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Purpose Capital Ltd

Consultation Response | Second Emissions Reduction Plan (ERP2)

Who is Purpose Capital?

<u>Purpose Capital Ltd</u> (PCL) is New Zealand's largest private impact investment fund manager. PCL is founded on the principle that we can effect change through well-run commercial investments that deliver impact as well as financial return.

Through demonstrating the effectiveness of our approach, PCL aims to increase the amount of capital invested in impact investments from asset and fund managers as well as private and philanthropic wealth.

By leading investment opportunities, we provide confidence to other investors to invest alongside us in impactful companies and projects.

Mitigating climate change is a key impact focus for PCL, along with: Sustainable, secure, affordable housing; Social equity; and Environmental regeneration.

General consultation questions

The following consultation questions relate to the Government's general approach to emissions reductions. Some information is provided along with these questions to support you to answer them without extensive reading of the discussion document.

	e your views
0.1	What do you think is working well in New Zealand to reduce our emissions and achieve the 2050 net zero target?
	Almost nothing - with our largest sector (agriculture) not included in the ETS and no longer required to report data and our largest industrial emitters receiving huge carbon subsidies, dissolving the EECA GIDI programme, no rebates, but RUC on EV's and plans to weaken water pollution controls – to name a few. NZGIF picking up its investment pace and the government announcing today it will follow Climate Change Commission advice to not lower the carbon price floor are recent positives we can point to.
0.2	The Government is taking a 'net-based approach' that uses both emissions reductions and removals to reduce overall emissions in the atmosphere (rather than an approach that focuses only on reducing emissions at the source). A net-based approach is helpful for managing emissions in a cost-effective way that helps grow the economy and increase productivity in New Zealand.
	a. What do you see as the key advantages of taking a net-based approach?
	b. What do you see as the key challenges to taking a net-based approach?
	 a.) If the offsets in the net based approach lead to critically important improvements like native forest, wetlands and habitat restoration then we are in favour. b.) If they are based upon what we regard to be unfounded optimism and over reliance on unproven 'green tech' such as ruminant methane reduction and carbon capture and massive increases in pinus radiata plantations our view is these are a way to put off the hard decisions we need to make now on gross emissions reduction. A net-based approach aims to remove carbon through forestry or technology rather than by reducing emissions at their source. This is susceptible to reliance on unproven technology and locks in future generations to land use decisions on forestry. A gross emissions approach is based on solutions in sectors like transport, agriculture, and energy which are reliable and ready to invest in. A gross reductions approach which focuses on stopping emissions at the source is the least risky way of ensuring New Zealand meets our domestic and international emissions goals. The Climate Change Commission highlights that reducing gross emissions is a pathway strongly recommended by the Intergovernmental Panel on Climate Change (IPCC). Their Sixth Assessment Report states at a high level of confidence that "reaching net zero CO2 or greenhouse gas emissions of non-CO2 greenhouse gas emissions." The Climate Change Commission notes that long-term ambiguity about the intended level of gross emissions is a particular problem for the Emissions Trading Scheme (ETS). To design and operate effective climate policies, and particularly to run the NZ ETS, it is essential to have a clear objective for the balance sought between gross reductions and carbon removals.
0.3	 The current proposed policies in the ERP2 discussion document cover the following sectors and areas: strengthening the New Zealand Emissions Trading Scheme private investment in climate change energy sector transport sector agriculture sector forestry and wood-processing sector non-forestry removals waste sector. What, if any, other sectors or areas do you think have significant opportunities for cost-effective

Share your views			
	Fluorinated (F) gas reduction, removal and destruction		
0.4	What Māori- and iwi-led action to reduce emissions could benefit from government support?		
	There are additional questions about Māori- and iwi-led action to reduce emissions and impacts of proposed ERP2 policies on Māori and iwi in chapters 1 and 12.		
	Click or tap here to enter text.		

Chapter 1: Our approach to New Zealand's climate change response | Tā mātou e whai nei e pā ana ki tā Aotearoa urupare ki te panoni āhuarangi

Summary

This chapter outlines the Government's long-term approach to deliver and sustain net zero emissions by 2050 at least cost. We will implement it over time, through successive emissions reduction plans. Key actions taken over the next five years through the second emissions reduction plan (ERP2) will set in motion a least-cost, low-emissions transition.

The Government proposes taking a strong, net-based approach to reduce emissions at least cost. This strategy is based on five pillars.

- 1 Infrastructure is resilient and communities are well prepared.
- 2 Credible markets support the climate transition.
- 3 Clean energy is abundant and affordable.
- 4 World-leading climate innovation is boosting the economy.
- 5 Nature-based solutions address climate change.

Chapter 1			
1.1	What opportunities do the proposed initiatives and policies across the sectors offer for Māori- and iwi- led action to reduce emissions?		
	Click or tap here to enter text.		
1.2	What additional opportunities do you think the Government should consider?		
	Click or tap here to enter text.		

Chapter 2: Tracking our progress towards meeting emissions budgets | Te aroturuki i tō tātou koke i te ara whakatutuki i ngā tahua tukunga

Summary

The Government is committed to meeting our climate targets. Our strategy outlines how we will approach the challenges and opportunities in meeting them.

