



TERMS OF REFERENCE

NEW ZEALAND ENERGY STRATEGY

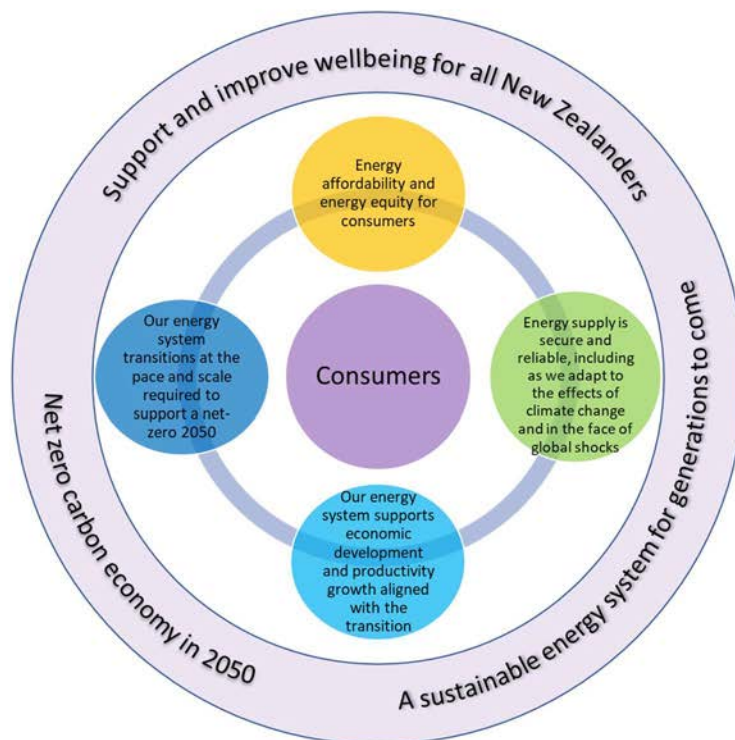
October 2022

Context for an energy strategy

1. Energy is essential to the economy and the lives of New Zealanders. It is used across the economy in transport, electricity, for heating and by industry. It is fundamental to the health and wellbeing of our communities and people.
2. In 2020, emissions from energy made up 40% of our total gross emissions. We will need to do things differently if we are to create a sustainable energy system for generations to come.
3. To meet the 2050 target of a net zero emissions economy, we need a transformed energy system, with much lower reliance on fossil fuels and increased reliance on renewable electricity and low-emissions fuels. As the sector transitions over the next 30 years, we must ensure that:
 - energy remains accessible and affordable to support the wellbeing of all New Zealanders
 - energy supply is secure, resilient, and reliable throughout the transition and beyond
 - energy systems support economic development and productivity growth aligned with the transition.
4. A significant amount of work has already taken place that we now need to build on. To date, the Government's renewable energy strategy work programme has guided work to decarbonise the energy sector and prepare it for a more renewable future. The first Emissions Reduction Plan (ERP) released in May 2022 set out a broad range of actions to reduce energy and industry emissions.
5. One of these actions is the development of an energy strategy by December 2024. The development of a strategy provides a real opportunity to ensure that steps to decarbonise are coordinated and considered across the whole energy system.
6. The **New Zealand Energy Strategy** (the Strategy) will help set pathways to achieve our objectives and provide certainty for the sector, consumers, and industry. It will set the direction for New Zealand's pathway away from fossil fuels and towards greater levels of renewable electricity and other low emissions alternatives.
7. The Ministry of Business, Innovation and Employment (MBIE) is leading the development of the Strategy. Already, MBIE has met with a wide range of stakeholders and has established a cross-agency steering group to guide the development of the Strategy. Feedback from stakeholders and the steering group has informed these terms of reference.

Vision, purpose and objectives

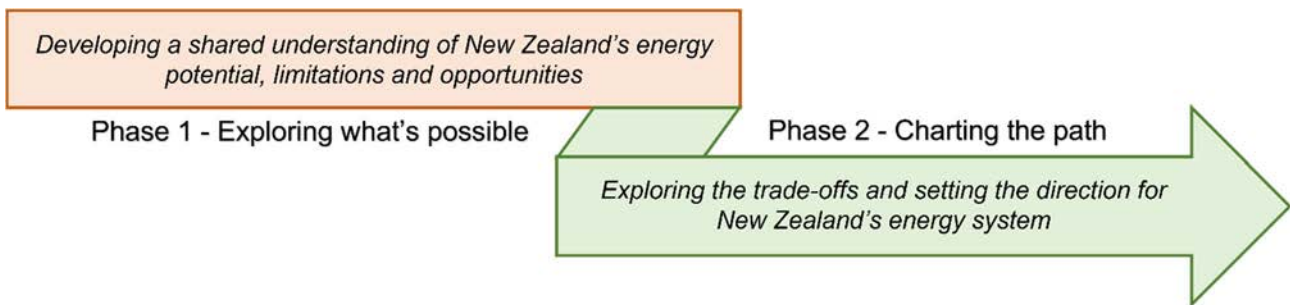
8. The ERP outlines the vision and high-level purpose of the Strategy.
 - The **vision** is for a net-zero carbon economy in 2050, where energy is accessible and affordable, secure and reliable, and supports New Zealanders' wellbeing.
 - The **high-level purpose** is to address strategic challenges in the energy sector, and signal pathways away from fossil fuels.
9. This Strategy will cover all forms of energy across the motu (both demand and supply side), including electricity, gas, and liquid and solid fuels, and will look out to 2050.
10. The Strategy will have the following **high-level objectives**:
 - energy affordability and energy equity for consumers
 - our energy system transitions at the pace and scale required to support a net-zero 2050
 - energy supply is secure and reliable, including as we adapt to the effects of climate change and in the face of global shocks
 - our energy system supports economic development and productivity growth aligned with the transition.
11. At the heart of these objectives are consumers. In reaching the objectives, we need to support and improve wellbeing for all New Zealanders.
12. The vision and objectives are illustrated below.



13. These objectives recognise the need to balance competing needs and the opportunity to improve on all three limbs of the energy trilemma (equity, security and environmental sustainability) through the transition.

Approach to development

14. The Strategy will be developed in two key overlapping phases, as described further below:
- Firstly, **exploring what's possible**.
 - Secondly, **charting the path**.



Phase 1: Exploring what's possible

15. This phase is about building an understanding of New Zealand's energy potential, limitations, and opportunities. Under this phase, we will:
- explore potential future scenarios for our energy system,
 - undertake research into key areas, and
 - identify the key issues to address and opportunities to seize.
16. This phase will be underpinned by modelling, research, and analysis of potential different scenarios/pathways for energy demand, supply, prices, and emissions in New Zealand out to 2050.
17. The development of these scenarios will have regard to:
- New Zealand's emissions budgets out to 2035
 - the target for 50 per cent of New Zealand's total final energy consumption to come from renewable sources by 2035
 - the Government's aspirational target of 100% renewable electricity by 2030, and
 - the target for net-zero emissions of long-lived greenhouse gases by 2050.
18. These scenarios will explore the energy trilemma to analyse trade-offs and look at how we can make progress on equity, security and environmental sustainability through the transition.
19. Phase 1 will also include in-depth exploration of the key areas set out in the table below. Others may be added as the Strategy develops.

Key area	Indicative supporting questions	Key related work to inform this ¹
Ensuring energy affordability and energy equity	<p><i>What are the implications of different scenarios/options for energy affordability and energy equity?</i></p> <p><i>What actions are needed to provide for greater affordability and equity?</i></p>	<ul style="list-style-type: none"> • Equitable Transitions Strategy • Community energy pilot programmes • Work to address energy hardship • NZ Emissions Trading Scheme settings
Using energy more efficiently and managing demand for energy	<p><i>How could we give consumers and businesses greater control of their energy use including through the utilisation of new technologies?</i></p> <p><i>What are the key opportunities for improving consumer and business energy efficiency?</i></p>	<ul style="list-style-type: none"> • Replacement NZ Energy Efficiency and Conservation Strategy (NZECS) • Work to improve the energy efficiency regulatory system • EV Charging Infrastructure strategy
Reducing emissions and energy use in industry	<p><i>What are the key opportunities to support industry to decarbonise, including through innovation and the utilisation of new technologies?</i></p> <p><i>What are the opportunities to support innovative low-emissions industries to grow?</i></p>	<ul style="list-style-type: none"> • Plan of actions for decarbonising industry • Government Investment in Industry Decarbonisation (GIDI) • Framework for Hard to Abate industries • NZ Emissions Trading Scheme settings
Ensuring the electricity system is ready to meet future needs	<p><i>What is needed to accelerate the development of new renewable electricity generation?</i></p> <p><i>How do we ensure the electricity system and market can support higher levels of renewable generation?</i></p> <p><i>How do we support the development of the required transmission and distribution infrastructure?</i></p>	<ul style="list-style-type: none"> • Electricity Market Measures • Advice of the Market Development Advisory Group • New Zealand Battery Project • Regulatory framework for offshore renewables • Resource management reform • Regional Energy Transition Accelerator
Reducing our reliance on fossil fuels and supporting the switch to low emissions fuels ²	<p><i>How can we phase-out fossil fuels in energy, transport, and industry?</i></p> <p><i>What is the potential role for new low-emissions fuels?</i></p>	<ul style="list-style-type: none"> • Gas Transition Plan • Circular Economy and Bioeconomy Strategy • The Sustainable Biofuels Obligation • Hydrogen Roadmap • NZ Emissions Trading Scheme settings • National Freight Strategy

¹ This column sets out related Government work programmes only. We note that the Strategy will also be informed by key sector initiatives.

² There are relationships here with other aspects of the Emissions Reduction Plan such as transport and building and construction. For example, transport fuels are part of the Strategy, but at the same time many of the regulatory levers for reducing the use of fossil fuels in transport fall in the transport regulatory system.

Phase 2: Charting the path

20. This phase is about setting the direction for New Zealand's energy system through the transition to a low emissions economy.
21. Under this phase, we will explore the key trade-offs between the potential future scenarios for our energy system, and identify the big choices for New Zealand to make, including through understanding:
 - What is required to make the potential future scenarios happen, especially any fundamental choices or mindset changes for New Zealand?
 - What is required to safeguard the wellbeing of consumers, in particular energy affordability and energy equity?
 - What are the implications of different pathways for energy emissions? What is the potential for the energy system to contribute to the decarbonisation of the economy?
 - What are the implications of different pathways for affordability and the international competitiveness of businesses and industry? How can we seize economic opportunities presented by the transition?
 - What do different pathways mean for reliability, security of supply, and New Zealand's resilience and energy independence?
 - What opportunities are there to improve on all three limbs of the energy trilemma (equity, security and environmental sustainability) through the transition?
22. Based on the exploration of trade-offs between potential future scenarios, the Strategy will:
 - set out government actions needed to achieve the vision and objectives of the Strategy and the least-regrets or no-regrets actions to progress, and
 - provide direction to guide decisions by communities, businesses, and the energy sector.
23. A framework to guide future decisions and actions for industry and government will also be developed under this phase, including:
 - What is the role of government, and when should it intervene?
 - Where are the gaps and who should fill them?
 - What more might need to happen to meet our emissions budgets and support a net-zero 2050?
24. This phase will also consider how we monitor progress towards targets and track along the pathway to 2050, including how we can adapt as necessary.

Timing and deliverables

25. The following is a high-level timeline for the development of the Strategy.

	Milestone	Timing
	Early engagement to understand what people want to see in the Strategy and how they want to be involved	July – September 2022
	Finalise and publish Terms of reference – scope and approach	October 2022
Phase 1	Initial policy work and development of approach to modelling	Late 2022 – early 2023
	Phase 1 Targeted engagement through various mechanisms	Early to mid-2023
	Public consultation seeking feedback on findings from phase 1 and feedback on issues to explore in phase 2	Late 2023
Phase 2	Further policy work and modelling that takes into account submissions, the final Gas Transition Plan, and the outcomes of other key policy work	Early to mid-2024
	Phase 2 Targeted engagement through various mechanisms	Early to mid-2024
	Finalisation and publication of the Strategy	Late 2024

Engagement Approach

26. The first Emissions Reduction Plan commits to the development of the Strategy through:
- fully collaborating and engaging with Māori, and
 - working with energy system stakeholders.
27. Early engagement to inform these terms of reference was undertaken between July and September 2022. Key themes and views on what people want to see in the Strategy and how best to collaborate have informed these terms of reference.
28. MBIE will continue to undertake targeted engagement through different means to inform the development of the Strategy, applying the principles of early, accessible, and inclusive.
29. An email address has been set up to enable interested parties to keep informed of progress and opportunities for input. Further detail on engagement and consultation opportunities will be provided through this email address and MBIE’s website.
30. Members of the public will be invited to have a say once research has been undertaken and a discussion document prepared.

Governance and management

31. The Ministry of Business, Innovation and Employment (MBIE) is the lead agency responsible for developing and delivering the Strategy.
32. The Minister of Energy and Resources is the responsible Minister.
33. MBIE will chair a cross agency steering group. The New Zealand Energy Strategy Steering Group terms of reference sets its role as supporting the delivery of the Strategy (and key workstreams that underpin it) through providing direction and guidance. This includes identifying links and dependencies across workstreams and strategies and helping to ensure these are being managed.
34. Progress will be monitored and reported to:
 - the responsible Minister
 - the Senior Leadership Team of MBIE
 - the Climate Change Chief Executives Board established as an Interdepartmental Executive Board (IEB) under the Public Service Act 2020 to oversee the implementation of the Emissions Reduction Plan, and
 - the Climate Response Ministers Group (CRMG), who will have an interest in the development of the Strategy given the role the energy sector has in responding to climate change.
35. The Council of Energy Regulators (consisting of the Commerce Commission, Electricity Authority, Energy Efficiency and Conservation Authority, Gas Industry Company, and MBIE) will play a key role in ensuring alignment across related work.