An energy sector perspective on the Government's proposed Energy Strategy

This paper has been developed in collaboration with members of the BusinessNZ Energy Council, participants in the Energy Transition Framework, Arup New Zealand Limited and leading industry associations incl. Electricity Retailers' Association of New Zealand, Energy Resources Aotearoa, Electricity Networks Aotearoa, FlexForum, Independent Electricity Generators Association, and the Major Electricity Users Group.

Introduction

The evolution of our energy system is one of New Zealand's defining opportunities. An abundant supply of secure, affordable, and low-emissions energy is fundamental to our economic resilience, environmental ambitions, and the wellbeing of our people. It can help improve our productivity and enhance the international competitiveness of our industrial base.

As global demand grows for more secure energy that is cleaner, New Zealand is uniquely positioned to lead by harnessing our abundant natural resources, maintaining a consumer-first focus via competitive forces, and enabling innovation across all fuels and technologies.

Energy underpins every part of our society, from the homes we live in and the businesses we run, to the industries that drive productivity and export earnings. It is the connective tissue between economic development and climate responsibility. This fundamental role of energy, together with our commitment to a net zero carbon economy by 2050, points to the need for a clear direction that a national energy strategy could provide.

There are a wide range of perspectives on the appropriate level of detail for a national energy strategy. The key elements that a strategy should cover include vision; principles (or objectives); key priority areas for action; and how to track progress. Those key elements have been used to develop the sector-led Energy Transition Framework - it establishes a principles-based framework to guide action across government and industry, key priorities and actions, setting out how we will support the energy sector while maintaining energy equity and security.

The Energy Transition Framework was designed with the thinking that, with strong cross-sector collaboration, clear measurement of progress, and an enduring commitment to affordability and reliability, we will ensure our energy system delivers lasting value for future generations. Acknowledging the level of overlap between what is covered in the Energy Transition Framework and what might be covered in an energy strategy, and that BEC members represent organisations that are Framework participants and those who are not currently participants, we have framed up this document by referring to areas where there could be value in building on or amending content covered in the Framework.

The following outlines an energy sector perspective on the potential contents for an energy strategy that would support an enduring energy future that benefits New Zealanders. We trust that the following will provide a valuable contribution to the Government's energy strategy for New Zealand.

Current Outlook on New Zealand's Energy Sector

New Zealand's energy system continues to advance towards sustainability with 43% of its primary energy supply from renewables in 2023, and a remarkable 94% of its electricity generated in the quarter ending December 2024 being renewable. While off lower demand, this presents a significant opportunity for economic growth. Overall, renewable electricity generation has increased, balancing the rise in refined oil product consumption. However, the industrial and transportation sectors still heavily depend on fossil fuels, and we are facing significant challenges in energy security that require urgent attention.

Energy system shifts are profound and enduring under the right conditions

In the past, the country has been able to take advantage of our ample energy resources. Major natural gas discoveries such as the Pohokura and Maui fields and the development of hydro production through the 20th century positioned the country to enjoy reliable, low-cost energy and the growth of renewable energy generation in the wider energy system. However, due to policy induced incentives and reliance on mature, near end-of-life fields, New Zealand's gas supply is declining faster than anticipated and investment confidence is at an all-time low.

Gas-fired firming, flexible generation and grid capacity is needed desperately to keep downward pressure on prices, as highlighted in winter 2024. Demand-side pressures are also growing. Broad electrification and a shortage of natural gas is placing additional strain on the system leading to price volatility. Seasonal peaks, especially in winter, are becoming more pronounced. Alternative sources of flexibility which compliment renewable generation, such as utility-scale batteries and energy storage, remain underdeveloped. Hydro generation is also increasingly variable due to climatic shifts.

The market has been able to survive largely due to ad hoc industrial demand response and good weather, but long term this is neither desirable nor sustainable.

As we move forward, the transport and energy sectors are becoming inherently linked, with the increased electrification of transport, industrial processes and space heating anticipated. Beyond electrification, clean fuels for shipping, road transport and aviation will significantly impact our current energy mix.