We are building off the momentum that our first emissions budget started. For example, higher rates of forestry have occurred in the last few years, positioning New Zealand well for the future as those trees grow.

Reflecting the Government's change in approach, we have stopped work on some actions that were included in the first emissions reduction plan (ERP1). This is not expected to materially affect our ability to meet the first emissions budget: our current assessment is that ERP1 remains sufficient to meet it.

To maintain an up-to-date ERP1 and reflect decisions that have already been taken, we are now consulting on formally amending ERP1 using the statutory process set out in section 5ZI(3) of the Climate Change Response Act 2022 (CCRA).

The second emissions reduction plan (ERP2) lays the way for us to achieve future budgets, particularly the second emissions budget. The information we have today suggests that ERP2 can be sufficient to achieve the second emissions budget.

The Government will proactively respond to challenges and opportunities to stay within the budgets. We will continue to rely on the most up-to-date modelling as we finalise ERP2, which will allow us to ensure the sufficiency of the final plan.

Chapt	ter 2			
	Current modelling suggests that with a changed approach, the first emissions reduction plan is still sufficient to meet the first emissions budget.			
2.1	What, if any, other impacts or consequences of the Government's approach to meeting the first emissions budget should the Government be aware of?			
	The 400+ actions and policies developed in ERP 1 do not go far enough and will need to be added to and strengthened to meet New Zealand's emissions reduction targets. ERP 2 must also deliver on the legislated 2030 target for biogenic methane (at least 10% down from 2017 levels by 2030).			
2.2	What, if any, are the long-term impacts from the changes to the first emissions reduction plan on meeting future emissions budgets that should be considered through the development of the second emissions reduction plan?			
	• Adopting specific gross GHG emissions targets in the second and third emissions budgets, without limiting policy drivers to the current net GHG emission reduction budgets and targets;			
	• Communicating indicative levels of both gross emissions and forestry-related emissions removals out to 2050; and			

 Amending and restructuring the Emissions Trading Scheme (ETS) to remove or reduce incentives for exotic forest planting. 		
•	Delivering agricultural emissions pricing by 2025 to incentivise gross emissions reductions.	
•	Banning new fossil fuel installations, including commercial coal-fired boilers and gas-fired hot water heating in homes, except when there is no other option.	
•	Pursuing more widespread process heat decarbonisation and establishing mechanisms for other industrial sectors and processes to decarbonise.	
•	Prioritising and accelerating renewable electricity generation developments, and ensuring electricity distribution networks can support growth and variability of demand and supply.	
•	Transport, with a focus on developing an integrated public and active transport network, removing barriers to scaling up EV charging and developing incentives to accelerate the uptake of low emissions commercial vehicles.	
•	Built environment, with an integrated planning system that builds urban areas upward and mixes uses while incrementally reducing climate risks. The ERP 2 Draft Advice also advocates incentivising retrofits to deliver lower emissions buildings.	
•	Waste, with policy changes to achieve optimal use and efficiency of landfill gas capture systems and to improve the accuracy of measurement data.	
Payment	ernment's current reform of industrial allocation (being the Climate Change Response (Late Penalties and Industrial Allocation) Amendment Bill - which is currently at the Select ee stage) does not adequately reset the policy.	

Chapter 3: Strengthening the New Zealand Emissions Trading Scheme | Te whakakaha i te Kaupapa Hokohoko Tukunga o Aotearoa

Summary

This chapter explains how the Government will support the New Zealand Emissions Trading Scheme (NZ ETS) to help meet the second emissions budget and net zero target. A key focus is the credibility of the NZ ETS and aligning it with the second emissions budget.

Share your views

We are seeking feedback on:

- the Government's proposed actions to strengthen the NZ ETS
- using the NZ ETS as the primary mode for meeting the second emissions budget.

Chapt	Chapter 3	
3.1 What else can the Government do to support NZ ETS market credibility and ensure the N continues to help us to meet our targets and stay within budgets?		
	Overreliance on afforestation in these earlier emissions reduction periods will create risks further down the track, and leaves on the table the potential benefits of gross emissions reductions in the nearer term .	
	ERP 2's proposed planting scheme on Crown land favours exotics (10,000 ha) over indigenous (5,000 ha rising to 7,500). The Crown should be showing the way by making all afforestation on Crown land native afforestation.	

The Government should make clear statements about its goals for reducing greenhouse gases at their source.

The Government should set out a plan for achieving the NDC. In addition to setting out how the NZ ETS should work with other policies to do more domestically, this will need to include how it will obtain emissions reductions from overseas and the role of the NZ ETS in that.

