflect energy’s dual nature as both taonga and necessity, shaping a relationship of reciprocity: energy provides for people, and people must act as its guardians (Marsden 2003; He Ara Poutama 2022).

### 4. Māori Values in Energy

#### Kaitiakitanga

Kaitiakitanga is the expression of collective responsibility to protect and sustain the wellbeing of te taiao, people, and future generations (Harmsworth & Awatere 2013). Energy decisions are made through this lens of guardianship and intergenerational care (Royal Society 2017). Development is supported when it enhances mauri, protects natural features, and avoids harm to environmental or cultural integrity (Marsden 2003). Kaitiakitanga calls for energy practices that restore balance and reinforce the life-supporting capacity of the environment (MBIE 2023).

#### Whakapapa

Renewable energy sources — sun, wind, geothermal, and flowing water, are connected through whakapapa to atua and the origins of the natural world (Marsden 2003). This lineage defines both the source of energy and the obligations of those who use it.

When the flow of a river, the skyline of a maunga, or the vitality of a geothermal field is changed, the effects are cultural as well as physical (Eastland Generation 2020). Whakapapa grounds

energy planning in respect, accountability, and connection to place (Harmsworth & Awatere 2013).

### **Mātauranga Māori**

Mātauranga Māori provides knowledge and understanding that complement science and technology (Harmsworth & Awatere 2013). It offers insights into seasonal cycles, environmental indicators, and local conditions that support sustainable energy design and use (Royal Society 2017). Integrating mātauranga Māori into planning ensures innovation remains compatible with the character of each place and honours the wisdom of those who live within it.

### **Collective Benefit and Equity**

Energy should contribute to collective wellbeing and equitable outcomes (He Ara Poutama 2022). Access to affordable and reliable supply for whānau, marae, and communities is fundamental (Te Puni Kōkiri 2021). Māori values emphasise that energy development should also build local capability—creating employment, training, and reinvestment opportunities (Productivity Commission 2018). Meaningful participation in decision-making and benefit-sharing strengthens community resilience and ensures that prosperity is shared across generations (Wairarapa Moana 2021).

These values – kaitiakitanga, whakapapa, mātauranga Māori, and collective benefit, together express a Māori understanding of energy as a living, relational system. They guide how energy should be captured, converted, transmitted, used, and cared for: with respect for natural forces, connection to place, intergenerational responsibility, and a commitment to equitable outcomes (Marsden 2003; Harmsworth & Awatere 2013). In doing so, they align the Waikato Regional Energy Strategy with Māori worldviews and support a just and sustainable energy future for the region.

#### **Key messages:**

- Energy is a living force with mauri, requiring care and balance.
- Kaitiakitanga guides long-term stewardship of natural and cultural systems.
- Whakapapa shapes relationships between people and energy sources.
- Mātauranga Māori may inform planning and innovation where appropriate.
- Iwi Māori hold diverse interests across the energy system, linking cultural responsibilities with practical engagement.
- Energy systems should support reciprocity and collective benefit, aligned with iwi values and aspirations.

## **5. Current State and Key Issues for Iwi Māori**

### **Overview**

Iwi Māori across Waikato engage in the energy system as kaitiaki, developers, landowners, ratepayers, and consumers (He Ara Poutama 2022). Interests span environmental protection, economic participation, and equitable access. This reflects enduring cultural relationships with natural energy sources and the realities of a modern energy market (Royal Society 2017).

This section outlines key environmental, cultural, social, and economic issues affecting iwi Māori across generation, transmission, and consumption, drawing on iwi management plans, engagement, and sector insights (Te Puni Kōkiri 2021; MBIE 2023).

### **Environmental and Cultural Effects**

Major energy assets – hydro, geothermal, wind and solar, operate within landscapes of cultural significance (Marsden 2003). The Waikato River, geothermal fields, and coastal winds are taonga with their own mauri and whakapapa (Harmsworth & Awatere 2013).