But sustained regulatory uncertainty and sovereign risk have meant that investment in new gas production and flexible electricity generation and storage has been muted. This needs to be addressed with urgency. Investors need predictability from regulators and government to lower the threshold for development and unlock the potential of domestic as well as foreign capital. A co-ordinated national energy strategy will provide policy certainty, reduce barriers to investment and, long-term, align planning, regulation and capital.

Vision

Note: The Energy Transition Framework contains a Vision statement. The below statement covers the key elements of that statement in a more summarised way.

An evolving energy system that benefits all New Zealanders by providing secure, affordable, and sustainable energy, supporting a high growth, highly productive economy.

Guiding Principles

Note: The Energy Transition Framework contains both key objectives and principles for working together. The following provides a reiteration of some, as well as additional points to be considered in the Government's energy strategy.

1. Consumer-Centric Transition

The energy system exists to serve New Zealanders, households, and businesses; by delivering energy that is affordable, reliable, and increasingly low emissions. Achieving this requires a clear strategic direction, with government and industry working together to shape the enabling environment, remove barriers, and unlock investment.

While markets remain the primary mechanism for delivery, they must be guided by customer needs and long-term national interests. Success means giving customers more choice and control, ensuring access to the energy services they need at an affordable price and building confidence in the transition.

2. Stable, Supportive Policy & Regulation

Policy and regulation play a vital role in enabling a competitive system that supports economic growth and contributes to our low emissions goals. Clear, consistent, and durable policy settings provide the predictability needed for long-term investment and innovation.

The energy transition must be guided by a focused policy framework that avoids conflicting objectives, remains fuel- and technology-agnostic and uses robust market signals, such as carbon pricing, to drive efficient outcomes.

Government's role is to set direction, enable access to new technologies, ensure regulatory processes are transparent and the market operates effectively, proportionate, and aligned with broader national goals. Policy stability across political cycles is essential to build investor confidence and unlock both domestic and international capital.

3. Fit-for-Purpose Markets

Markets are central to delivering a secure and affordable energy system. They drive innovation, efficiency, and investment, unlocking value for consumers and supporting economic growth and productivity. But to be effective, markets must be open, competitive, and guided by clear, stable rules.

Government has a role in setting the right conditions, removing barriers to entry, ensuring transparency, and maintaining trust in pricing and investment signals. Fit-for-purpose markets should reward the efficient mix of fuels, generation type, flexibility, demand-side participation, and emerging technologies, while enabling diverse business models and investment.

A robust and cost-effective energy system is one that supports both economic growth, as well as the wellbeing of households. When market signals do not achieve

desired public goals, the policy framework must adapt to ensure the energy system meets the needs of New Zealanders both now and in the future.

4. Collaboration Across the Sector

The energy system is complex and interconnected, and no single actor can deliver the transition alone. Government, industry, iwi, research institutions, and communities must work together to align goals, share knowledge, and unlock innovation.

Government plays a unique role in enabling collaboration, bringing credibility, and convening influence and policy insight that helps turn shared goals into coordinated action.

By fostering a culture of partnership, grounded in transparency and mutual trust, we can ensure policy, investment, and technology development move in step. Effective collaboration will de-risk projects, support regional development, and help New Zealand stay globally competitive as the energy landscape evolves.

5. Accountability through measured progress

Accountability and transparency are essential to a successful energy transition. We must measure outcomes that matter for consumers and use that evidence to guide decisions, refine approaches, and build confidence in the pathways forward.

Regular, reliable monitoring and reporting helps government, industry, and communities identify effective practices and areas needing improvement. A balanced transition requires an understanding of the trade-offs inherent in the Energy Trilemma: affordability, security, and sustainability. Given that the Trilemma is deeply embedded in our economy and society, its stability is manifested through durability, predictability, and flexibility.

Priorities for New Zealand's Energy Strategy

1. Facilitate Consumer-Led Innovation

Empower consumers and innovative business models by eliminating regulatory barriers, modernising market access protocols, and ensuring equitable participation.