The ERP should incorporate the Climate Change Commission's advice, to ensure the ETS is fit for purpose. This includes, but is not limited to:

• Each year, hundreds of millions of dollars' worth of industrial allocation is provided to New Zealand's largest emitters. This industrial free allocation should be gradually phased out, while ensuring Government supports industry in this transition towards less emissions-intensive processes. Instruments like a Carbon Border Adjustment Mechanism could be used to address the issue of carbon-intensive production overseas.
 Policies to restrict forestry in the ETS should be investigated, to ensure that high quality forestry is captured by the ETS, in line with recommendations made by the Climate Change Commission.
• Setting of NZU supply should be carried out by the Climate Change Commission.
 Government investment in the governance and market integrity of the scheme should be increased, ongoing, and work to build a robust, credible market.
 International research indicates that emissions pricing policies are likely to be better supported by stakeholders where the funds generated are recycled. For this reason, the Climate Emergency Response Fund should be re-instated and policies such as carbon rebates, which increase the political feasibility of emissions pricing, should be investigated.
What are the potential risks of using the NZ ETS as a key tool to reduce emissions?
The Government has the option to use the NZ ETS together with other policies to help speed up emissions reductions in this country. As it is currently operating, it is not doing this, leading to a potentially massive bill to pay for emissions reductions in other countries to meet the NDC.
In addition, the overreliance on exotic forests as offsets risks NZ's tourism industry (pine not bush), productive land use, habitat and biodiversity .
The Emissions Trading Scheme should not be the only vehicle for achieving emissions reductions in Aotearoa. New Zealand is an international outlier in relying exclusively on emissions pricing to achieve emissions reductions, and for good reason.
The many risks in relying mostly on the ETS as a key to reduce emissions, including:
• The risk of exposing New Zealand's export market to claims of 'greenwashing' due to the ETS's current reliance on net-based forestry removals,
• The pace of emissions reductions relying on the New Zealand unit (NZU) price rising, which

3.2

- The current market integrity and governance arrangements of the ETS damaging the credibility of the system,
- The current settings risk flooding the market with cheap NZUs from forestry which will not drive the emissions reductions necessary for a liveable future.

3.3	How can the Government manage these risks of using the NZ ETS as the key lever to reduce emissions?		
	Not rely on it so much – carrot and stick the country into gross emissions reductions.		
3.4	Do you support or not support the Government's approach of looking at other ways to create incentives for carbon dioxide removals from forestry, in addition to using the NZ ETS?		
	Please choose one of the following:		

	 □Yes, I support ⊠No, I don't support 			
	• Unsure			
3.5	Apart from the NZ ETS, what three other main incentives could the Government use to encourage removals through forestry?			
	It should not encourage more carbon sequestration through exotic forestry.			
3.6	Please provide any additional feedback on the Government's thinking about how to use the NZ ETS to reduce emissions.			
	Click or tap here to enter text.			

Chapter 4: Scaling private investment in climate mitigation | Te whakakorahi tā te rāngai

Summary

This chapter outlines how the Government proposes to better support private investment in reducing emissions. Work is underway across government to understand the barriers to green investment in New Zealand, and to identify options to address them. Through the second emissions reduction plan (ERP2), we will signal our approach to scaling private investment.

Chapter 4			
4.1	Do current measures work well to unlock private investment in climate mitigation?		
4.2	What are the three main barriers to enabling more private investment in climate mitigation?		
	 Certainty about the government's emissions reduction plans Investment, even if at a concessionary rate, to encourage private capital to crowd in. Grant funding and concessionary funding into areas with challenging business plans – such as habitat restoration, biodiversity support, native tree afforestation. 		
4.3	What are the three main actions the Government can do to enable more private investment in climate mitigation for the next 18 months?		
	 Set up funds with clear mandates and a focus on inviting the private sector in. Adjust NZGIF's mandate to allow it to earn less than risk adjusted return. Facilitate grant funding and concessionary funding into areas with challenging business plans – such as habitat restoration, biodiversity support, native tree afforestation. 		
4.4	What are the three main things the Government can do to enable more private investment in climate mitigation in the longer term (beyond the next 18 months)?		
	 Set up funds with clear mandates and a focus on inviting the private sector in. Adjust NZGIF's mandate to allow it to earn less than risk adjusted return Facilitate grant funding and concessionary funding into areas with challenging business plans – such as habitat restoration, biodiversity support, native tree afforestation. 		
4.5	Please provide any additional feedback on the Government's thinking about how to enable more private investment in climate mitigation for the next 18 months.		
	The availability of concessionary finance from government sources is critical to accelerating additional private investment. Concessionary finance from government sources makes later or co-investment more attractive to private investors.		
	This Government will think if the market isn't attracted into solving the problem then there is something wrong with the problem. In reality there are certain actions which must be taken that by their very nature sit outside the existing economic risk adjusted return model. This is where the government must contribute.		

Chapter 5: Energy | Te pūngao

Energy sector at a glance



کی ا	Annual emissions	 2022: 15 Mt CO₂-e 2030 (projected): 12–15 Mt CO₂-e 2050 (projected): 6–13 Mt CO₂-e
	Pillars of the strategy	Clean energy is abundant and affordable.Credible markets support the climate transition.
Ð	Why this sector is important	 New Zealand has abundant renewable energy potential. Harnessing this will help meet our emissions budgets, reduce our dependency on imported fuels and support the reliability and affordability of the energy system.
\bigcirc	What we're doing now	 Enabling an acceleration in renewable generation and electricity networks by removing red tape.
	What's coming	 Renewable energy will double by 2050. A smarter electricity system which gives consumers the ability to change how and when they use power.
E.	What this means for New Zealanders	 Over the longer-term households heat their homes more affordably, with renewable energy. People charge their electric vehicles easily across the country. Renewable energy providers have confidence to invest, enabling them to grow their operations and meet increasing demand. Businesses have opportunities to choose cost-effective, low-emissions technologies.