Electricity generation has brought benefits and impacts: altered river flows and habitats; reduced surface geothermal features; and effects on the visibility and character of ancestral landscapes (Eastland Generation 2020). These changes influence iwi ability to exercise

kaitiakitanga and affect cultural integrity (Marsden 2003; He Ara Poutama 2022). Iwi seek a balance where renewable generation does not come at the cost of environmental degradation or cultural loss, with restoring mauri and participation in environmental management as recurring priorities (Royal Society 2017). Using residues and low-grade logs requires safeguards for sustainability and local carbon storage to uphold mauri (MBIE, 2025a).

### **Social and Community Impacts**

Energy affordability remains a pressing issue (Te Puni Kōkiri 2021). High prices place disproportionate pressure on Māori households and marae, particularly in rural areas with limited network resilience (MBIE 2023). Energy hardship undermines health and wellbeing, as confirmed in national sector studies (Productivity Commission 2018). Many marae face high operational costs; some have installed solar and batteries to improve resilience, though access to capital and technical support is uneven (Wairarapa Moana 2021; He Ara Poutama 2022). Where viable feedstocks exist, small biogas systems can provide on-site heat/power and cut bills in weak-network areas (MBIE, 2025b). Equity also concerns engagement and decision-making: iwi often have limited influence over large projects that affect their rohe. Stronger collaboration and co-designed processes are needed to address this imbalance (Royal Society 2017).

### **Economic and Development Barriers**

Iwi interests range from co-investment in geothermal ventures to using Māori land for solar or wind (Eastland Generation 2020). Barriers include limited access to start-up capital, constraints on using Māori land as collateral, consenting, and unequal benefit-sharing from infrastructure on or near Māori land (Te Puni Kōkiri 2021). With appropriate policy, partnerships, and finance, iwi-led projects can support sustainable regional growth (He Ara Poutama 2022; Productivity Commission 2018). Wood energy projects hinge on cost-effective residue aggregation, transport, and bankable offtake (MBIE, 2025a).

### **Infrastructure and Connectivity**

Transmission and distribution constraints limit new renewable generation and affect energy security for some communities (Transpower 2022). Rural areas are more vulnerable to outages. For marae and papakāinga, these constraints can hinder uptake of distributed generation (Wairarapa Moana 2021). Improved spatial planning and investment are needed to connect Māori communities and landholdings to renewable opportunities, including fair access to grid connections (MBIE 2023).

### **Information and Data Gaps**

Access to accurate, energy data is limited, making it harder to demonstrate benefits, attract investment, or design evidence-based solutions (He Ara Poutama 2022). Data partnerships between iwi, council, and industry are essential to support informed decision-making (Royal Society 2017; Te Puni Kōkiri 2021).

#### **Key messages:**

- Iwi Māori experience both benefits and burdens of Waikato’s national energy role.
- Environmental and cultural effects of existing infrastructure remain significant.
- Energy hardship and affordability are ongoing challenges.
- Structural and financial barriers limit participation.
- Improved infrastructure, equitable access, and data transparency are critical enablers.

## 6. Iwi Aspirations for the Future

### Overview

Iwi across Waikato seek energy systems that are sustainable, affordable, and grounded in tikanga (Harmsworth & Awatere 2013). Aspirations vary by place, opportunity, and priority, with common themes of restoring balance, achieving energy independence, and building resilience (He Ara Poutama 2022; Royal Society 2017).

The strategy supports these aspirations by enabling iwi leadership in planning, facilitating investment in renewables, and encouraging fair sharing of transition benefits (MBIE 2023; Productivity Commission 2018).

### Self-Sufficient and Affordable Energy for Whānau and Marae

Many iwi and marae seek energy self-sufficiency through renewables — solar, wind, hydro, and bioenergy (Wairarapa Moana 2021). Solar and battery systems reduce costs, improve resilience, and model community independence (Te Puni Kōkiri 2021). Energy self-sufficiency supports collective wellbeing, enabling warm, dry homes and reducing hardship (He Ara Poutama 2022; MBIE 2023). Pairing solar with clean heat from residues or biogas can further lift resilience and reduce operating costs (MBIE, 2025a; 2025b).

### Renewable Energy Development and Innovation

Iwi aspire to lead renewable development such as geothermal, solar, wind and biomass, and explore emerging technologies such as hydrogen and biofuels (Eastland Generation 2020). Ventures can create employment, diversify economies, and strengthen ownership in the energy market (Royal Society 2017). Collaboration should recognise iwi expertise and enable participation from concept to operation (Productivity Commission 2018).

### Environment and Restoration

Restoration is central to iwi aspirations (Marsden 2003). Energy projects should help regenerate affected systems — replanting riparian margins, restoring mahinga kai, and maintaining geothermal integrity (Harmsworth & Awatere 2013; Eastland Generation 2020). Projects aligned with environmental values gain social licence and long-term support, contributing to regional objectives.

### Employment, Skills, and Capability Building

A fair transition creates skilled employment and training for rangatahi in renewables, environmental management, and data (He Ara Poutama 2022; Te Puni Kōkiri 2021). Partnerships between iwi, education, and industry will build a workforce for the future energy economy (Productivity Commission 2018). Building governance, project, and technical capability supports Māori-led enterprises (Royal Society 2017; MBIE 2023).

### Climate Resilience and Community Wellbeing

As climate impacts increase, iwi seek reliable energy for emergency response and essential services (Royal Society 2017). Localised electricity generation and storage support remote or vulnerable communities (Wairarapa Moana 2021; MBIE 2023). Clean, reliable energy underpins broader goals of resilience, health, and prosperity (He Ara Poutama 2022).

#### Key messages:

- Iwi Māori aspire to self-sufficiency, affordability, and environmental balance.
- Renewable development offers economic opportunity with cultural responsibility.
- Restoration and resilience are central goals.
- Skills, capability, and leadership enable long-term participation.
- The strategy supports these aspirations through enabling actions, investment pathways, and shared accountability.

## 7. Opportunities and Innovations

### Overview

Iwi and Māori-led energy projects are demonstrating how renewable generation, community resilience, and environmental restoration can align (Wairarapa Moana 2021; He Ara Poutama 2022). Across Waikato, iwi are designing initiatives that reflect local values and show how economic opportunity can advance environmental responsibility (Harmsworth & Awatere 2013). Established investments—such as the co-ownership of geothermal assets by Tauhara North No.2 Trust (Ngāti Tahu–Ngāti Tūwharetoa) and Mercury NZ, and the Mōkai geothermal station operated by Tūaropaki Trust—illustrate how iwi are already shaping the renewable landscape (Tauhara North No.2 Trust 2020; Tūaropaki Trust 2020).

### Emerging Opportunities for Iwi Māori

#### Community Energy Systems

Community-scale renewables and microgrids for marae, papakāinga, and rural settlements lower costs, improve resilience, and demonstrate sustainable practice (Te Puni Kōkiri 2021). Solar projects at Hau Arika Marae in Wairarapa and at 21 marae in Tairāwhiti have shown the potential of shared energy systems to reduce bills and provide emergency power (Rewiring Aotearoa 2023; Trust Tairāwhiti 2023). In Waitomo, five marae have installed solar arrays that redistribute surplus power to kaumātua and low-income whānau through The Lines Company partnership (Waitomo District Council 2023). With greater technical support, flexible regulation, and targeted capital funding, these models could scale across the region (MBIE 2023; Productivity Commission 2018). Community-scale anaerobic digestion linked to marae or kai networks can turn unavoidable waste into useful energy (MBIE, 2025b).

#### Māori Land-Based Generation

Māori land offers geothermal zones, high-wind ridgelines, and solar-suitable areas (Eastland Generation 2020). Short-rotation forestry and better recovery of harvest residues can supply clean heat and pellet feedstock where this does not displace higher-value fibre uses (MBIE, 2025a). Successful geothermal partnerships—such as Ngāti Tūwharetoa (BOP) Limited’s management of the Kawerau steamfield—show the potential of Māori-led resource stewardship linked to commercial innovation (Ngāti Tūwharetoa BOP 2020). Co-investment and tailored finance could unlock new ventures in agri-solar systems that integrate solar with pastoral or horticultural activity, producing multiple whenua benefits (Royal Society 2017).

#### Collaborative Ventures

Joint ventures between iwi, councils, and private companies are driving renewable expansion (He Ara Poutama 2022). The Halcyon Power partnership between Tūaropaki Trust and Obayashi Corporation, which operates a geothermal hydrogen facility, exemplifies cross-sector collaboration in emerging technologies (Halcyon Power 2021). Clear governance and equitable investment terms remain essential to scale such models. Standardised partnership templates could improve efficiency and confidence (Productivity Commission 2018). The Ngāi Tahu Farming–Crown Forestry programme demonstrates iwi leadership in woody-biomass supply and regional resilience (MBIE, 2025a).

#### Hydrogen and Emerging Technologies

Hydrogen, biofuels, and battery innovation create new iwi participation pathways (MBIE 2023; Transpower 2022). Māori-led hydrogen projects such as Halcyon Power’s geothermal production facility and Ngāi Tahu’s involvement in the Southern Green Hydrogen initiative demonstrate how iwi can participate early in high-value, low-emission technologies (Halcyon Power 2021; Meridian Energy 2023). Waikato’s proximity to industrial hubs and transport corridors makes it ideal for pilot projects, provided iwi are engaged from the outset as co-designers and equity partners.

### Education, Research, and Data Collaboration

Partnerships with universities, research institutions, and technology providers can expand Māori-led energy science, modelling, and monitoring (Royal Society 2017). Shared data platforms would enhance transparency and strengthen accountability, particularly when developed collaboratively with iwi energy networks (He Ara Poutama 2022; Te Puni Kōkiri 2021). These partnerships can also support vocational pathways and strengthen Māori capability in engineering, energy management, and climate innovation.

## **8. Examples of Innovation**

- Marae solar and battery systems lowering energy costs, improving resilience, and serving as community learning hubs (Wairarapa Moana 2021; Trust Tairāwhiti 2023).
- Geothermal co-ownership ventures—such as Rotokawa, Ngā Awa Purua, and Mōkai—delivering employment, training, and environmental monitoring roles (Tauhara North No.2 Trust 2020; Tūaropaki Trust 2020).
- Agri-solar and bioenergy pilots combining energy and food production while regenerating soils (Royal Society 2017).
- Hydrogen collaborations exploring industrial, transport, and export potential within environmental limits (Halcyon Power 2021; Meridian Energy 2023).
- Iwi–industry trials of short-rotation forestry and residue recovery to supply clean process heat and pellets, with local jobs and training (MBIE, 2025a).
- Off-grid solar systems at marae in Waitomo and Tairāwhiti that support energy hardship relief for vulnerable households (Waitomo District Council 2023).

## **9. Enabling Innovation**

Priority actions include streamlining consenting for iwi-led projects; expanding access to transition finance, green bonds, and co-investment tools; growing Māori capability in energy sector training; and embedding mātauranga Māori and cultural knowledge in technical standards, planning, and reporting (He Ara Poutama 2022; Harmsworth & Awatere 2013). Establishing an enabling policy environment will be critical to increase the range of iwi participation—from geothermal and hydrogen to community microgrids and agrivoltaics—and to ensure that Māori communities directly benefit from the low-emission energy transition. Priorities: standard offtake templates for heat/pellets, regional feedstock maps for residues/organics, and access to eligible public co-funding (MBIE, 2025a; 2025b).

### Key Messages

- Iwi and Māori-led projects provide practical models for a fair and sustainable energy transition.
- Community generation and co-investment on Māori land deliver shared cultural, social, environmental, and economic outcomes.
- Hydrogen, geothermal, and agri-solar initiatives open new pathways for participation.
- Research, education, and data collaboration strengthen Māori innovation and equity in the energy sector.
- Policy, planning, and finance systems must actively enable iwi-led participation and innovation.

## 10. Barriers and Challenges to Realising Iwi Potential

### Overview

Despite progress, iwi Māori face systemic barriers that limit full participation in the energy transition (He Ara Poutama 2022; Productivity Commission 2018). These reflect historic inequities and ongoing gaps in policy, finance, infrastructure, and data (Te Puni Kōkiri 2021). Addressing them is important for an effective and just transition (Royal Society 2017).

### Financial and Investment Barriers

Many entities are asset-rich but capital-poor (He Ara Poutama 2022). Collective ownership can restrict collateral, and traditional funding models may not suit intergenerational goals (Te Puni Kōkiri 2021). Large projects need significant upfront capital and long payback periods (MBIE 2023). Targeted tools — green bonds, concessional loans, and co-investment mechanisms — can enable iwi to participate as partners (Productivity Commission 2018).

### Policy and Regulatory Constraints

Complex consenting, zoning, and access requirements increase costs and delays (MBIE 2023; Royal Society 2017). Recognition of cultural values in practice often lags behind policy intent (Harmsworth & Awatere 2013). Better alignment between local government planning, the Waikato Regional Policy Statement, and iwi management plans would improve certainty and enable co-designed outcomes (He Ara Poutama 2022).

### Infrastructure and Grid Access

Networks were designed for centralised generation (Transpower 2022). As distributed and community systems expand, capacity constraints and connection costs are major barriers (MBIE 2023; Wairarapa Moana 2021). Equitable access to grid infrastructure, prioritised connections, and transparent pricing require coordination between WRC, Transpower, lines companies, and iwi (Royal Society 2017).

### Capability and Workforce Development

Participation depends on technical, financial, and managerial capability (He Ara Poutama 2022). Access to training remains uneven, including in engineering, project finance, and compliance (Te Puni Kōkiri 2021). Partnering with tertiary and training providers will grow the Māori energy workforce (Productivity Commission 2018; Royal Society 2017).

### Information and Data Limitations

Limited iwi-specific data on use, emissions, and infrastructure constrains decision-making and investment (He Ara Poutama 2022). Data-sharing agreements and transparent monitoring frameworks are needed to ensure equitable evidence-based policy (Te Puni Kōkiri 2021).

### Structural and Historical Challenges

Historic exclusion from resource ownership and decision-making has contributed to under-representation and enduring impacts from earlier developments (Marsden 2003; Harmsworth & Awatere 2013). Addressing these imbalances requires sustained commitment, fair benefit settings, and collaborative project design (Royal Society 2017).

#### Key messages:

- Financial, regulatory, and infrastructural barriers continue to constrain participation.
- Collective land ownership requires tailored finance and support.
- Planning and regulatory systems should better align with iwi priorities and processes.
- Grid access, capability, and data transparency are central enablers.
- Addressing historical imbalances supports a fair transition.

## 11. Pathways for Partnership and Action

### Overview

Progress towards a low-emissions energy future depends on practical collaboration between iwi Māori, WRC, central government, and the energy sector (Royal Society 2017). This section outlines pathways that emphasise the council's role to enable, support, and advocate — adjusting policy frameworks where possible and seeking changes where these sit outside council control (He Ara Poutama 2022).

WRC's focus is to create conditions for participation. The strategy recognises iwi as decision-makers, investors, ratepayers, and kaitiaki (Harmsworth & Awatere 2013). Actions will be developed with iwi so aspirations are integral to how energy is produced, distributed, and governed. Where iwi already have or are developing their own energy strategies, WRC will work alongside them and sector operators — including generators, transmitters, retailers, and installers — to identify opportunities to implement aspects of those strategies that align with the regional strategy. This will occur through partnerships, collaboration, co-investment, and commercial operation that deliver prosperity, affordability, sustainability, and social equity to iwi members, hapū, marae, and whānau, underpinned by culturally safe practices.

### Shared Principles for Collaboration

- **Iwi leadership:** Recognise iwi roles in decisions that affect their initiatives and interests.
- **Kaitiakitanga:** Maintain environmental stewardship and cultural integrity (Harmsworth & Awatere 2013).
- **Collaboration:** Work across iwi, government, and industry to achieve practical outcomes (He Ara Poutama 2022).
- **Culturally safe practice:** Ensure engagement, investment, and implementation processes uphold tikanga and respect iwi values, decision-making, and self-determination.
- **Appropriate use of cultural knowledge:** Reflect local knowledge in planning and monitoring where it improves outcomes (Royal Society 2017).
- **Equity:** Improve access to opportunities, information, and benefits (Te Puni Kōkiri 2021).

## 12. Mechanisms for Collaboration and Co-Design

### Joint Planning and Programme Oversight

Build on existing arrangements to develop joint planning for energy and climate initiatives — for example, shared working groups and project boards — with iwi input from inception to delivery (MBIE 2023), including wood-energy switching roadmaps for large heat users and marae-scale biogas options where feedstocks exist.

### Integrated Policy and Spatial Planning

Use regional policy and spatial planning to embed iwi priorities in land use, infrastructure, and energy zoning, identify suitable areas for renewables, avoid culturally sensitive sites, and align with iwi management plans (Harmsworth & Awatere 2013).

### Research and Data Sharing

Establish shared, transparent data systems covering use, emissions, and environmental outcomes (He Ara Poutama 2022). Uphold data sovereignty and enable evidence-based decisions (Te Puni Kōkiri 2021; Royal Society 2017).

### **Investment and Funding Collaboration**

Provide clear co-investment pathways and advocate for targeted, fit-for-purpose public finance and national transition funding tools (Productivity Commission 2018; MBIE 2023). Where levers sit outside WRC control, advocate to the relevant agencies. Support bankable offtake for clean heat, pellet supply, and biomethane, and broker iwi–industry partnerships that advance iwi-led energy strategies and shared economic opportunities.

### **Capability and Workforce Development**

Work with education providers and industry to deliver apprenticeships, scholarships, and training aligned with iwi priorities (He Ara Poutama 2022; Te Puni Kōkiri 2021).

## **13. Council Commitments**

WRC will:

- Enable iwi participation across strategy implementation.
- Support iwi who have or are developing energy strategies to align these with the regional strategy where mutually beneficial.
- Support the use of iwi management plans and relevant cultural knowledge in decisions where it improves outcomes.
- Adjust regional policy settings where possible to facilitate iwi–industry-led initiatives.
- Advocate for changes to national policy and funding where required.
- Facilitate data-sharing and transparent monitoring.
- Create opportunities for iwi leadership in programme oversight and delivery (Royal Society 2017).

## **14. Pathways for Implementation**

1. Support a regional Iwi Energy Forum to coordinate priorities, share knowledge, and guide implementation.
2. Develop standardised co-investment and partnership templates for renewables (He Ara Poutama 2022).
3. Incorporate iwi-led indicators into regional monitoring and reporting, where appropriate (Harmsworth & Awatere 2013).
4. Support community and iwi energy pilots with technical, financial, and regulatory assistance (MBIE 2023).
5. Develop a regional feedstock map (residues, low-grade logs, unavoidable organics) to signal viable hubs and connection points.
6. Pilot two iwi-led clean-heat conversions using wood fuels and one iwi/marae-led biogas project, with standard templates for offtake and governance.
7. Publish annual updates on participation, project delivery, and outcomes.

Key messages:

- Collaboration with iwi Māori is essential to the region’s energy transition.
- WRC will work alongside iwi who have or are developing their own energy strategies to create shared benefits.
- Partnerships with sector operators will help deliver prosperity, affordability, sustainability, and social equity for iwi, hapū, marae, and whānau.
- Culturally safe practices are central to all engagement, investment, and delivery.
- Aligning regional strategy with iwi aspirations strengthens resilience, innovation, and equity.

## 15. Measures of Success

### Overview

Measuring progress ensures equitable outcomes for iwi Māori and the wider community (He Ara Poutama 2022). Measures focus on transparency, shared accountability, and alignment with iwi aspirations — combining quantitative indicators with qualitative assessments of cultural, environmental, and social wellbeing (Royal Society 2017; Harmsworth & Awatere 2013).

Success is shown by emissions reduction, improved infrastructure, stronger participation, community resilience, and consistent application of regionally agreed values (MBIE 2023; Productivity Commission 2018). It also includes the extent to which iwi energy strategies are supported, implemented, and aligned with the regional strategy through culturally safe partnerships that deliver prosperity, affordability, sustainability, and social equity for iwi, hapū, marae, and whānau.

### Monitoring Framework

Co-designed with iwi to ensure relevance and integrity, including:

1. **Joint Evaluation** — Shared reporting by WRC and iwi, with annually reviewed indicators that include iwi energy strategy alignment.
2. **Integrated Data Systems** — Shared access to accurate, timely data with data sovereignty respected (Te Puni Kōkiri 2021).
3. **Cultural and Environmental Outcomes** — Indicators for the health of waterways, geothermal fields, and whenua, developed using science and locally relevant cultural measures where appropriate (Harmsworth & Awatere 2013; Royal Society 2017).
4. **Socio-Economic Outcomes** — Jobs, capability development, reduced energy hardship, and demonstrable prosperity for iwi members, hapū, and marae (He Ara Poutama 2022; MBIE 2023).
5. **Policy and Programme Outcomes** — Inclusion of iwi priorities, iwi management plans, and iwi energy strategies in policy, planning, and implementation, with all engagement guided by culturally safe practice.

### Indicative Indicators

- **Iwi Energy Strategies Supported:** Number of iwi who have developed or implemented energy strategies in alignment with the regional strategy.
- **Iwi-Led Energy Projects:** Number and capacity of iwi-owned, co-owned, or co-invested renewable projects (He Ara Poutama 2022).
- **Partnerships with Sector Operators:** Joint initiatives between iwi and generators, transmitters, retailers, or installers contributing to shared energy goals.
- **Energy Affordability:** Reduction in Māori households experiencing energy hardship (Te Puni Kōkiri 2021).
- **Cultural Safety and Practice:** Evidence that culturally safe practices are applied across all engagement, investment, and delivery phases.
- **Environmental Restoration:** Area restored through iwi energy partnerships (Harmsworth & Awatere 2013).
- **Workforce Participation:** Māori employed, trained, or contracted in renewables and related sectors (Productivity Commission 2018).
- **Jobs and Training:** Skilled roles in pellet, residue-recovery, and biogas operations with iwi participation.
- **Clean Heat Conversions:** Fossil process heat replaced by wood energy at iwi-owned/partnered sites (PJ/year).

- **Biogas Uptake:** Marae/iwi sites producing or using biogas/biomethane; energy delivered (GWh/year).
- **Feedstock Coordination:** Residues/low-grade logs and unavoidable organics under supply agreements (tonnes/year).
- **Participation in Governance:** Involvement of iwi in regional and project oversight structures.
- **Data Transparency:** Use of shared platforms for performance, emissions, and cultural outcomes tracking (MBIE 2023).

## 16. Reporting and Review Cycle

Progress will be reported annually through strategy implementation updates, with a comprehensive review every three years incorporating iwi feedback, performance data, and independent evaluation (He Ara Poutama 2022). Public reporting will reinforce accountability. Where progress is limited, targeted responses will be developed jointly (Royal Society 2017; Te Puni Kōkiri 2021). Regular reviews will also report on the degree of iwi energy strategy alignment and effectiveness of culturally safe practice in partnerships and delivery.

### Key messages:

- Success is measured by both outcomes and relationships.
- Monitoring will be shared and transparent, with cultural and iwi-led measures included.
- Indicators reflect alignment with iwi energy strategies, cultural safety, and socio-economic performance.
- Regular reporting and review strengthen accountability, adaptation, and continuous improvement.
- Long-term success is evident when iwi Māori are fully enabled as partners, innovators, and beneficiaries — achieving prosperity, affordability, sustainability, and social equity across their communities.

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