2. Focus on Affordable Energy

Ensure efficiency and efficient pricing is crucial to maintain competitive electricity markets. High energy costs affect the cost of living and productivity, ultimately undermining our ability to meet emissions reduction targets. Electrification requires the least-cost access to technology and fuels.

3. Investing in Energy to Boost our Economy

Investing in all fuels and technologies unlocks competition and innovation and ensures an affordable, secure, and sustainable future that supports economic growth while providing choice to consumers.

4. Value all Contributions to Energy Security

Abundant secure energy fuels. Create the right market mechanisms and incentives that properly recognise storage, flexibility, diverse fuels, and infrastructure that support the provision of secure and resilient energy.

5. Resilient Infrastructure

Support energy initiatives in a fuel and technology agnostic way. Let project proponents outline the opportunities for economic growth and industry development, energy security, storage, generation, business use, flexibility, and local resilience.

6. Provide Long-Term Policy Predictability

A durable, bipartisan pathway will unlock private investment. Stable policy settings are the means to achieve secure, affordable, and sustainable energy.

7. Support Innovation through Regulatory Flexibility

Risk-based approaches focused on outcomes unlock innovation and competition. Trial new technologies and models through a structured regulatory sandbox to accelerate learning and system evolution.

8. Build a Connected, Data-Driven Energy System

Invest in digital infrastructure and governance to enable secure, real-time energy data sharing across the sector.

9. Align and Empower Sector-Wide Coordination

Support enduring institutions to coordinate action, build capability, and ensure inclusive delivery.

10. Measuring Progress toward a Balanced Transition

Track the execution of the strategy using the Energy Trilemma Index and Energy Transition Framework's Measures & Metrics Reporting, with independent reporting and transparent public accountability.

Actions

The following actions are intended to convert guiding principles and strategic priorities into specific actions. These actions will need adjustments as circumstances change. They represent a comprehensive approach that considers energy security, affordability, and sustainability. The proposed actions reflect a business-oriented perspective on the energy transition, with the government acting as a convenor, regulator, and facilitator. It supports business-led innovation, competition, and investment throughout the energy system driving better outcomes for New Zealanders while also recognising current markets may not adequately value energy security and supply diversity.

Principle	**Action**
Consumer-Centric Transition Let market signals and consumer demand set the pace.	**Remove regulatory barriers to new consumer business models** As New Zealand's energy systems evolve, consumers are increasingly adopting technologies like distributed generation (DER), energy storage, and electric vehicles. Innovative business models are emerging to meet these evolving consumer needs. However, existing regulatory frameworks, designed for traditional centralised systems, can impede the development and scaling of these models. Addressing these regulatory barriers is essential to empower consumers, foster innovation, and accelerate the energy transition. **Objective:** Modernise regulations to promote innovative, consumer-focused energy models that improve security, affordability, and reduce emissions while offering more choices and value to consumers. **Key Features:** **Modernise Market Participation Rules.** Update market rules to recognise and integrate DERs, flexibility products and aggregators, though: - appropriate market tools that reward flexibility and reliability and enable businesses to deliver significant volumes of flexible resources.

	- provision of ancillary services, such as instantaneous reserves, frequency regulation and voltage support. - contribution to system resilience, particularly in remote or vulnerable areas. **Facilitate Flexible Pricing and Tariff Structures.** Enable the development of pricing models that reflect the value of distributed energy resources and allow for dynamic pricing, time-of-use rates, and other innovative tariff structures that incentivise consumer participation and investment. **Streamline Compliance and Licensing Processes.** Simplify regulatory compliance and licensing requirements for new business models to reduce administrative burdens and encourage innovation, while ensuring consumer protection and system reliability. **Enhance Data Access and Interoperability.** Establish clear standards for data access, sharing, and interoperability to enable seamless integration of new technologies and services, while safeguarding consumer privacy and security. **Promote Equity and Accessibility** Ensure that regulatory reforms consider the needs of all consumers, including vulnerable and underserved populations, to promote equitable access to the benefits of new energy business models. Trailing and testing of these models can be facilitated within the Regulatory Innovation Sandbox**.**
	Addressing declining gas reserves to mitigate increasing costs and de-industrialisation The natural gas supply in New Zealand is currently at a crucial point, with businesses encountering substantial difficulties due to limited supply, escalating prices, and ambiguity concerning future availability. Demand consistently exceeds supply, making it difficult for businesses to secure long-term contracts. **Objective:** Ensure long-term energy security and energy affordability by addressing declining gas reserves. **Key Features:** **Enable New Gas Supply.** To enhance investment in various energy resources such as natural gas and alternative supplies like biomass, biogas, biofuel, hydrogen, and similar fuels, stable long-term government