Chapter 5		
5.1	What three main barriers/challenges that are not addressed in this chapter do businesses face related to investing in renewable electricity supply (generation and network infrastructure)?	
	 Urgency. Lack of government co-investment in renewable energy projects to reduce risk and crowd in other investment. The discussion documents notes "Globally, New Zealand is unusual in not subsidising renewables," yet does not offer a sufficient remedy. 	
	 Pricing coal and gas fired generation appropriately so that overall electricity cost increases thus incentivising industry and business to adopt energy efficiency. 	
5.2	How much will the Government's approach to driving investment in renewable energy support businesses to switch their energy use during 2026–30 (the second emissions budget period)?	
	 Please choose one of the following answers □A lot – it will make a large difference □A moderate amount - there will still be other barriers ☑Little to none – it will make no meaningful difference □ Unsure 	
5.3	What three main barriers/challenges do businesses and households face related to electrifying or improving energy efficiency, in addition to those already covered in the discussion document?	
	 Lack of government incentives for residential solar and energy efficiency improvements. Lack of understanding on the benefits of residential solar and energy efficiency improvements Inertia: without sufficient motivation, businesses and households are unlikely to change. Government incentives would reduce this friction. 	
5.4	How much will existing policies support private investment in low-emissions fuels and carbon-capture technologies?	
	 Please choose one of the following answers □ A lot – it will make a large difference □ A moderate amount - there will still be other barriers □ Little to none – it will make no meaningful difference □ Unsure 	
5.5	What three main additional actions could the Government do to enable businesses to take up low- emissions fuels and carbon-capture technology?	
	 Carbon capture technology will be proven and commercialised offshore, if it ever is. Relying upon unproven technologies like CC, BECCS rather than reducing gross carbon emissions now is like hoping a tooth ache will go away rather than going to the dentist. Yes human nature but we need the government to lead and inspire the citizenry to their better selves. Immediately end oil, gas and coal exploration and prospecting Announce a phase out date for coal mining and imports by 2030 at the latest Ban gas connections in new builds. 	
5.6	If you are an electricity generator, please explain and/or provide evidence of how Electrify NZ could affect projects already planned or underway.	
	Click or tap here to enter text.	
5.7	If you are an electricity generator, please explain and/or provide evidence of how Electrify NZ could increase the likelihood that new projects will be investigated.	
	Click or tap here to enter text.	
5.8	Please provide any additional feedback on the Government's proposals to reduce emissions in the energy sector and the industrial processes and product use sector.	

Chapter 5

The emissions from Industrial and commercial heating, lighting and processing is a significant proportion of our overall emissions. We need to accelerate and encourage this sector to switch from gas and coal to renewable energy use. This government claims to understand business – it clearly doesn't on this matter because if you want this switch to happen **quickly businesses need the incentives and financial assistance like the EECA GIDI programme provided**. Otherwise, businesses will wait until the price of their current power becomes unbearable. This will impact on NZ's productivity and GDP.

We are concerned about the Government signalled support for maintaining:

- 1. A secure gas supply. We feel that the use of gas and coal needs to be phased out as quickly as possible by continuing to increase wind and solar renewable energy so that hydro can be used for peak demand support.
- 2. The renewable gas sector (i.e. production and use of biomethane and hydrogen). These are both largely unproven either technically or commercially and should not be relied upon for emissions reductions.
- Carbon capture, utilisation and storage ('CCUS', i.e. the process of capturing CO2 from industrial activities and either utilising it or permanently storing underground). International studies have repeatedly pointed out the impracticality, dangers and unproven nature of this tech. Having this in the plan is unconscionable.

The Government is anticipating fairly material emission reductions from CCUS (1.4Mt CO2 e in 2026-2030 and 3.2Mt CO2 e 2031-2035) - we feel this is completely unobtainable.

We strongly feel that the following should be retained from ERP1:

- Energy-efficient equipment rebates
- Grant funding for commercial space and water heating and high-efficiency electrical equipment.
- Ban new fossil-fuel baseload generation.
- New Zealand Battery Project.
- Phase-out of fossil gas and gas transition plan.
- The Government should reinstate the oil and gas exploration ban. Undoing the oil and gas exploration ban will result in an extra 51 million tonnes of planet-heating emissions being pumped into the atmosphere in the years to 2050.
- Restore the Government Investment in Decarbonising Industry, to ensure industry is supported in the transition to zero emissions processes.
- Scale up initiatives that support energy efficiency and protect against energy poverty like the Warmer Kiwi Homes scheme.
- Initiatives such as the Green Party's Clean Power Payment can rapidly increase the energy
 efficiency of the nation's housing stock and move towards warm, fully-electrified homes in
 every part of Aotearoa.
- The advice of the Climate Change Commission must be followed when working through development of renewable projects.
- Progress towards the aspirational renewable electricity target should be monitored.
- Ban gas connections to new-builds.

