



Hydrogen Action Plan

NOVEMBER 2024



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

Te Kāwanatanga o Aotearoa
New Zealand Government



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INNOVATION & EMPLOYMENT**
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Ministerial foreword

This Government is taking action to unlock private investment in hydrogen.

After a period of relative stability, our energy system is undergoing a period of challenge and opportunity. Recent months have demonstrated how critical it is that we have a diversified, resilient energy system. And over the longer term, purchasers of New Zealand goods and services are increasingly demanding low-carbon products, delivered to market on low-carbon trucks, planes, and ships.

New Zealand is fortunate to have abundant renewable energy potential, which provides a strong foundation to electrify much of our economy, but also to produce hydrogen and other green fuels for activities that are less suited to electrification.

This Government is committed to doubling our renewable electricity generation by 2050 through our Electrify New Zealand work programme. We are also committed to removing regulatory barriers to unlock private investment in clean energy technologies, including hydrogen.

The Government wants to attract investment in low-emissions hydrogen to support New Zealand's transition to a low-emissions economy. Substantial innovation has already taken place in New Zealand to kickstart our hydrogen economy. Firms are already pioneering everything from pilot production, refuelling stations, storage and electrolyser equipment technologies, heavy transport trials, investigation into airport ground infrastructure requirements, green urea pilot production, to seeking to explore for naturally occurring hydrogen, just to name a few. The Government wants to see more of this industry-led innovation.

This Hydrogen Action Plan is the Government's commitment to enabling the hydrogen sector through removing regulatory barriers and supporting international trade and investment. But ultimately, it is private capital that will unleash our transition to a low-emissions economy. I look forward to working with the sector to unlock these opportunities.

Hon Simeon Brown

Minister for Energy



Introduction

OUR ENERGY SYSTEM IS UNDERGOING SIGNIFICANT CHANGE

The global economy is moving to reduce emissions. Our energy system is navigating the challenges of maintaining reliable and affordable access to energy as New Zealand transitions toward a highly-renewable energy system. Market access for New Zealand's goods also increasingly depends on lower emissions products and supply chains. While our electricity system is already highly renewable, only around 30 per cent of total energy use comes from renewable sources.

New Zealand has committed to reaching Net Zero by 2050 with five-year budgets and plans for getting there. The Government's [Climate Strategy](#) is premised on a cost-effective approach to meeting emissions targets, with the Emissions Trading Scheme as the key tool for reducing gross emissions. It includes pillars to ensure clean energy is abundant and affordable, and to support world-leading climate innovation that boosts the economy.

HYDROGEN COULD PLAY A KEY ROLE IN REDUCING EMISSIONS IN HARD-TO-ELECTRIFY SECTORS

Electrification will be the cheapest and most efficient way to reduce emissions for most activities.

But some parts of the economy are less well suited to electrification, such as heavy transport (where the weight of a battery can be a problem) and heavy industry (where specific chemical reactions or high temperatures are needed). Hydrogen could play a key role in reducing emissions in these sectors.

Hydrogen uses in New Zealand

Hydrogen offers opportunities in sectors that are hard to electrify, as well as export opportunities:

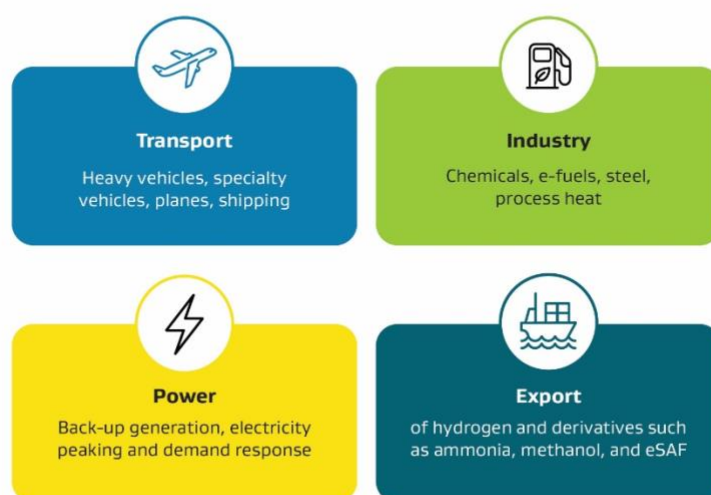


Figure 1: Hydrogen uses in New Zealand.