	policies are crucial. Reducing regulatory barriers and fostering bipartisan agreements will promote investment confidence and stability, despite the inherent challenges in justifying investments in gas fields. **Stabilising Energy Security needs a Plan.** A comprehensive plan is required to stabilise energy security and affordability, considering different scenarios and preparing for potential deficiencies in government efforts to restore confidence in the gas sector. This plan should address how natural gas shortages might be managed to protect New Zealand's long-term interests, particularly for small to mid-sized businesses, and ensure a stable and affordable energy supply in the future.
	National direction to support energy projects that contribute to energy security and resilience New Zealand's energy landscape is evolving to ensure energy security and address regional disparities. It is crucial to streamline consenting processes for projects that bolster the energy system's reliability and adaptability. This includes not only renewable electricity generation but also initiatives that enhance the production of all fuel-types, storage, transmission, and distribution across diverse geographic areas. **Objective:** Ensure that our consenting framework prioritises energy projects that are fuel-agnostic, supporting economic growth and industry development, energy security, storage, flexibility, and local resilience. **Key Features:** **Align Consenting Priorities with the Broader New Zealand Energy Strategy.** Approve projects balancing affordability and security with sustainability and those that align with New Zealand's energy strategy. **Comprehensive Definition of Priority Energy Projects.** Expand the criteria for consenting to include: - support the integration of diverse energy sources and fuels, including distributed generation and community energy, renewable and non-renewable fuels and technologies. - enhance grid stability and flexibility, such as energy storage systems and flexibility initiatives. - ease transmission and distribution strain, especially in areas with limited access or high risk.

Stable, Supportive Policy & Regulation Reduce regulatory uncertainty and interference.	**Develop a long-term energy pathway with bipartisan support** New Zealand's energy sector faces challenges that go beyond climate change, including ensuring energy security, affordability, and fostering innovation. Policy reversals and adjustments have raised concerns about the stability of New Zealand's energy policy and investor confidence. To address these challenges, it is crucial to achieve a comprehensive, bipartisan-supported energy pathway. This approach would offer long-term certainty for private capital investment, align energy system planning with national objectives, and ensure policies are resilient and adaptive to a range of future scenarios. **Objective:** To provide certainty for private capital investment, guide infrastructure development, and ensure alignment with national climate goals. **Key Features:** **Bipartisan Commitment Mechanism.** Encourage a principle-based agreement on long-term energy targets. This could ensure continuity of energy policies across electoral cycles, providing stability for investors and stakeholders. However, measures should be in place to allow swift changes in emergencies. **Long-Term Investment Signals.** Establish clear commitment to a low-emissions energy future. This includes defining long-term objectives and natural resources development pathways that provide certainty for investors, enabling them to make informed decisions regarding infrastructure development, research and development, and market participation. **Regular Review and Adjustment.** Include provisions for periodic review and adjustment of the legislated pathway to incorporate technological advancements, economic shifts, and evolving scientific understanding, ensuring the framework remains relevant and effective over time.
	Establish a regulatory innovation programme Establishing a regulatory innovation programme for energy technologies and business models to operate under relaxed rules can provide New Zealand's energy sector with a controlled environment for testing innovative solutions. This aligns with the Electricity Authority's initiatives, such as in the Power Innovation Pathway (PIP), to develop guidelines facilitating such trials, aiming to support the integration of new technologies and business models into the energy market. Code exemptions to support trials (or "sandboxes")

