



COVERSHEET

Minister	Hon Dr Megan Woods	Portfolio	Energy and Resources
Title of Cabinet paper	Energy and Industry Content for Emissions Reduction Plan	Date to be published	11 August 2022

List of documents that have been proactively released

Date	Title	Author
March 2022	Energy and Industry Content for Emissions Reduction Plan	Office of the Minister of Energy and Resources
16 March 2022	Emissions Reduction Plan: Energy and Industry Content DEV-22-MIN-0044	Cabinet Office
March 2022	Annex One: Proposed energy and industry initiatives for the first emissions reduction plan	Office of the Minister of Energy and Resources

Information redacted

YES / NO

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Some information has been withheld for the reason of Confidential advice to Government.



Cabinet Economic Development Committee

Minute of Decision

This document contains information for the New Zealand Cabinet. It must be treated in confidence and handled in accordance with any security classification, or other endorsement. The information can only be released, including under the Official Information Act 1982, by persons with the appropriate authority.

Emissions Reduction Plan: Energy and Industry Content

Portfolio **Energy and Resources**

On 16 March 2022, the Cabinet Economic Development Committee:

Background

- 1 **noted** that the government must prepare an emissions reduction plan (ERP) by May 2022 to put Aotearoa New Zealand on a pathway to reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050, taking into account the Climate Change Commission's (the Commission) recommendations;
- 2 **noted** that the energy and industry sectors accounted for just over a quarter of Aotearoa New Zealand's total gross greenhouse gas emissions in 2019, and that reducing emissions from these sectors will be crucial to meeting emissions budgets and the net zero 2050 target;
- 3 **noted** that it will be critical to support actions undertaken in the energy system to not only reduce energy and industry emissions but also to support the development of significant additional renewable electricity generation (Transpower estimates approximately 70 percent additional to current output) and low emissions fuels to enable system-wide decarbonisation in other sectors, including transport and building and construction;

The proposed energy and industry content of the emissions reduction plan

- 4 **noted** that the New Zealand Emissions Trading Scheme (NZ ETS) is a key mechanism to drive emission reductions in the energy and industry sectors, but that complementary measures are needed to address market or other barriers, support nascent markets and infrastructure to enable future decarbonisation, address distributional impacts, and unlock co-benefits;
- 5 **noted** that the government is already undertaking, or has committed to, a significant number of initiatives in the energy and industry sectors that will contribute to meeting the emissions budgets, and that a complete list of existing initiatives is outlined in Annex One to the paper under DEV-22-SUB-0044;

- 6 **noted** that the Minister of Energy and Resources proposes the following 2050 vision for the energy and industry sectors:

Aotearoa has a highly renewable, sustainable, and efficient energy system that supports a low emissions economy. Energy is accessible and affordable and supports the wellbeing of all New Zealanders. Energy supply is secure, resilient, and reliable. Energy systems support economic development aspirations and an equitable transition to a low emissions economy;

- 7 **noted** that the energy and industry content is framed around the following five focus areas to support this vision:

- 7.1 using energy efficiently and managing demand for energy;
- 7.2 ensuring the electricity system is ready to meet future needs;
- 7.3 reducing reliance on fossil fuels whilst supporting switching to low emission alternatives;
- 7.4 reducing emissions and energy use in industry;
- 7.5 setting a strategy and targets to guide the government to 2050;

Focus area 1: Using energy efficiently and managing demand for energy

- 8 **agreed**, subject to funding through Budget 2022 or future budgets, to indicate the following programmes to improve energy efficiency in the ERP:

- 8.1 **Confidential advice to Government**

- 8.2 expansion of the Warmer Kiwi Homes programme;

Focus area 2: Ensuring the electricity system is ready to meet future needs

- 9 **noted** that renewable, affordable, and reliable electricity underpins the decarbonisation of the economy, including for industry, transport, and buildings and construction, and that to enable this, the electricity regulatory system will need to continue to adapt and respond to innovations and market developments;
- 10 **directed** officials to investigate options for electricity market measures to support affordable and reliable electricity supply, while accelerating the transition to a highly renewable electricity system;
- 11 **agreed**, subject to funding through Budget 2022 or future budgets, to indicate current or potential initiatives to ensure the electricity system is ready to meet future needs in the ERP as follows:
- 11.1 progressing electricity market measures to support the transition to a highly renewable electricity system, and implementing investigations and policy relating to 100 percent renewable electricity;
 - 11.2 supporting government and local government agencies to explore Power Purchase Agreements (PPAs) with new renewable generation developers;
 - 11.3 **Confidential advice to Government**