THE HYDROGEN ACTION PLAN OUTLINES THE GOVERNMENT'S PLAN TO UNLOCK PRIVATE INVESTMENT IN HYDROGEN

The Hydrogen Action Plan outlines the steps the Government is taking to create an enabling regulatory environment to unlock private investment in hydrogen, building on the Interim Hydrogen Roadmap published in 2023.

The Government sees hydrogen production playing an important role in New Zealand's transition to a low-emissions economy in sectors that are hard to electrify. The Hydrogen Action Plan focusses on unlocking low-emissions hydrogen, including green, blue, turquoise, white, and orange hydrogen (defined in Figure 2 below). The Government is fuel and technology neutral as it relates to reducing our emissions.

The publication of a Hydrogen Action Plan reflects the Government's market-led and delivery-oriented approach. It also reflects the expectation that the private sector is best-placed to plan for demand and supply. The Government will continue to engage with the hydrogen sector to understand its pathway to scaling up.

WHAT IS HYDROGEN?

Hydrogen is the lightest and most abundant element in the universe. It is generally encountered as molecular hydrogen (H₂) and usually must be separated from other compounds such as water. It has high energy content by weight – nearly three times that of gasoline – but has high volume unless compressed or liquefied.

Hydrogen can carry and store energy like a battery. This energy can then be used to produce electricity through a fuel cell to power machines or combusted for heat and energy. It has a wide range of applications in sectors ranging from power, industry, and heavy transport. However, it can be energy intensive to produce, transport, and store.

Hydrogen can be produced through a range of methods, outlined in the figure below.

Colours of hydrogen

Hydrogen is often described using a 'colour' system to describe its production method and environmental characteristics. The diagram below shows the types of hydrogen that are being used or explored in New Zealand.



Figure 2: Colours of hydrogen.

In New Zealand, hydrogen has historically been produced from natural gas and used as an input into production of fertiliser, methanol, and oil refining. In recent years, interest in hydrogen has centred around low-emissions hydrogen to decarbonise a range of hard-to-electrify activities. The private sector in New Zealand has focused on exploring *green* hydrogen produced by using renewable electricity to split water. There is also interest in *blue* or *turquoise* hydrogen involving producing hydrogen from natural gas using steam reforming with carbon capture or through pyrolysis respectively. New Zealand could also hold prospects for naturally-occurring or artificially-stimulated hydrogen in geological formations (*white*, *orange*).

NEW ZEALAND HAS A RANGE OF INNOVATIVE HYDROGEN ACTIVITY UNDERWAY

There are a range of low-emissions hydrogen projects already underway across New Zealand at early stage. The market has to date largely focused on opportunities to decarbonise hard-to-electrify activities using green hydrogen. A map of current projects can be found on the [New Zealand Hydrogen Council's website](#).

There is potential for hydrogen to scale in future, particularly in sectors where there are limited other options. Hydrogen can be scaled flexibly. Key factors influencing the speed of scale-up will be the cost of inputs like renewable electricity or natural gas, electrolyzers, and access to affordable finance. Modelling undertaken for the Interim Hydrogen Roadmap showed demand could be between 640,000 and 1,200,000 tonnes per annum by 2050. The private sector has work underway to plan its growth. For example, the New Zealand Hydrogen Council is working with the sector to explore potential demand and supply in five sub-sectors through its Hydrogen Industry Framework programme.

The hydrogen sector offers many opportunities. But as an early-stage market, there are a range of regulatory and commercial challenges. There are also global commercial headwinds in the hydrogen sector, including high capital costs and interest rates, high operating costs particularly from electricity, and strong competition in activities with alternative means of decarbonising. The Hydrogen Action Plan outlines that the Government will address regulatory barriers, to support the private sector to grow.