	are a subset of the PIP. While innovators do not always require an exemption, support, and advice regarding real or perceived regulatory barriers can help them understand their obligations. **Objective:** To create a structured and supportive environment that enables innovators in New Zealand's energy sector to test and refine emerging technologies and business models under relaxed regulatory conditions. This initiative aims to accelerate the integration of innovative solutions into the energy market, enhance system flexibility, and inform the evolution of regulatory frameworks to better accommodate future energy needs. **Key Features:** **Provide advice.** Offer support and advice on regulatory barriers helps them understand their obligations. **Controlled Testing Environment.** Allows innovators to trial new energy solutions under relaxed regulatory conditions, ensuring consumer protection and system integrity. **Time-Bound Trials.** Each sandbox trial operates within a defined timeframe, enabling focused assessment and iteration. **Collaborative Oversight.** Involves close collaboration between innovators and regulatory bodies to monitor progress and address challenges promptly. **Knowledge Sharing.** Insights and learnings from sandbox trials are documented and shared to inform future regulatory frameworks and industry practices.

Fit-for-Purpose Markets Let private investment lead	**Create market mechanisms that value energy security contributions across the energy system** Ensure market structures adequately value diversity of supply and the contributions of various fuels, energy assets and infrastructure that are essential for maintaining energy security, such as ports, storage facilities, and flexibility capabilities. As the energy system evolves with increased integration of variable renewable energy sources, it is imperative to recognise and incentivise all components that contribute to a secure and reliable energy supply.

but ensure markets deliver energy security.	**Objective:** To establish market mechanisms and policy frameworks that recognise and appropriately value the contributions of a diversified energy system, including diversity of fuel source, flexibility, storage, frequency support, and supporting infrastructure to New Zealand's energy security. **Key Features:** **Assessment of Energy Security Contributions.** Assess the contributions of various energy assets and infrastructure to energy security, considering geopolitical risks. Include transmission and distribution networks, energy resources including gas, storage facilities, and demand-side resources for system reliability. This investigation could be part of, or build upon the fuel security plan, extending beyond liquid fuels. **Design of Incentive and Policy Mechanisms**. Develop and implement market-based instruments or policy mechanisms that provide appropriate incentives for fuels, assets and infrastructure contributing to energy security. This may involve price support mechanisms, reliability options, endorsement of new fuel sources (e.g. renewable gas), or other financial instruments tailored to the specific contributions of different assets. **Integration with Existing Regulatory Frameworks.** Ensure that new mechanisms are harmonised with current regulatory structures and market operations to maintain efficiency and avoid unintended consequences. This includes coordination with the Commerce Commission and the Electricity Authority to align incentives with regulatory objectives. **Monitoring and Continuous Improvement.** Set up continuous monitoring and evaluation processes to assess and improve energy security mechanisms. Use insights to make necessary adjustments over time. Focus on identifying and minimizing energy risks like HVDC station damage, central plateau eruptions, solar events, and grid instability, like the situation in Spain and Portugal.
	Strengthen the Security and Reliability Council At present, the responsibility for security of supply of our energy system is spread across multiple parties, with no clear line of accountability. This is increasingly concerning when the system is facing times of stress, such as winter 2024, and near-misses in the prior years. **Objective:** Strengthen the Security and Reliability Council (SRC). An independent entity, as recommended by a Sapere report released in 2024, should oversee security of supply across the entire energy system and