- 12 **agreed**, subject to funding through Budget 2022 or future budgets, to pilot community-based integrated renewable energy projects, and demonstrate solutions at a community level **Confidential advice to Government** which would build on the existing \$28 million Māori and Public Housing Renewable Energy fund and support multiple objectives, including an equitable transition, climate adaptation and resilience, and building skills and capability;
- 13 **noted** that the renewable and affordable energy in New Zealand communities initiative will help inform the understanding of and mitigation options for potential distributional impacts of the transition;
- 14 **directed** officials to investigate options to deliver an optimal regulatory environment for the consenting of offshore renewable energy;
- 15 **noted** that funding for resourcing the offshore renewable energy work is being sought through Budget 2022, and that the timing of funding will determine the timeframe for progressing this work;

Focus area 3: Reducing reliance on fossil fuels whilst supporting switching to low emission alternatives

- 16 **noted** that on 20 December 2021, Cabinet agreed to develop a Gas Transition Plan that will set out the transition pathway for the fossil gas sector, and include further measures required to ensure an equitable transition and a focus on where renewable gases can strategically support hard-to-abate consumers and assist in mitigating overall transition costs [CAB-21-MIN-0547.03];
- 17 **noted** that on 28 October 2021, the Cabinet Environment, Energy and Climate Committee agreed to implement a Sustainable Biofuels Mandate that will support the deployment of biofuels in Aotearoa [ENV-21-MIN-0058];
- 18 **agreed**, subject to funding through Budget 2022 or future budgets, to indicate the following programmes to reduce reliance on fossil fuels whilst supporting switching to low emissions fuels in the ERP:
- 18.1 **Confidential advice to Government**
- 18.2 developing a hydrogen road map, which would establish the stepping stones for Aotearoa to scale up the production and use of green hydrogen;

Focus area 4: Reducing emissions and energy use in industry

- 19 **noted** that the Commission recommended that the government ‘outline a plan for actions required to decarbonise the industrial sector’, and that the plan should be created in partnership with iwi/Māori and in collaboration with industrial and manufacturing stakeholders;
- 20 **agreed**, subject to funding through Budget 2022 or future budgets, to develop a plan for actions to decarbonise the industrial sector to identify a package of actions to decarbonise industry in collaboration with the sector, with the aim of supporting existing industry to decarbonise, and enabling innovative low-carbon industries to grow;

- 21 **agreed**, subject to funding through Budget 2022 or future budgets, to expand actions that support the decarbonisation of industry and heat, including:
- 21.1 scaling up and pivoting the Government Investment in Decarbonising Industry fund, as outlined in paragraph 46 of the paper under DEV-22-SUB-0044;
- 21.2 providing grants and rebates to decarbonise commercial space and water heating, and accelerate the adoption of high efficiency electrical equipment;
- 22 **agreed**, subject to funding through Budget 2022 or future budgets, to include in the ERP a work programme to develop a mandatory energy and greenhouse gas emissions reporting scheme (EERS) for large energy users;
- 23 **invited** the Minister of Energy and Resources to report back to the Cabinet Economic Development Committee in the second quarter of 2022 on options to address data gaps in New Zealand's energy use and emissions;
- 24 **agreed** that the government indicates in the ERP the development of a strategic framework for addressing emissions reductions in single firm industries that are hard-to-abate;
- 25 **Confidential advice to Government**
- 26 **agreed** that the Minister for Economic and Regional Development will lead the strategic framework, in consultation with the Minister of Energy and Resources, the Minister of Research, Science and Innovation, the Minister of Climate Change and other Ministers as appropriate, with work commencing in September 2023;

Focus area 5: Setting a strategy and targets to guide the government to 2050

- 27 **noted** that the Commission recommended that the government 'commit to delivering a strategy to decarbonise the energy system and ensure the electricity sector is ready to meet future needs', and that the strategy be developed in partnership with iwi/Māori and in collaboration with energy system stakeholders;
- 28 **Confidential advice to Government**
- 29 **Confidential advice to Government**
- 30 **noted** that an energy strategy will look to signal pathways to achieving the 2050 emissions reduction target and the government's vision for the energy and industry sectors, and lay out a coherent and coordinated approach to the policy proposals being considered in the energy and industry sectors;
- 31 **noted** that the Commission recommended that, as part of the scope of an energy strategy, the government set a target so that 50 percent of total final energy consumed (TFEC) comes from renewable sources by 31 December 2035;
- 32 **agreed** to set a renewable energy target so that 50 percent of TFEC comes from renewable sources by 2035;

- 33 **noted** that Aotea New Zealand's TFEC is currently 28 percent renewable, and that achieving the 50 per cent TFEC target will require substantial changes to how energy is used, and a significant uptake in low emissions fuels and technologies, such as electric vehicles and biofuels in the transport sector;
- 34 **noted** that achieving the 50 percent TFEC target will also be driven by the NZ ETS price following the Commission's expected price path (and industries and consumers responding to these prices), and rely on funding and implementation of actions in the energy, industry, transport, and building and construction sectors;
- 35 **noted** that the government's target for 100 percent renewable electricity by 2030 is aspirational and will be reviewed in 2025 before the second ERP is put in place;
- 36 **noted** that as part of developing an energy strategy and alongside a renewable energy target, the Ministry of Business, Innovation and Employment (MBIE) will develop secondary indicators to:
- 36.1 monitor progress in relation to the four focus areas of using energy efficiently and managing demand for energy, ensuring the electricity system is ready to meet future needs, reducing reliance on fossil fuels whilst supporting switching to low emission alternatives, and reducing emissions and energy use in industry;
 - 36.2 ensure that as the transition progresses, the energy system meets the energy trilemma goals of having an energy system that is accessible and affordable, secure and reliable, and sustainable, to support the wellbeing of all New Zealanders;
- 37 **noted** that the Minister of Energy and Resources has agreed that the current New Zealand Energy Efficiency and Conservation Strategy, which guides the Energy Efficiency and Conservation Authority's work programme, be replaced with a new strategy in order to better give effect to the ERP and government policy on energy efficiency, energy conservation, and the use of renewable energy sources;

Meeting emissions budgets

- 38 **noted** that with current and proposed policies and the NZ ETS price following the Commission's expected price path, emissions reductions in the energy and industry sector are on track to meet the energy and industry sub-target for the first emissions budget, and exceed the reductions required by the energy and industry sub-target for the second and third emissions budgets;
- 39 **noted** that the closure of New Zealand's Aluminium Smelter (NZAS) is a key uncertainty for achieving the first emissions budget, and that the 'adding up' of policies to meet emissions budgets includes a buffer for NZAS remaining open after 2024 to manage this uncertainty;
- 40 **noted** that market expectations on whether NZAS will continue to operate beyond 2024 are likely to have significant implications for the development of electricity generation and decarbonisation of the electricity system, and that actions set out under focus area 2 will be crucial to minimise a potential increase in fossil fuel electricity generation;
- 41 **noted** that achieving reductions in the energy and industry sectors will also depend on the actions of a range of private sector actors, including large industrial and manufacturing businesses, electricity generators, and commercial sector businesses, and that developing supporting policies, as indicated in Annex One to the paper under DEV-22-SUB-0044 (including developing an energy strategy) will be important to support private sector action;

- 42 **noted** that an option for reducing uncertainty for meeting the first emissions budget would be to announce funding for further decarbonisation of industry and heat ahead of Budget 2022 announcements, which would enable the first round for additional Government Investment in Decarbonising Industry funding to open two to three months earlier and could unlock an additional 0.2 Mt CO₂-e of emissions reductions in the first emissions budget period;

Financial implications

- 43 **agreed** to pre-commit \$25.000 million to the Government Investment in Decarbonising Industry Fund ahead of Cabinet decisions on the full budget bid submitted in Budget 2022, for funding further decarbonisation of industry and heat and implementing supporting policies;
- 44 **approved** the following changes to appropriations, with a corresponding impact on the operating balance and net core crown debt:

Vote Business, Science and Innovation Minister of Energy and Resources	\$m – increase/(decrease)	
	2021/22 to 2024/25	2025/26 & Outyears
Non-Departmental Other Expense: Energy and Resources: Accelerating Energy Efficiency and Fuel Switching in Industry 2021-2025 MYA (funded by revenue Crown)	25.000	-

- 45 **noted** that the indicative spending profile for the multi-year appropriation described above is as follows:

Indicative annual spending profile	\$m – increase/(decrease)				
	2021/22	2022/23	2023/24	2024/25	2025/26 & Outyears
	-	18.750	6.250	-	-

- 46 **agree** that the changes to appropriations above be included in the 2022/23 Estimates and that, in the interim, the increases be met from Imprest Supply;
- 47 **agreed** that the expenditure incurred above be charged as a pre-commitment against the Climate Emergency Response Fund established in the Budget 2022 strategy;
- 48 **noted** that the total amount of the *Funding further decarbonisation of industry and heat and implementing supporting policies* budget bid submitted in Budget 2022 will be reduced by \$25.000 million.

Janine Harvey
Committee Secretary

Present: (see over)

Present:

Hon Grant Robertson (Chair)
Hon Dr Megan Woods
Hon David Parker
Hon Nanaia Mahuta
Hon Poto Williams
Hon Damien O'Connor
Hon Kris Faafoi
Hon Willie Jackson
Hon Michael Wood
Hon Dr David Clark
Hon Dr Ayesha Verrall
Hon Meka Whaitiri
Hon Phil Twyford
Rino Tirikatene MP
Dr Deborah Russell MP

Officials present from:

Office of the Prime Minister
Officials Committee for DEV