Chapter 6: Transport | Te tūnuku

Transport sector at a glance



ش ا	Annual emissions	 2022: 13.6 Mt CO₂-e 2030 (projected): 11–16 Mt CO₂-e 2050 (projected): 3–11 Mt CO₂-e
	Pillars of the strategy	Clean energy is abundant and affordable.Credible markets support the climate transition.
Ð	Why this sector is important	 The transport system is critical to economic growth and productivity. New Zealand is in a strong position to decarbonise transport through electrification. Making clean energy accessible and enabling electric vehicle (EV) uptake via improved charging infrastructure will remove some non-market barriers to uptake.
	What we're doing now	 We are reviewing the Clean Car Importer Standard to ensure it is effective and achievable. We are working with businesses through Sustainable Aviation Aotearoa to understand the barriers to decarbonising aviation.
	What's coming	 We will enable a network of 10,000 public EV charging points by 2030 and facilitate private investment in EV charging infrastructure. We will review regulatory barriers to decarbonising heavy vehicles. We will work with other countries on sustainable aviation fuels and low- and zero-carbon shipping on key trade routes by 2035. We will support public transport in our main cities.
<u>E</u>	What this means for New Zealanders	• People can charge their EVs easily across the country.

6.1	Do you support the proposed extings to proble TV she wind inforct with 2
6.1	Do you support the proposed actions to enable EV charging infrastructure?
	• XYes I support
	DNo I don't support
	Unsure
6.2	What are the three main actions the Government can do to reduce barriers to and enable the development of a more extensive public EV charging infrastructure in New Zealand (without adding too much cost for households and businesses)?
	• Public EV charging infrastructure is important, but what's most important is the rollout of smart home charging insuring charging is done at a time and in a way that reduces EV charging during peak and shoulder periods.
	• Legislate that petrol stations add EVs chargers so that finding a charging station will be as easy as finding a petrol station.
	• The uptake of EVs must be incentivised concurrently so that any new EV infrastructure can be utilised at an economically viable level. Fair (ie. reduced) RUC's for light EVs are an important part of this.
6.3	Do you support the Government's proposals to reduce emissions from heavy vehicles?
	• 🛛 Yes I support
	• 🗆 No I don't support
	• Unsure
6.4	What are the three main actions the Government can do to make it easier to switch to low- and zero- emissions heavy vehicles (without adding too much cost for households and businesses)?
	• Hydrogen, even Green Hydrogen, should not be used as a transport fuel. There are better options available.
	• As evidenced by Air NZ's backing off its commitments recently sustainable aviation fuel is too costly and too ineffective in the near term (at a minimum).
	• Overall, the government is overly optimistic that low emission fuels will be available to the heavy transport and aviation sector in the near term.
6.5	Do you support the Government proposals to reduce emissions from aviation and shipping?
	• 🛛 Yes I support
	DNo I don't support
	• Unsure
6.6	What opportunities might there be from rolling out new technologies to reduce emissions from aviation and shipping?
	• In terms of aviation, the greatest opportunity is to reduce emissions by directly reducing non- essential travel. High Speed internet access and digital capability throughout New Zealand is essential for this. As is the government leading my example through measuring and reducing its own domestic travel emissions both in central government and in government agencies. Online options for conferences are not yet as common as one might expect, even for climate oriented organisations.
	• For shipping, harnessing wind energy presents an opportunity to greatly enhance efficiency.
6.7	What are the three main actions the Government can do to make it easier to reduce emissions from aviation and maritime fuels (without adding too much cost for households and businesses)?
	• Enable better, greener, land transport within New Zealand between main centres, for example passenger rail.
	• Meet with Air New Zealand to discuss their withdrawal from SBTi and help them make a new, equally strong climate target.

Chapter 6			
6.8	Please provide any additional feedback on the Government's thinking about how to reduce emissions in the transport sector.		
	Waka Kotahi's national mode shift plan, plus Vehicle Kilometres Travelled reduction targets and plans for New Zealand's major urban areas should be retained from ERP1.		
	• EV charging and weakening the Clean Car Standard carbon dioxide targets will not be sufficient to drive the emissions reductions we need to see in the transport sector, our second biggest emitter after agriculture. The transport system largely needs to decarbonise if we are to meet the 2050 net zero target.		
	 Further, there are greater emissions reductions potentials using the avoid-shift-improve framework to reduce transport emissions, successfully used by other countries, and recommended by the Climate Change Commission: 		
	 Reduce the need to travel by building more housing in our cities where people want to live, work and play, rather than allowing further greenfield development, which require people to travel further to amenities. 		
	 Shift how we travel from high emissions modes to lower emissions ones, by giving people better choices. This includes: 		
	 Investing in safe biking and pedestrian infrastructure, making it a safer choice to walk and bike. 		
	 Investing in regional rail to reduce the number of domestic flights required, and investing in coastal shipping and rail freight to improve efficiency in the system and get more trucks off the road. 		
	 Improve the uptake of technology we already have by reducing barriers to electric vehicles, including range-anxiety, but also pricing incentives. Vehicles stay in the New Zealand fleet for an average of 20 years before they are scrapped, therefore a ban on the import of fossil-fuel vehicles should be implemented as soon as 2030 to ensure we meet our net zero target, as other jurisdictions have done. Regulatory barriers to investment in low-carbon aviation, and shipping modes should also be investigated, as well as a Sustainable Aviation Fuel Mandate, and support for coastal shipping. 		
	 A transport emissions reduction plan chapter using this framework would not only reduce far more emissions than what is proposed, but it has a multitude of co-benefits: health benefits, from reduced air pollution and increased active travel; reduced congestion and road maintenance costs by shifting more cars and trucks off the road and onto public transport, rail and coastal shipping, and; more pleasant cities to live in, with streets for people, instead of cars. 		