The Government's action plan to unlock private investment in hydrogen

The Government's focus is on unlocking market-led private investment in hydrogen

Role for Government

- › Create an enabling regulatory environment
- › Use country-to-country relationships to attract foreign investment and promote market access

The Government has four key priorities to enable market-led hydrogen investment:



Priority: Create an enabling regulatory environment

Key Actions:

- › Set enabling health and safety regulations and standards
- › Review regulatory barriers to uptake of low-emissions heavy vehicles
- › Enable blue hydrogen by reducing regulatory barriers to carbon capture and storage
- › Enable exploration for natural hydrogen and the development of orange hydrogen



Priority: Reduce barriers for consenting hydrogen projects

Key Actions:

- › Reduce consenting barriers through the Electrify NZ and RMA reform work programmes
- › Continue to monitor how existing regulations manage hydrogen's wider impacts



Priority: Promote a cost-effective and market-led transition to a low-emissions economy

Key Actions:

- › Strengthen the Emissions Trading Scheme
- › Continue to support early stage trialling and demonstration
- › Engage with the private sector on its pathway forward



Priority: Support access to international investment and markets

Key Actions:

- › Support access to internationally aligned certification schemes
- › Use country-to-country relationships to attract foreign investment and promote market access

Figure 3: The Government's action plan to unlock private investment in hydrogen.

Priority: Create an enabling regulatory environment

The Government is setting rules that enable markets to choose the best technology for their needs, while keeping workers and the public safe.

ACTION: SET ENABLING HEALTH AND SAFETY REGULATIONS AND STANDARDS

New uses of hydrogen are not well covered by existing regulations in the work health and safety and electricity and gas safety regimes. It is important hydrogen can be handled safely and businesses have certainty about the rules that will apply to its use.

The Ministry of Business, Innovation, and Employment (MBIE) and WorkSafe will review and update key electricity and gas safety regulations to enable safe production, storage, and use of hydrogen in near-term uses. Doing this involves a mix of changes to regulations and streamlining how standards relating to hydrogen are updated in legislation.

The Government is moving to streamline how standards are updated in regulation. The Regulatory Systems (Immigration and Workforce) Amendment Bill proposes to provide WorkSafe with the ability to make electricity and gas safety instruments, enabling technical matters to be updated more quickly rather than requiring regulatory change. This Bill is expected to be reported back to the House in January 2025. These changes, and accompanying amendments to the relevant regulations, will enable WorkSafe to cite newly adopted hydrogen-specific international safety standards in safety instruments as a means of demonstrating compliance with regulatory obligations. MBIE will consult on proposed regulatory amendments for hydrogen around mid-2025.

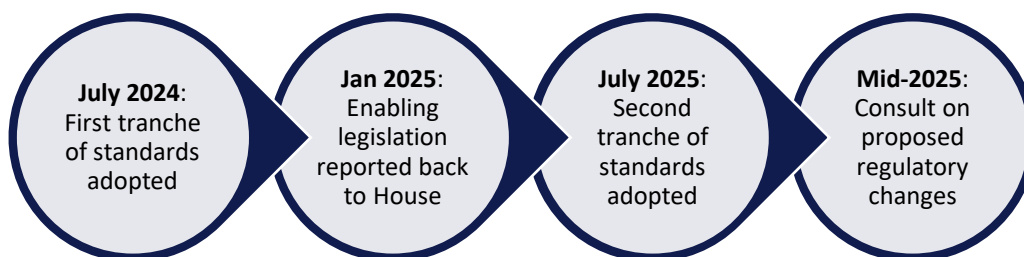


Figure 4: Timeframes for electricity and gas safety regulatory work.

The Minister for Workplace Relations and Safety has also committed to reforming the work health and safety regulatory system, to ensure it is clear, proportionate, and effective. The Minister is aware of issues in the sector, as they were raised during her health and safety roadshow, and will take advice on how to include any further changes to health and safety that are required to enable hydrogen as part of her work programme.

ACTION: REVIEW REGULATORY BARRIERS TO UPTAKE OF LOW-EMISSIONS HEAVY VEHICLES

Decarbonisation of heavy vehicles is at an earlier stage than light vehicles both globally and in New Zealand. Some companies are exploring the merits of low and zero-emissions heavy vehicles and of different technologies, including electrification and alternative fuels such as hydrogen.

A key role for the Government is to remove regulatory barriers so they can adopt these options. For example, our current vehicle dimension and mass rules can create barriers to getting hydrogen heavy trucks on our roads because hydrogen tanks on heavy vehicles can cause them to exceed volume constraints. There are also no inspection or crashworthiness requirements specific to hydrogen-fuelled vehicles. It is important to ensure our vehicle requirements are aligned with leading international standards and deviate only where the New Zealand context requires it.