	adjacent elements. This entity must be adequately resourced to monitor reliability, security, and resilience to meet consumer demand. **Key Features:** **Independence.** The SRC must operate independently of the Authority, considering factors beyond its jurisdiction, like those under the Commerce Commission or MBIE's Energy Safety Service. The SRC can commission studies and publish reports independently. **Holistic Approach.** The SRC can evaluate any part of the power system or supply chains that might affect reliability, security, or resilience, prioritising their impact on New Zealand's economy. **Extend SRC Mandate.** The mandate of the SCR could be extended to include the broader energy sector, encompassing the entire energy system rather than solely focusing on electricity.
	National energy data sharing infrastructure New Zealand's energy sector is transforming with more renewable sources and distributed energy resources. Digitising this sector tackles current challenges and supports a reliable, efficient, and sustainable energy future in line with national strategic principles. **Objective:** Establish a secure, interoperable digital platform that enables real-time data sharing among energy sector participants, including generators, distributors, retailers, and consumers to improve market access and innovation. **Key Features:** **Standardised and Secure Data Protocols**. Develop common data standards to ensure interoperability across systems. Implement robust cybersecurity measures to protect sensitive information. **Governance Framework.** Establish clear policies regarding data ownership, access rights, and responsibilities. **Stakeholder Collaboration.** Involve industry participants in designing and implementing infrastructure to meet sector needs. The Flexibility Plan 2.0 outlines steps for data infrastructure and usage.

Collaboration Across the Sector Government convenes; industry delivers.	**Utilising the Energy Transition Framework to collaborate** New Zealand's energy governance is spread across multiple agencies with differing mandates, leading to fragmented implementation, policy drift, and limited strategic accountability. Past advisory groups have been temporary and vulnerable to political change, creating uncertainty for long-term investment. The Energy Transition Framework could provide strategic oversight, fostering alignment, and ensuring continuity of the energy transition across political cycles. They will provide forethought to avoid reactive interventions and prioritise appropriate actions for balancing the energy trilemma. **Objective:** The Energy Transition Framework aids the national energy strategy by providing the structure for government and the energy sector to collaborate on the shared challenges as well as tracking progress and providing advice. **Key Features:** **Composition:** Composed of representatives of government and business across the energy value chain, with an established governance steering group, and mechanisms for a work programme and decision making. **Accountability Mechanism:** Publishes a "State of the Energy Transition" report tracking delivery against strategy targets and recommending course corrections. *(Also see Measuring Progress)* **Streamlined and Open Consultation:** Facilitating more streamlined and efficient consultation and collaboration between the Government and the energy sector, as well as open and inclusive engagement to avoid duplication, create synergies, and make better use of limited resources.

Accountability through measured progress Hold government to account on strategy delivery not operational outcomes.	**Measuring progress using tools such as the Energy Trilemma Index and Energy Transition Framework Measures & Metrics Reporting** New Zealand ranks high in the World Energy Council's Energy Trilemma Index, balancing energy security, equity, and environmental sustainability. However, growing import dependence and less domestic storage pose new challenges. The Measures & Metrics reporting process extends on the Energy Trilemma Index to further define measures & targets that support a balance, solutions focused perspective that present the facts of the transition and enables insights into required actions. **Objective**: To use the Energy Trilemma Index to monitor New Zealand's global performance and Measures & Metrics Reporting to track progress against energy strategy targets. **Key Features:** **Benchmark New Zealand with the Energy Trilemma Framework.** Use the World Energy Council's Energy Trilemma Index for alignment with global standards and comparative analysis. **Utilise the Measures & Metrics Reporting.** Use the Measure & Metrics Reporting as a foundation for the measurement system, aligning with the global energy trilemma framework for comparative analysis. **Institutional Independence and Endurance.** Position the measurement framework within an appropriate institution or statutory body to ensure its continuity beyond political cycles. The Energy Transition Framework suggests using a participant member who is suitably independent to maintain the reporting process. For example, in New Zealand, the BEC represents the World Energy Council and conducts thorough analysis. **Regular Reporting and Transparency.** Establish a regular reporting schedule for the nation's performance across the three Trilemma dimensions, ensuring transparency and enabling stakeholders to monitor progress and identify areas needing improvement. **Facilitate Informed Policy Adjustments.** The Energy Trilemma Index and Measures & Metrics show how current policies impact energy security, equity, and sustainability. This helps the government stay focused on long-term energy goals and adapt to new challenges.

Members of the BusinessNZ Energy Council and/or Energy Transition Framework: