

An aerial photograph of a large dam and reservoir. The reservoir is a vibrant blue color, contrasting with the surrounding green and brown hills. The dam structure is visible in the upper right, with water flowing over it. The surrounding landscape is a mix of forested hills and open grassy areas.

Our energy future:

A regional approach to energy
in Waitaha Canterbury

Te pūngao ki Tua:

He tirohanga ā-rohe ki te pūngao
i Waitaha

AUGUST 2026

CANTERBURY
Mayoral Forum

Contents

Ngā ihirangi

Foreword	3
A regional approach to energy in Canterbury	4
Interconnections	8
The Canterbury Energy Strategic Framework - plan on a page	10
Vision and outcomes	12
Strategic priorities	13
Strategic priority 1 - Create regional benefits and foster innovation	14
Strategic priority 2 - Build resilience and reliability	17
Strategic priority 3 - Enable choices and access	18
Strategic priority 4 - Embed a regenerative energy future	21
Strategic priority 5 - Reduce emissions from transport and industry	22
Enabling success	24
Guiding principles	25
Where to next?	26

Foreword

Kupu takamua

Energy is fundamental to Waitaha Canterbury's prosperity, resilience, and wellbeing. It underpins our key sectors, from agriculture and manufacturing to tourism and emerging industries. It is critical to support investment, productivity, and sustainable economic growth across the region. Just as importantly, reliable, affordable, and sustainable energy enables our communities and whānau to thrive, supporting warm homes, essential local services, and equitable access to opportunity.

The strategic importance of energy is reflected across key regional initiatives. It is identified as one of five pillars in the Canterbury World-stage Ready future regional deal foundational document and a key priority within the Canterbury Ambition, developed in partnership by Business Canterbury.

As Canterbury grows and evolves, so too do the opportunities and challenges associated with how we generate, distribute, and use energy. Ensuring security of supply – particularly in the context of increasing electrification, climate variability, and system constraints – building business confidence, reducing emissions, and supporting thriving communities are interconnected priorities. The choices we make now will shape not only our environmental footprint, but also our long-term economic competitiveness and resilience.

This strategic framework sets out a coordinated regional response to these challenges and opportunities. It signals Canterbury's collective commitment to plan ahead, align effort and work in partnership across local government, industry, energy providers, mana whenua, central government agencies, and the wider community. The valuable input and support of these stakeholders has strengthened both the ambition and the practicality of this framework.

Canterbury is uniquely positioned, with abundant renewable resources, innovative businesses, and strong community leadership. By working together, we can harness these advantages to build a secure, affordable, and resilient energy system – one that supports a future-focused regional economy and unlocks lasting benefits for communities, businesses and industry across Canterbury.

I thank everyone who has contributed to the development of this framework and look forward to the collective action that will follow.

Mayor Nigel Bowen
Chair, Canterbury Mayoral Form





A regional approach to energy in Canterbury

He tirohanga ā-rohe ki te pūngao i Waitaha

Energy is a critical lifeline – it underpins the economy and is essential to our way of life.

Canterbury's regional approach to energy has been initiated through the Canterbury Mayoral Forum and its Plan for Canterbury 2023-2025. The Plan for Canterbury recognised that energy security will be critical to support opportunities for the region. It also highlighted that renewable energy will become an increasingly important role in responding to climate change risks, and that Canterbury has an opportunity to be at the forefront of an energy transition to attract and retain talent, investment, and technologies.

The 2026-28 Plan for Canterbury continues this commitment.

The Canterbury Mayoral Forum made a commitment to supporting the region to foster partnerships, to investigate barriers, harness opportunities to improve our energy security and systems in ways that maximise the benefits for our community, economy and environment.

The regional approach to energy has three integrated components:

Energy Inventory 2025	A comprehensive overview of Canterbury’s energy landscape – this forms the evidence base for future work and is now available on the Canterbury Mayoral Forum website.
Strategic framework	Establishes a shared regional vision, outcomes, and priorities, and sets the strategic direction needed to capture the benefits of the energy transition while addressing associated challenges.
Action Plan / Roadmap	Translates the strategy into delivery by identifying and prioritising practical actions to deliver on the energy goals for the region.

Strategic Framework

This Regional Energy Strategic framework positions Canterbury as a leader in sustainable energy and recognises the region’s significant role in the wider South Island and New Zealand energy landscape. It is presented as a high-level ‘plan on a page’, with additional detail set out in this report.

The strategic framework is intended for a broad audience. It supports coordinated decision-making, investment, and collaboration across the region, acting as a shared reference point for councils, organisations and partners working toward a common energy future. It aims to shape a collaborative energy future for Canterbury – benefiting individuals, communities, and industry alike.

The strategic framework is designed to be adaptive rather than static. It will evolve over time in response to shifting public expectations, emerging technologies, and changing energy demands.

Key drivers of the strategic framework

The energy landscape is changing

New Zealand, like many countries, is at a major transition point – moving toward low- or zero-carbon energy and shifting from a centralised supply model to a more distributed system. Growing electricity demand adds further pressure. A regional strategy will help Canterbury navigate this transition and respond in ways that best support our communities.

Unlocking economic, environmental and social benefits

The energy transition presents substantial opportunities. With a clear, committed plan, Canterbury can capture these benefits locally and achieve the right balance between protecting the environment and promoting economic growth.

Energy and economic growth are intrinsically linked

Reliable energy is critical to supporting existing industry and attracting new investment. Confidence in the region's direction and security of supply has direct implications for job creation, business prosperity and regional economic resilience.

Coordination is essential

Energy planning must be aligned with existing plans and strategies. Energy intersects with nearly every aspect of regional development – including planning, economic growth, climate adaptation and resilience, environmental sustainability, transport, industry, and urban development.

Supporting people and communities

Energy is woven into every part of modern life. To support families, communities, businesses and industries across Canterbury, the region requires a well-functioning, reliable, and equitable energy system and a well-managed energy transition is essential.

Implications for agriculture and the rural sector

Canterbury's strong rural and agricultural base contributes significantly to national GDP. Regional energy planning must consider agricultural production, alignment with emissions reduction efforts, and opportunities for coordinated investment in rural energy solutions.



Who we've connected with and what we've heard

The strategic framework has been shaped by the aspirations and perspectives of the energy sector, communities, iwi, industry, academia, and local and central government. It brings together diverse views and priorities. While consensus is not always possible, there is a strong willingness to collaborate to create a shared direction for Canterbury's energy future. Key messages include:

- **Energy is broader than electricity** – Canterbury's future requires a whole-system approach that considers all forms of energy.
- **Electrification is driving change** – electricity and electrifying processes represent the areas of greatest change and opportunity.
- **Hydropower is Canterbury's energy superpower** – the region hosts some of the largest hydro-electric schemes in New Zealand, making a significant contribution to the national grid. That means we can also be vulnerable during dry years.
- **Biomass potential** – Canterbury is uniquely positioned to leverage biomass as part of a sustainable energy mix.
- **Regional decisions have wider impacts** – decisions here have impacts for neighbouring regions, the wider South Island, and New Zealand as a whole.
- **Multiple futures are possible** – outcomes will depend on national demand and supply, population growth, new technologies, and geopolitical developments.
- **A sustainable energy future affects everyone** – from households paying power bills, farmers managing irrigation costs, and small businesses keeping the lights on, to community groups and large energy users.
- **An energy future for Canterbury needs to be enduring** – stable, long-term settings are important to withstand political change and provide investment certainty.

Ngāi Tahu

Māori have interests across all parts of the energy system. The role of natural resources in Māori culture, values, and worldview (Te Ao Māori) is deeply rooted in the concept of kaitiakitanga (guardianship), where land, water, and energy sources are entities with mauri (life force) that must be respected, sustained, and managed for future generations. Ensuring energy is reliable and resilient is particularly important for marae, which often serve as emergency response hubs for their communities. Alongside this, many Māori entities are actively exploring investment opportunities in renewable energy and emerging technologies, positioning iwi as key partners in shaping Canterbury's energy future.

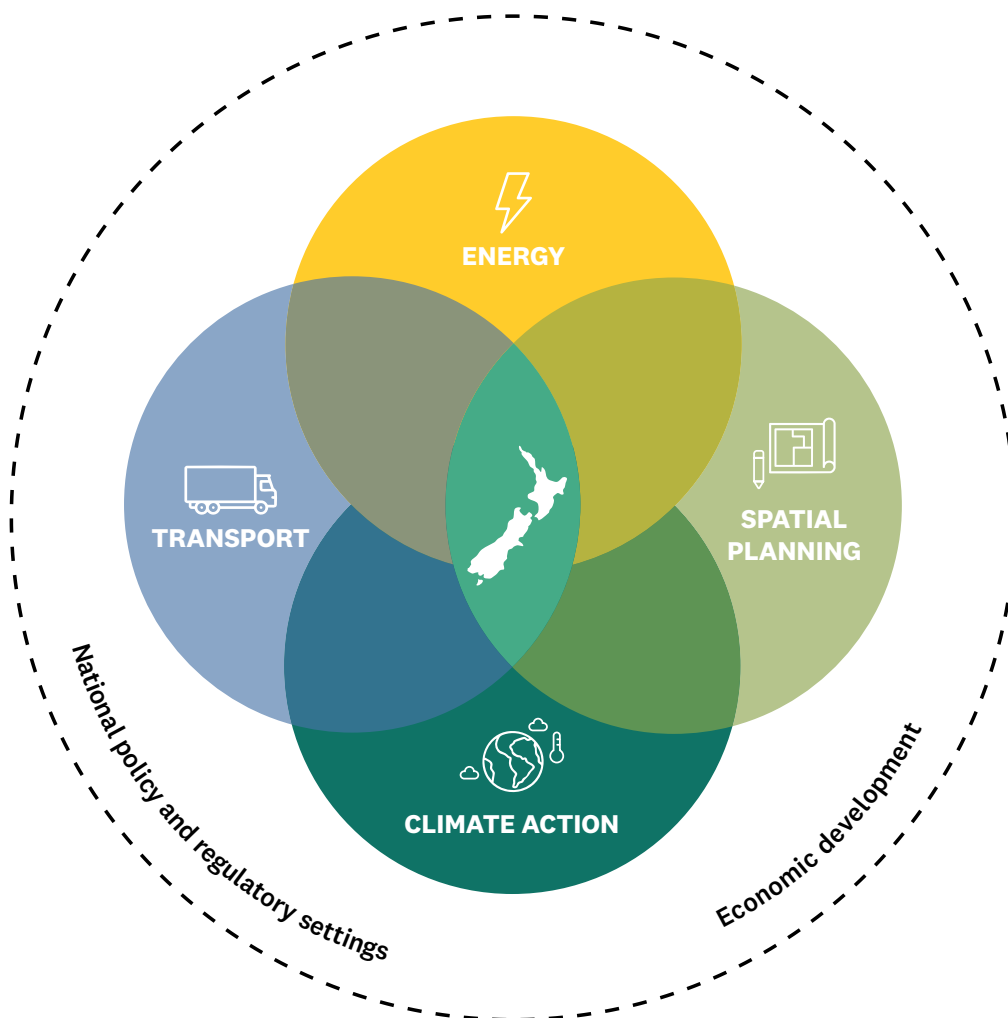
To shape the future of energy in Canterbury, concentrated efforts need to be undertaken to build positive and enduring relationships with mana whenua. Ngāi Tahu holds rangatiratanga over more than 80 per cent of Te Wai Pounamu South Island, including Waitaha Canterbury. Te Rūnanga o Ngāi Tahu, established under the Te Rūnanga o Ngāi Tahu Act 1996, is statutorily recognised as the representative tribal body of Ngāi Tahu Whānui. There are ten Papatipu Rūnanga in Canterbury who hold mana whenua over their respective takiwā (area, territory):

- | | |
|--|--------------------------|
| • Te Rūnanga o Kaikōura | • Wairewa Rūnanga |
| • Te Ngāi Tūāhuriri Rūnanga | • Te Taumutu Rūnanga |
| • Te Hapū o Ngāti Wheke (Rāpaki) Rūnanga | • Te Rūnanga o Arowhenua |
| • Te Rūnanga o Koukourārata | • Te Rūnanga o Waihao |
| • Ōnuku Rūnanga | • Te Rūnanga o Moeraki |

Early conversations with some rūnanga have helped to shape the draft Strategic Framework. Further and ongoing dialogue will remain important as the regional energy work progresses.

Interconnections Ngā hononga

Energy is closely connected to other regional priorities related to transport, climate action and spatial planning. Progress in one area can accelerate outcomes in others, but the overlap and interconnections also highlight the need for coordinated prioritisation to maximise impact, avoid duplication, and ensure that limited resources deliver the greatest benefit for Canterbury's communities.

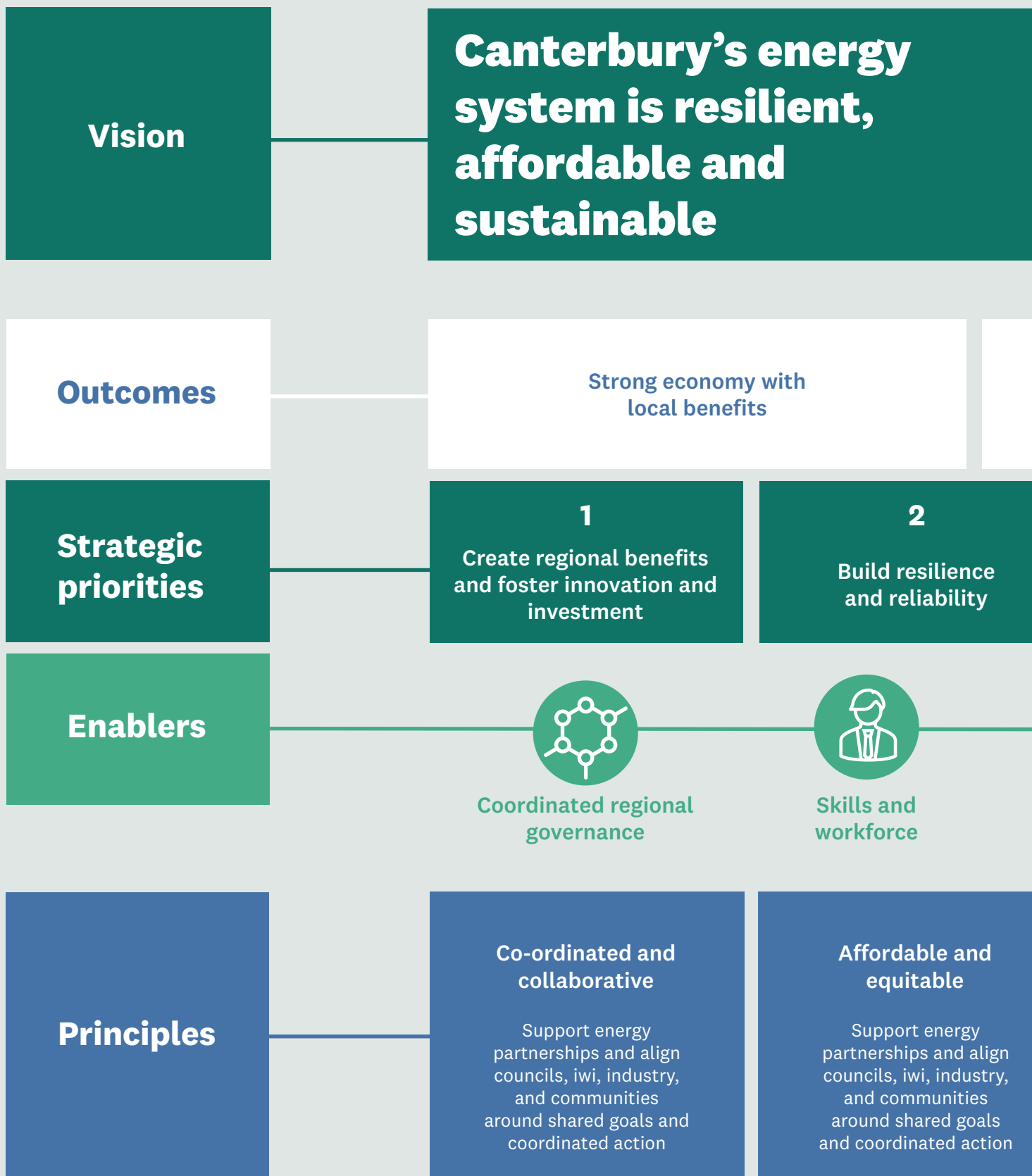


Energy and its interconnection with...	Key Information
 Climate action	The Canterbury Mayoral Forum is advancing regional emissions-reduction work through the Canterbury Climate Partnership Plan 2024–27¹. One of the actions commits partners to working together across the region to build equitable, inclusive pathways, targets, and key actions that support New Zealand’s global greenhouse gas emissions-reduction commitments. Progressing both workstreams in a way that is aligned will ensure that energy-focused actions are integrated with wider regional climate priorities.
 Transport	The transition to a lower-emission transport system in Canterbury will have significant impacts on the demand for energy – increased demand for electricity, hydrogen, and other low-emission fuels will require supporting infrastructure and investment. The Canterbury Regional Land Transport Plan 2024–34 supports the transition by prioritising intermodal freight, public transport, and active travel to reduce fossil fuel reliance while also recognising the broader transport system changes that will be required. Looking ahead, businesses and households will likely rely on a combination of electric, hydrogen, and biofuel-powered vehicles. Heavy freight faces considerable challenges as it looks to lower emissions, including limited availability of heavy vehicle charging infrastructure, high costs of converting heavy freight fleets, and uncertainty around fuel pathways and future technologies.
 Spatial planning	Regional spatial planning creates a significant opportunity to integrate energy planning into long-term land use decisions. Spatial plans could guide where renewable energy infrastructure (e.g. solar or wind farms, EV charging stations, community batteries) can be located. Spatial planning can also promote alignment between land use and energy demand and supply, particularly in areas with high distributed energy resources potential, reduce regulatory barriers, and support the establishment of Renewable Energy Zones.² There is also opportunity to influence urban form through spatial planning and reduce car dependency and lower fuel demand.

¹ Canterbury Mayoral Forum, Canterbury Climate Partnership Plan Kua tae te wā, Waitaha 2024–2027

² Renewable Energy Zones: National Consultation 2022, Transpower, p.4.

The Canterbury energy strategic framework – plan on a page



Te anga o te rautaki pūngao o Waitaha – te mahere

Harnessing our unique strengths to support the economy, empower communities, protect the environment and ensure the wellbeing of future generations

Resilient and
secure supply

Thriving environment and
a low emissions future

3

Enable choices
and access

4

Embed a regenerative
energy future

5

Reduce emissions from
transport and industry



Policy,
regulations and
guidance



Shared knowledge,
data and insights



Funding and
investment



Strategic
partnerships

Te taiao (the natural
environment)

A holistic view that
prioritises the wellbeing
and interconnection of
te taiao. Relationships
and partnerships are
grounded in Te Ao
values

Adaptative and action
orientated

Take a least regrets
approach that balances
urgency with flexibility
as technologies and
circumstances evolve

Place based

Ensure a place-based
approach is integrated
into energy system
planning enabling local
solutions

Vision and outcomes

Ngā matawhanui me ngā hua

Vision: Canterbury's energy system is resilient, affordable and sustainable

Harnessing our unique strengths to support the economy, empower communities, protect the environment and ensure the wellbeing of future generations

Canterbury's energy future is anchored in the strengths that define our region: our distinctive natural environment, a culture of innovation, and a sector committed to working collaboratively to deliver for our communities. By building on these advantages, we can create an energy system that is resilient, affordable, and sustainable – positioning Canterbury to lead the way in a changing energy landscape.

Resilient and secure supply

Resilience means building an energy system that can adapt as technologies evolve, electricity demand grows, geopolitical landscapes change, and climate pressures intensify, while withstanding shocks – from extreme weather to earthquakes and global disruptions. By broadening our generation mix, modernising networks, and using energy more intelligently, we can strengthen supply across both urban and rural Canterbury and reduce exposure to future risks.

Strong economy with local benefits

Affordable and reliable energy underpins jobs, innovation, and investment, supporting households, businesses, and communities. Investment in distributed generation, demand-side tools, and smart infrastructure can lower costs, expand access, increase equity, and unlock regional opportunities through new industries and skilled employment.

Thriving environment and a low-emissions future

Sustainability drives down emissions, protects the environment, and enables growth that benefits future generations. It also empowers communities to participate in and benefit from the energy transition through local projects, emerging technologies, and pathways for skills development. With Canterbury's capacity to adopt and test new solutions, the region is well-positioned to lead in demonstrating innovative approaches that accelerate the shift to a low-emissions future.

This strategic framework provides a clear path forward for an energy system that supports a strong economy, vibrant communities, and a climate-resilient, low-emissions future for Canterbury.

Strategic priorities

Ngā aronga rautaki

A clear, coordinated plan is essential to position Canterbury to meet its energy needs now and into the future. Five strategic priorities have been identified as critical to achieving this. These priorities are closely interconnected, and progress in one area will strengthen outcomes in others. Successfully advancing these priorities will require innovative funding and financing mechanisms, strong partnerships, and ongoing education and upskilling across the region.



Strategic Priority 1 -

Create regional benefits and foster innovation and investment

What this means: Prioritise investment, jobs, talent pipeline and economic opportunities that keep value in Canterbury. Support research, training, new technologies, and smart infrastructure that drive economic opportunity and emissions reduction.

Canterbury is uniquely positioned to lead New Zealand's energy transition due to its abundant natural resources, sun, wind, and water, and its role as a major contributor to South Island economic activity.

Why this matters:

- There are opportunities to build strong regional relationships and strategic partnerships across the energy sector including with key infrastructure and market organisations such as Transpower, electricity distribution businesses, and generators as well as community-council partnerships that support locally led energy initiatives, alongside public-private and private-private partnerships that are collaborative rather than competitive.
- Empowering local solutions through grassroots and community-led initiatives can make a tangible difference in advancing the regional energy transition.
- Building international partnerships and innovation ecosystems can create long-term benefits for Canterbury's economy, knowledge base, and energy innovation.
- Ensuring pathways for energy jobs, from field technicians to engineers, is essential for both current and future needs. This includes attracting and growing the right talent, creating 'green jobs' and providing opportunities for people to work locally on their whenua.
- University of Canterbury, Lincoln University, and Ara Institute all have energy expertise that support energy research, innovation and workforce development.
- Emerging frameworks like Local Area Energy Planning offer opportunities to coordinate energy development across districts, ensuring that Canterbury retains its regional advantages while embracing new technologies and investment models.³





Strategic Priority 2 -

Build resilience and reliability

What this means: Invest in infrastructure, innovation, and smarter networks to ensure Canterbury's energy system is diverse, secure, flexible, and future-ready. Consider the energy needs for adaptation and resilience for emergency hubs, marae, and other critical facilities that support community response and recovery.

Resilience is a critical priority for Canterbury's energy system, which faces increasing risks from climate change, natural hazards, and infrastructure vulnerabilities.

Why this matters:

- The region's energy networks face risks from extreme weather, sea level rise, and earthquakes.
- Reducing reliance on imported fossil fuels strengthens long-term resilience by lowering exposure to supply disruptions and price volatility.
- Energy security extends beyond electricity; liquid fuels for transport, freight, emergency response, and industry, are also critical, and supply disruptions pose significant risk.
- Energy demand is changing in amount, type, and timing, and the electricity grid may require additional services to maintain reliability.
- Secure, reliable infrastructure and transparent network planning are needed so communities and industry can plan for the future with certainty.
- Coordinated leadership and action is essential to ensure resilience and reliability.
- Local energy solutions must align with national frameworks.
- Investments in Battery Energy Storage Systems and distributed generation, such as rooftop solar, can improve reliability and reduce dependence on centralised systems.⁴
- Climate resilience must be integrated into all future energy planning, informed by the work of the Canterbury Civil Defence Emergency Management Group.⁵

⁴ Canterbury Energy Inventory 2025, Canterbury Mayoral Forum, p.39.

⁵ Canterbury Energy Inventory 2025, Canterbury Mayoral Forum, p.38.

Strategic Priority 3 -

Enable choices and access

What this means: Empower communities, businesses, iwi and individuals through energy education and partnerships so everyone can participate in and benefit from an affordable, sustainable energy system – with expanded energy options and local energy initiatives.

Improving energy literacy, partnership opportunities, and access to energy options is essential for communities, businesses, and iwi to participate in and benefit from Canterbury's energy system.

Why this matters:

- Communities, businesses, and iwi face varying levels of access to energy knowledge and resources, which can limit participation in the energy transition and reduce opportunities to benefit from local energy solutions, lower costs, and innovative approaches.
- Rapid changes in technology and evolving energy markets are reshaping Canterbury's energy landscape, creating both opportunities and challenges for households, businesses, and communities.
- Up-front costs, perceived complexity, and limited awareness can discourage households and businesses from adopting efficient, renewable, or innovative energy solutions.
- Community energy initiatives provide practical, locally led ways to lower costs, build resilience, and keep benefits within communities. Building knowledge and skills will support informed energy choices and help ensure Canterbury's transition is inclusive, locally led, and innovative.





Strategic Priority 4 - Embed a regenerative energy future

What this means: Ensure energy choices safeguard the environment, restore ecosystems, reduce waste, and strengthen the circular economy with the right balance of sustainability and te taiao (the natural environment) to enable sustainable and healthy options for future generations.

We must embed sustainability in energy decisions to protect ecosystems, restore habitats, and ensure a healthy environment for future generations.

Why this matters:

- Canterbury is moving toward a more regenerative energy future, with growing investment in renewable generation, circular energy systems, and emerging technologies such as hydrogen and biofuels.
- Large-scale renewable and bioenergy, including organic waste processing, are already demonstrating how circulate approaches can strengthen the region's energy system.
- Developing circular pathways for energy technologies will be increasingly important to reduce waste and support a long-term regenerative energy system.
- These technologies offer opportunities but also come with uncertainties, including supply-chain and implementation challenges that affect how quickly they can contribute to Canterbury's transition goals.
- Protecting te taiao, including valued landscapes, mahinga kai, and taonga species, remains essential as Canterbury expands its renewable and circular energy systems.
- A fair and inclusive transition is critical, so that the shift to new energy technologies and systems does not increase energy hardship and communities, businesses, and iwi can access reliable, affordable energy.

Strategic Priority 5 - Reduce emissions from transport and industry

What this means: Accelerate the transition of Waitaha Canterbury's transport and industrial sectors to low-emission energy through multiple energy options, efficiency measures, and support for innovation and investment.

Shifting Canterbury's transport and industry to low-emission energy opens opportunities for innovation, economic growth, and progress toward a low-carbon future.

Why this matters:

- Transport and industry are major energy users and significant contributors to emissions.⁶
- Electrification is one of the most immediate and scalable pathways to reduce emissions and support the low-carbon transition.
- Canterbury is well-positioned to lead innovation, with local companies and research partners advancing hydrogen technologies, and exploring opportunities in synthetic aviation fuels, and electric freight solutions.⁷
- Industrial process heat offers a major decarbonisation opportunity, with coal-dependent operations able to reduce emissions through electrification, biomass, and heat pump technologies.⁸
- Emerging technologies offer new opportunities, but up-front costs, infrastructure gaps, and knowledge barriers can slow adoption.
- Canterbury's renewable energy resources and grid capacity can support the shift if investment is well targeted and coordinated.
- Collaboration across industry, local and central government, iwi, and communities is essential to align action, share investment, and realise economic, social, and environmental benefits for the region.

6 With fossil fuels powering approximately 98% of the national vehicle fleet and 91% of Canterbury's regional fleet

7 For example Fabrum and the Hydrogen Aviation Consortium

8 Canterbury Energy Inventory 2025, Canterbury Mayoral Forum, p.27.



Enabling success

Mairangatia te angitu

Below is a brief description of the enablers we expect will be needed to shape a regional approach to energy. This list and the descriptions are not exhaustive – they will shift and change as needed.



Coordinated regional governance

Clear leadership, collaboration, and accountability across agencies to drive collective action.



Skills and workforce

Building the capability and capacity needed to deliver an energy future that improves economic resilience and community wellbeing. Canterbury's energy future will be built by people – engineers, tradespeople, planners, and innovators.



Policy, regulations and guidance

Ensuring supportive national and regional policy settings to enable timely, consistent energy action.



Shared knowledge, data and insights

Accessible, trusted information to guide decisions, track progress, and share learning. Drawing on national and international expertise will strengthen Canterbury's ability to apply whole-of-system energy planning approaches and support informed local decision-making.



Funding and investment

Targeted and coordinated investment to unlock opportunities and innovation.



Strategic partnerships

Collaborative relationships across sectors and communities to accelerate progress, unlock innovation and facilitate scale.

Guiding principles

Ngā mātāpono

A resilient, affordable and sustainable energy system for Canterbury will be shaped not only by infrastructure and investment, but by the principles that guide our decisions. These principles reflect the values of our communities and the aspirations of our region. Together, they underpin how we will work collectively to build an energy system that supports the wellbeing and prosperity of people and places for generations to come.

Coordinated and collaborative

Support energy partnerships and align councils, iwi, industry, and communities around shared goals and coordinated action.

Affordable and equitable

Reduce hardship and supporting inclusive participation. Support a fair energy transition for everyone, from individuals to large energy users.

Te taiao (the natural environment)

A holistic view that prioritises the wellbeing and interconnection of te taiao. Relationships and partnerships are grounded in te ao values.

Adaptative and action orientated

Take a least regrets approach that balances urgency with flexibility as technologies and circumstances evolve.

Place based

Ensure a place-based approach is integrated into energy system planning enabling local solutions.

Where to next? Ki hea atu?

Canterbury is still reliant on fossil fuels in the transport, industrial, and agriculture sectors. However, it is well-positioned for the energy transition, with abundant solar, wind, and hydro resources, particularly through the Waitaki hydro scheme.⁹

There is a broad set of opportunities for shaping the energy future in Canterbury and while this strategic framework sets the scene and identifies some of the priorities - it is the next step of developing the action plan/road map that will matter the most.

1

Building relationships and encouraging partnerships

There is a willingness in Canterbury to work together in partnership to achieve shared goals, scale impact, attract investment and share the risk.

2

Determining actions

We'll work together to co-develop the actions that sit underneath the strategic priorities with a focus on which ones we think will make the most positive difference for the region.

3

Bundling and streamlining

We'll look at how to bundle together actions and streamline how we work towards the same or similar goals.

4

Prioritising action

In alignment with the action-oriented principles, we'll need a focus on what we can get going with in the short term, as well as planning for the long-term.