There are opportunities to review barriers to the uptake of low-emissions heavy vehicles, including hydrogen heavy vehicles, as part of work planned by the Ministry of Transport to review the vehicle regulatory system to ensure our

domestic rules are fit for purpose. Any change to the system would need to be balanced against the increased wear and tear on roads and bridges associated with heavier vehicles, and related higher maintenance costs.

ACTION: ENABLE BLUE HYDROGEN BY REDUCING REGULATORY BARRIERS TO CARBON CAPTURE AND STORAGE

The Government wants to enable markets to have a level playing field of technologies so they can choose the right solution for their needs. Blue hydrogen, produced by steam reforming natural gas with carbon capture and storage, may be cheaper to produce than green hydrogen where there is existing steam reforming plant.

The Government consulted on a regime for carbon capture, utilisation, and storage (CCUS) in July 2024. Cabinet agreed in August 2024 to establish a clear enabling framework for CCUS, including with a view to reducing the costs of gas production, as part of the comprehensive response to the energy security of supply situation. Policy work is progressing on the design of this framework.

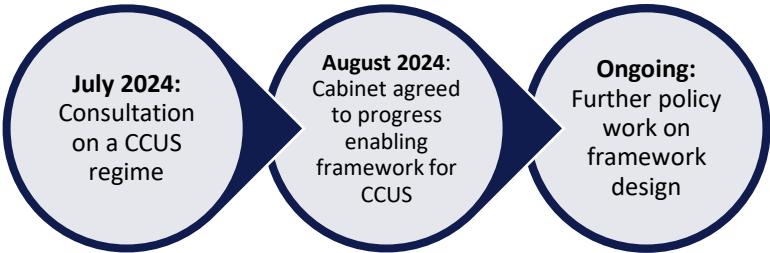


Figure 5: Timeframes for work to enable carbon capture, utilisation, and storage.

ACTION: ENABLE EXPLORATION FOR NATURAL HYDROGEN AND THE DEVELOPMENT OF ORANGE HYDROGEN

New Zealand has prospects for both naturally-occurring hydrogen (natural hydrogen) that could be extracted, and for artificially stimulated geological hydrogen (orange hydrogen). The Government has committed to ensure energy settings allow for the exploration of natural geological hydrogen in New Zealand, to maximise future energy resilience.

The Government has work underway to clarify regulatory settings and assess if changes are needed to enable exploration for natural hydrogen and development of orange hydrogen. Any changes required to settings will begin in mid-2025.



Figure 6: Timeframes for work to enable exploration for natural hydrogen and the development of orange hydrogen.

Priority: Reduce barriers for consenting hydrogen projects

Renewable electricity supply is key to affordable green hydrogen at scale. The Government is making it faster and cheaper to consent renewables projects.

ACTION: REDUCE CONSENTING BARRIERS THROUGH THE ELECTRIFY NZ AND RMA REFORM WORK PROGRAMMES

The Government's Electrify NZ work programme will support its goal to double renewable electricity generation by 2050. Additional generation will also be critical for enabling production of hydrogen and other green fuels. Electrify NZ is focused on removing barriers to investment in renewable electricity generation. Reducing consenting barriers for electricity will support hydrogen production. Electricity costs can often make up 60-80% of the cost of green hydrogen.

The new Fast-track Approvals legislation will provide a streamlined and enabling approval pathway for large infrastructure projects – which may include hydrogen-related proposals. The Government has also announced it will pass new legislation to replace the *Resource Management Act 1991* in 2026. Before then, amendments to the Resource Management Act (RMA) relating to consent duration, lapse periods, and decision-making timeframes for renewable energy projects will be progressed in the second Resource Management Act Amendment Bill. The Bill is expected to be introduced by the end of 2024 and enacted by mid-2025. The RMA national direction programme, which will include amendments to strengthen national direction for renewable electricity generation and transmission, will follow a similar timeline.

This suite of new legislation will make it easier to build new electricity generation to support hydrogen production. MBIE has not identified any hydrogen-specific barriers during consultation with the sector to date but will continue to engage as needed.

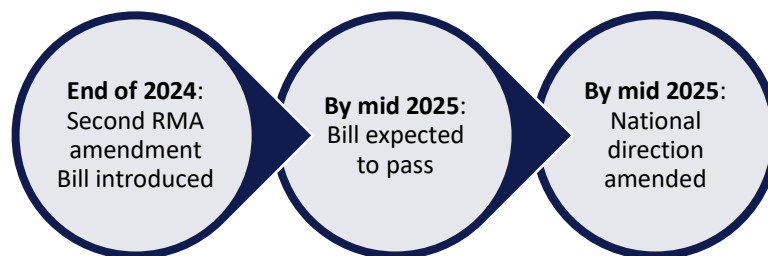


Figure 7: Timeframes for work to reduce consenting barriers through the Electrify NZ and RMA reform work programmes.

Box 1: Case study – Consenting for the Kapuni green hydrogen project

There are at least nine examples of consents granted for hydrogen projects in recent years. These projects typically received consent within three months of application.

One project, the Hiringa/Ballance pilot green urea plant, faced appeal delays under the COVID-19 (Fast-Track Consenting) Act 2020. The appeals related specifically to the proposed wind farm attached to the plant and to the production of synthetic fertiliser (rather than the production of hydrogen), under clauses specific to the previous COVID-19 fast-track regime.

The Government's Electrify NZ work programme, the Fast-track Approvals process and new legislation to replace the Resource Management Act 1991 will make it easier to get consent for such renewable electricity projects, as outlined above.

ACTION: CONTINUE TO MONITOR HOW EXISTING REGULATIONS MANAGE HYDROGEN'S WIDER IMPACTS

Hydrogen has many benefits. But its impacts also need to be considered and managed when projects apply for consents. MBIE conducted further work following consultation on the Interim Hydrogen Roadmap on impacts relating to electricity, water, and hydrogen leakage. MBIE concluded that it is appropriate for these impacts to continue being managed through existing regulatory systems for now, such as the electricity industry participation code and resource consents. MBIE will continue to monitor how these regulatory systems respond over time. See Box 2 for more detail.

Box 2: Hydrogen's impacts and the Government's approach to managing them

Electricity

Green hydrogen production could help to integrate and underpin development of renewable electricity. But it also requires significant amounts of renewable electricity. Modelling for the Interim Hydrogen Roadmap indicated that 12.5GW of additional electricity capacity could be required by 2050 if green hydrogen demand reached 0.64 Mt, assuming a mix of wind and solar PV. This modelling was scenario-based and did not reflect the interaction between hydrogen demand and electricity prices.

MBIE signalled in the Interim Hydrogen Roadmap that it would undertake further work to understand hydrogen's likely electricity market impacts. MBIE concluded that under a market-led approach to hydrogen sector development, hydrogen production is unlikely to significantly affect electricity prices. This is because new hydrogen production will compete for new renewable electricity generation with other uses of electricity. If electricity supply is unable to keep pace with demand, prices will rise, less hydrogen will be demanded, and prices will moderate.

Hydrogen export appears unlikely to materially increase exposure of New Zealand's electricity prices to global commodity pricing in the short or medium term. This is because hydrogen producers are likely to purchase long-term power agreements from dedicated renewable generation sources and sign offtake agreements with buyers, which limits the degree to which short-term commodity price movements can flow into the wholesale market.

Electricity use is regulated by the Electricity Authority. Hydrogen production has similar regulatory implications to other large-scale and potentially export-exposed uses of electricity such as aluminium export and data centres. The Government will continue to monitor the effectiveness of the electricity regulatory system, including for hydrogen production. No specific requirements for hydrogen (such as requiring it to be made from additional renewable electricity generation) are planned at this time, as it is expected producers will face natural incentives to secure low-cost renewable electricity generation that they can market to customers.

Water

MBIE received interest in hydrogen's water use as part of consultation on the Interim Hydrogen Roadmap. Hydrogen production often uses water as an input. Electrolysis uses around 15-18L of water per kg of hydrogen, while steam reforming uses around 22L per kg.¹ A very large-scale 300MW hydrogen plant uses roughly the same water as a single dairy farm.²

Meeting New Zealand's potential demand for hydrogen in 2050 as forecasted in the Interim Hydrogen Roadmap (640,000 to 1,380,000 tonnes) exclusively with green hydrogen could require between 9.6 and 24.8 million cubic metres of water per year (1.75%-4.5% of current national annual water withdrawal volumes of 550 million cubic metres),³ assuming 15L-18L of water is required to produce 1kg of hydrogen.

While this level of water use is manageable at a national level, there could be more trade-offs at local levels where there are already pressures on water use. The main mechanism for handling water management is resource management decision making. MBIE has not identified any reasons to treat hydrogen's water use differently to other water uses. The Government will continue to use the resource management regulatory framework for hydrogen's water use.

Hydrogen leakage

MBIE received interest in potential indirect global warming associated with hydrogen leakage as part of consultation on the Interim Hydrogen Roadmap.

¹Mehmeti et al (2018). Life Cycle Assessment and Water Footprint of Hydrogen Production Methods: From Conventional to Emerging Technologies [Environments | Free Full-Text | Life Cycle Assessment and Water Footprint of Hydrogen Production Methods: From Conventional to Emerging Technologies \(mdpi.com\)](#).

²Castalia (2022). New Zealand Hydrogen Scenarios. [New Zealand Hydrogen Scenarios Report June 2022 \(mbie.govt.nz\)](#)

³MBIE analysis. Water use statistics come from Water New Zealand (2023) [National Performance Review : Water New Zealand \(waternz.org.nz\)](#).

Emerging science indicates hydrogen that leaks into the atmosphere could have an indirect global warming effect. Hydrogen leaks through steel, iron, and plastic polymers. More suitable methods and materials for storing hydrogen are being deployed, such as carbon composite tanks. However, there is still the potential for hydrogen leakage to occur across the supply chain through fittings, valves, and storage container leakage. Estimated leakage rates range from 0.2-20% according to a review of studies by the Environmental Defense Fund.⁴ Hydrogen remains in the atmosphere for approximately 2 years, where it decreases the concentration of hydroxyl radicals (OH), which in turn increases the atmospheric lifetime of methane, leading to prolonged warming potential. The European Union's Joint Research Centre has found that estimates of indirect global warming potential range from 5(±1) and 11(±5) kg CO₂e/kg H₂ over a 100-year time horizon, and 12-33 kg CO₂e/kg H₂ over a 20-year horizon.⁵

International evidence suggests that the global warming potential avoided from replacing fossil fuels with green hydrogen still significantly outweighs the added warming from leakage even at very high leakage rates (i.e. >10%), while blue hydrogen deployment may in some scenarios take longer to produce a beneficial warming impact.⁶ Detecting and using adequate storage materials to control for leakage is a critical part of planned safety regulatory work. New Zealand will continue to monitor the science on hydrogen leakage and follow best practice emissions accounting as advised by the United Nations Framework Convention on Climate Change (UNFCCC).

⁴ Esquivel-Elizondo et al. (2023). 'Wide range in estimates of hydrogen emissions from infrastructure', *Front. Energy Res.*, <https://doi.org/10.3389/fenrg.2023.1207208>.

⁵ Arrigoni, A. and Bravo Diaz, L., (2022). *Hydrogen emissions from a hydrogen economy and their potential global warming impact*, EUR 31188 EN, Publications Office of the European Union, Luxembourg. ISBN 978-92-76-55848-4, doi:10.2760/065589, JRC130362.

⁶ See for example Ocko, I. B. and Hamburg, S. P. (2022). 'Climate consequences of hydrogen emissions', *Atmos. Chem. Phys.*, 22(14), pp. 9349-9368.

Priority: Promote a cost-effective and market-led transition to a low-emissions economy

The Government is taking a cost-effective approach to meeting our Net Zero 2050 goals. The Emissions Trading Scheme is the key tool the Government has for reducing net emissions efficiently. The Government is also supporting early trialling and demonstration, which can help to ensure more options are available to meet future emissions budgets.

ACTION: STRENGTHEN THE EMISSIONS TRADING SCHEME

The Emissions Trading Scheme (ETS) is the main tool for meeting our Net Zero 2050 goals in covered sectors. Credible markets are one of the five pillars of our Climate Strategy. Markets need to be able to have trust and confidence that the rules of the game are set if they are to have confidence to invest. Putting a price on carbon means fossil fuels are more expensive, which makes low-emissions options more attractive. A robust ETS supports low-emissions technologies such as hydrogen. Well-functioning markets are best place to determine hydrogen's place in the energy mix.

The Government is strengthening the ETS. It is providing investment certainty by committing to no vintaging, no differential treatment of forestry NZUs, and making sensible changes to limit forestry land use change and strengthen market governance. The Government is reducing the number of emissions trading scheme units available via government auction between 2025 and 2029, from 45 million to 21 million. Reducing the number of units will also support a credible ETS by reducing the surplus of units currently in the market.

ACTION: CONTINUE TO SUPPORT EARLY STAGE TRIALLING AND DEMONSTRATION

As an early stage market, the Government has a role to support innovation by providing trusted information to help markets function, and to support early-stage trialling and demonstration with technology-neutral competitive funds. Doing so can reduce the cost of future emissions abatement by making a wider range of solutions feasible and affordable. Hydrogen projects can currently receive funding support from a range of contestable funds and programmes, including:

- Contestable investment funds that support scientific research and R&D in New Zealand.
- Capital grants, such as EECA's [Low Emissions Heavy Vehicle Fund](#).
- Trialling and demonstration funding and pastoral supports, such as EECA's [Low Emissions Transport Fund](#) and [Technology Demonstration Fund](#), and support from [Ara Ake](#) and [New Zealand Trade and Enterprise](#).
- Infrastructure support from MBIE's [Regional Infrastructure Fund](#).

ACTION: ENGAGE WITH THE PRIVATE SECTOR ON ITS PATHWAY FORWARD

The hydrogen sector's development will be market-led. The Government will continue to engage with the hydrogen sector to understand its pathway forward and the steps required from Government to reduce regulatory barriers and promote international investment and trade.

The Government has established a Hydrogen Industry Leadership Group to provide an opportunity for industry leaders to share views in a coordinated way on the policy actions needed over time to enable the development of a low-emission hydrogen sector. Participants span production, technology, finance, heavy transport, and aviation parts of the hydrogen value chain. Participation in the group is on an informal and voluntary basis. The role of the group is advisory and it does not replace formal consultation.

Priority: Support access to international investment and markets

Our access to markets increasingly depends on being able to demonstrate that our products and their supply chains are low-emissions. New Zealand also has an opportunity to leverage foreign direct investment to support domestic renewable energy and hydrogen deployment, potentially servicing growing international demand for low-emissions hydrogen.

ACTION: SUPPORT ACCESS TO INTERNATIONALLY ALIGNED CERTIFICATION SCHEMES

Certification schemes and emissions intensity standards are developing across multiple jurisdictions to validate the emissions intensity of hydrogen. These certifications can be important for market access, demonstrating compliance with a purchaser's corporate climate targets, and other local regulatory standards. Private certification schemes are already being developed in New Zealand. It will be important that New Zealand firms have access to certification schemes that are aligned with our key trading partners' requirements. The Government will continue to engage with the hydrogen sector as locally available hydrogen certification schemes develop to understand how well these products meet their needs and align with our trading partners' requirements.

The Government is monitoring international efforts to develop principles to underpin mutual recognition of schemes internationally. Key progress has been made through the November 2023 launch of an [international standard](#) for measuring emissions associated with production, conditioning, and transport of hydrogen to consumption gate, with further detailed standards development to be finalised in 2025. International and regional forums are increasingly urging countries to adopt this global standard, and it will be important that schemes locally available in New Zealand follow international best practice.

New Zealand will focus its international efforts on key regional and bilateral relationships where hydrogen trade is most likely to occur. New Zealand already has bilateral agreements with Singapore and Japan – two key Asia Pacific region countries focussing on the international hydrogen supply chain. The Government is undertaking work on plurilateral approaches to green economy-focused trade rules and will continue to use existing trade agreement levers, such as the Indo-Pacific Economic Framework Agreement hydrogen cooperative working group, so New Zealand is well placed to understand and where needed to influence emerging international standards.

ACTION: USE COUNTRY-TO-COUNTRY RELATIONSHIPS TO ATTRACT FOREIGN INVESTMENT AND PROMOTE MARKET ACCESS

The Government will also use its country-to-country relationships to attract foreign direct investment in renewable energy and hydrogen. The Government wants foreign investors to know that New Zealand is open for business, supported by swift regulatory changes across the energy sector. The Government is making it faster and easier to invest by issuing a Ministerial directive to make processing timeframes faster under the Overseas Investment Act. Agencies such as New Zealand Trade and Enterprise (NZTE) actively engage with foreign investors and businesses and under this action plan NZTE, MBIE, and the Ministry of Foreign Affairs and Trade will continue to leverage international Ministerial engagements and trade missions to foster investment relationships in the hydrogen sector. New Zealand is also using its international relationships to promote learning and innovation, including through its research partnership with Germany.



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