Chapter 7: Agriculture | Te ahuwhenua

Agriculture sector at a glance



کی ا	Annual emissions	 2022: 41.3 Mt CO₂-e 2030 (projected): 36–40 Mt CO₂-e 2050 (projected): 30–44 Mt CO₂-e
	Pillar of the strategy	• World-leading climate innovation is boosting the economy.
Ð	Why this sector is important	 Agriculture makes up about half of New Zealand's total emissions. It is essential that domestic efforts to reduce emissions support our farmers to produce emissions- efficient products and do not cause production to shift to other parts of the world where it is more emissions intensive.
	What we're doing now	 We are reviewing methane science and targets. We are accelerating the development of mitigation tools and technologies to reduce on-farm emissions. We are developing measurement of on-farm emissions for use by 2025.
đ	What's coming	• We will implement a fair and sustainable pricing system for on-farm emissions by 2030.
E.	What this means for New Zealanders	 The agriculture sector maintains production of low- emissions goods to access high-value markets. The sector uses technologies to lower emissions while lifting productivity and the value of exports.

Chap	ter 7
7.1	What are the three main barriers or challenges to farmer uptake of emissions-reduction technology?
	That technology is not available now and very unlikely to be in the near term.
	• Like most small businesspeople, farmers are focused on survival and profitability above all else
	The cost to adopt in time and \$ will need to be very low
7.2	How can the Government better support farm- and/or industry-led action to reduce emissions?
	Ensure solutions are win-win. For example:
	- methane reducing feed that also increases feed efficiency
	 upgrading refrigeration equipment to greatly reduce high GWP refrigerant emissions from cooling units while also reducing energy cost. This is particularly important in the dairy industry.
7.3	How should Government prioritise support for the development of different mitigation tools and technologies across different parts of the agriculture sector?
	The government needs most of all to focus on gross farm emission reduction and improving water quality.
7.4	What are three possible ways of encouraging farmer uptake of emissions-reduction tools?
	Grants, incentives, and co-investment (i.e. blended finance)
	• Facilitate a constructive and positive dialogue with farm industry leaders to understand their needs
	 Promote agricultural soil management that maximizes harnessing nature's free services in the form of natural nutrient cycles to help reduce input costs. This type of agriculture has various names including but not limited to biological farming, regenerative agriculture, profit-focused farming, and organic farming.
7.5	What are the key factors to consider when developing a fair and equitable pricing system?
	All emitting sectors currently pay for their emissions – the agriculture sector must be drawn into paying too.
	The definition of 'fair and equitable' needs to include what is fair and equitable to future generations who will inherit a climate system impacted upon by this generation.
7.6	Please provide any additional feedback on the Government's thinking about how to reduce emissions in the agriculture sector.
	The discussion document suggests that new technologies (including genetic technologies) will achieve ~20 Mt in CO2e emissions reductions - more than a quarter of ERP 2's total mitigation. The government is dreaming and lying to the country on this issue.
	F-gases are not included in this plan- we think F-gases should be included due to the high global warming potential (GWP) of refrigerants and the initiatives recommended in the first Emissions Reduction Plan (2022). The reason given by MfE was that the recommendations under the first Emissions Reduction Plan were sufficient. We do not agree. The Climate Change Commission provided further recommendations that we agree with (see below)
	• The industry has called for a regulated product stewardship scheme , until this has been implemented, this recommendation should remain in all plans
	· Like the above recommendation, appropriate training and recognition was highlighted by industry and the Climate Change Commission as a key driver to reduce emissions from this sector
	• Develop and support initiatives to incentivise industry to move to using low global warming potential (GWP) alternatives- i.e. help businesses who are ready to upgrade systems and need help with funds and advice
	· Import restrictions on pre-charged equipment with high-GWP F-gases
	• The Climate Change Commission recommended the implementation of an effective agricultural emissions pricing system. The Government should implement the legislative backstop for agricultural processers to enter the ETS in 2025, as legislated, to ensure that

sector participants are incentivised to devise a pricing scheme that works for everyone and that crucial reporting information is collected. It is crucial that farmers pay their fair share for emissions, and don't rely on other sectors and households to pick up their slack.

- The Government's approach relies on technology that is unlikely to be commercially available in NZ until 2039 – after the timeframe for this plan. Additionally, there is no plan in place to address emissions of nitrous oxide, which have increased by over 600% since 1990. Synthetic nitrogen fertiliser should be priced at the manufacturer and importer level in the ETS as soon as practicable.
- With an effective emissions pricing system for agriculture, new technologies, some land-use diversification, and on-farm efficiency increases, the sector could make the changes needed to meet New Zealand's emissions reduction targets while limiting impacts on agricultural production. It is critical that the Government quickly implement this alternative and rapidly advance it in the second emissions budget period to a more detailed pricing system to create more long-term incentives to reduce emissions. This pricing system should be complemented by advisory and extension services to help farmers make necessary changes.
- Financial assistance could provide a means to limiting disruptive change to the agricultural sector. The Government could also choose to give targeted assistance based on certain criteria to manage more specific impacts.

Chapter 8: Forestry and wood processing | Te ahumahi ngāherehere me te tukatuka rākau

Forestry and wood-processing sector at a glance



کی ا	Annual removals	 2022: -4.6 Mt CO₂-e 2030 (projected): -15 to -16 Mt CO₂-e 2050 (projected): -15 to -27 Mt CO₂-e
	Pillars of the strategy	 Credible markets support the climate transition. Nature-based solutions address climate change.
₽	Why this sector is important	• Forestry and wood processing remove carbon from the atmosphere to reduce our net emissions and produce high-value products that can replace emissions-intensive ones.
\bigcirc	What we're doing now	• We are restoring confidence in the NZ ETS to give certainty to the forestry and wood-processing sector.
	What's coming	 We propose to limit whole-farm conversions to forestry on high-quality land to protect highly productive farmland. We will boost wood processing by improving the consenting framework, supporting commercial investments and getting the system settings right to be building with wood.
<u>E</u>	What this means for New Zealanders	• We reduce net emissions, while protecting our most valuable and productive farmland.

Chapt	er 8
8.1	How could partnerships be structured between the Government and the private sector to plant trees on Crown land (land owned and managed by the Government)?
	Native forest only on Crown land.
8.2	What are the three main actions the Government could do to streamline consents for wood processing?
	 Please write your first action here Please write your second action here Please write your third action here
8.3	How large should the role of wood in the built environment play in New Zealand's climate response?
	 Less than currently About the same as currently More than currently Unsure
8.4	What other opportunities are there to reduce net emissions from the forestry and wood-processing sector?
	Click or tap here to enter text.
8.5	Please provide any additional feedback on the Government's thinking about how to reduce emissions in the forestry and wood-processing sector.
	According to the UN's Food and Agricultural Organisation, the international forestry industry 'value chain' (from propagating the plants to the end life of its products), far from reducing global emissions, emits about twice as much carbon as it sequesters.
	This presents an acute risk to our ETS, which relies very heavily on production forestry for its claims to carbon sequestration.
	If the international rules around carbon sequestration change so that only genuine reductions in planetary emissions are counted, only those credits that meet the test will have lasting value.
	• The second emissions reduction plan is an opportunity for the Government to clarify the role of forests and other carbon stocks in achieving New Zealand's emissions reduction goals. Policies should ensure diverse, multifunctional, and resilient landscapes to support long-term carbon removal, and should investigate the way that the ETS can support indigenous biodiversity.
	• Maori have concerns about the impact that reducing the pre-eminence of forestry in the ETS would have for lands they have acquired through settlements. The government must not be dissuaded from diminishing the pre-eminence of exotic forestry in its emissions reduction plans because of Maori concerns.
	• The Government's plan should address how carbon removal activities will be recognised and incorporate principles of additionality (activities that contribute to carbon removal beyond the status quo) and permanence (ensuring long-term carbon storage). In their 2023 advice to government, the Climate Change Commission also noted:
	 Effective policy incentives, such as those provided by the NZETS, are necessary to maintain stored carbon. These incentives must be robust and maintained over long periods.
	• There is a need for integrated policy approaches that consider the broader impacts of forestry practices, such as water and air quality, land stabilisation, and biodiversity conservation
	• The Commission also stressed that excessive reliance on forestry for carbon removals could undermine incentives to reduce emissions at the source.

Chapter 9: Non-forestry removals | Ngā tangohanga ngāherehere-kore

Chapt	hapter 9		
9.1	What are the three main opportunities for non-forestry removals to support emissions reduction?		
	Please write your first opportunity here		
	Please write your second opportunity here		
	Please write your third opportunity here		
9.2	What are three main barriers to developing more non-forestry removals?		
	Please write your first barrier here		
	Please write your second barrier here		
	Please write your third barrier here		
9.3	It is important to balance landowners ability to use their land flexibly with the recognition of the role of non-forestry removals. How can this balance be achieved?		
	Click or tap here to enter text.		
9.4	What three main benefits beyond emissions reductions could be created by developing more non-forestry removals?		
	Please write your first benefit here		
	Please write your second benefit here		
	Please write your third benefit here		
9.5	What risks and trade-offs from incentivising land-use and management change to reduce net emissions need to be considered?		
	Click or tap here to enter text.		
9.6	Please provide any additional feedback on the Government's thinking about how to reduce emissions through non-forestry removals.		
	 Overall, the Climate Change Commission has recognised the potential of non-forestry removals like Carbon Capture and Storage (CCS) and Carbon Capture and Uptake (CCU) but emphasises the need for significant legislative and policy advancements to make these technologies viable and scalable in New Zealand. 		
	 In Aotearoa New Zealand, non-biogenic Carbon Dioxide Removal, CCS and CCU technologies have not advanced beyond the concept and research stage. This lag is attributed to the current lower-cost option of forestry for emissions removal and the economic viability of low emissions substitutes for fossil fuel energy under existing policies 		
	• The Commission states the focus should remain on ensuring these technologies complement, rather than substitute, efforts to reduce gross emissions.		
	 The Commission warns that insufficient progress in reducing gross emissions can lead to increased reliance on offshore mitigation and higher long-term costs. They recommend that clear targets and policies be set to drive gross emissions reductions and carbon removals. 		

Chapter 10: Waste | Te para

Waste sector at a glance



<u>بالیا</u>	Annual emissions	 2022: 3.5 Mt CO₂-e 2030 (projected): 3.3 Mt CO₂-e 2050 (projected): 3.0 Mt CO₂-e
	Pillars of the strategy	 Infrastructure is resilient and communities are well prepared. Credible markets support the climate transition.
Ð	Why this sector is important	 Waste is an important issue to New Zealanders.¹ Enabling better waste diversion will help households and businesses to reduce their waste and the associated emissions. Local and central government and the waste management, resource recovery and recycling sector all have key roles in this system.
٩	What we're doing now	 The New Zealand Emissions Trading Scheme (NZ ETS) incentivises efficient landfill gas capture. A portion of the waste disposal levy is invested in New Zealand's waste infrastructure.
Ē	What's coming	 We will have further targeted investment in New Zealand's resource recovery infrastructure and systems (including for construction and demolition waste). We will investigate improving organic waste disposal and landfill gas capture.
E.	What this means for New Zealanders	 Waste-related biogenic methane emissions are further reduced. More reusable and recyclable resources are available for use in the New Zealand economy.

¹ Waste-related issues have continuously featured in the top 10 concerns of New Zealanders in the Colmar Brunton/Kantar better futures survey, including the 2023 survey.

Chapt	hapter 10	
10.1	Do you agree or disagree that the Government should further investigate improvements to organic waste disposal and landfill gas capture?	
	 ► ⊠Agree ■ Disagree ■ Unsure 	
10.2	What is the main barrier to reducing emissions from waste (in households and businesses or across the waste sector)?	
	Universality of green waste services across NZ	
_	Education on the importance of composting	
10.3	What is the main action the Government could take to support emissions reductions from waste (in households and businesses or across the waste sector)?	
	Explore policy levers requiring the composting of organics at the municipal and industrial level	
10.4	Please provide any additional feedback on the Government's thinking about how to reduce emissions in the waste sector.	
	The following should be retained from ERP1:	
	- Bans or limits on organic waste disposal in landfill, including a full ban from 2030.	
	- Regulations requiring landfill gas capture at specific municipal landfills.	
	 The WMF should have a climate focus and should support local government to reduce waste emissions. 	

Chapter 11: Helping sectors adapt to climate change impacts | Te āwhina i ngā rāngai ki te

Summary

The Climate Change Response Act 2022 (CCRA) requires emissions reduction plans to include a multisector strategy to meet emissions budgets and improve the ability of those sectors to adapt to the effects of climate change. This chapter outlines how we propose to adapt to the effects of climate change through the second emissions reduction plan (ERP2).

As we work to reduce emissions, we also need to manage climate change impacts. How we approach this could affect the ability of sectors to adapt either positively (ie, adaptation co-benefits) or negatively (ie, maladaptation).

Chapt	Chapter 11		
11.1	What are the three main barriers to managing climate risks through emissions reduction policies in this discussion document?		
	Given our lack of mitigation action adaptation is now an important issue. However, overly focusing on adaptation at the expense of mitigation will only make adaptation that much more expensive and impossible.		
	Please write your second barrier here		
	Please write your third barrier here		
11.2	What are the three main benefits of managing climate risks that can come from the emissions reductions policies in this discussion document?		
	Please write your first benefit here		
	Please write your second benefit here		
	Please write your third benefit here		
11.3	What are some examples of how businesses and industries are already managing climate risks?		
	Click or tap here to enter text.		
11.4	How can these kinds of activities be further supported?		
	Click or tap here to enter text.		
11.5	Please provide any additional feedback on the pathway the Government has set out for managing climate risks from emissions reduction activities.		
	Click or tap here to enter text.		

Chapter 12: Addressing distributional impacts of climate mitigation policy | Te whakatutuki i ngā pāpānga tohatoha o te kaupapahere whakamauru panoni āhuarangi

Summary

Alongside our efforts to reduce emissions, we need to address the distributional impacts from climate mitigation policy in the second emissions reduction plan (ERP2). Reducing emissions and increasing removals can be disruptive and impose costs on different groups of New Zealanders.

Each emissions reduction plan is required, under the Climate Change Response Act 2022 (CCRA), to include a strategy to mitigate the impacts of reducing emissions and increasing removals on employees and employers, regions, iwi and Māori, and wider communities, including the funding for any mitigation action.

This chapter sets out an initial analysis of the distributional impacts of some policies in this discussion document. It also outlines how we will more thoroughly assess and address those impacts in the published ERP2.

Chapt	er 12		
12.1	What are the main impacts of reducing emissions on employees, employers, regions, iwi and Māori, and/or wider communities that you believe should be addressed through Government support?		
	Click or tap here to enter text.		
12.2	The Government can use a lot of existing tools to support people affected by reducing emissions (welfare and income support systems, employment and training services).		
	Do you think additional climate-specific services, supports or programmes should be considered by the Government over the coming years?		
	Please describe what additional climate-specific services, supports or programmes could be useful.		
	 ⊠Yes □No □Unsure The Plan must ensure that workers and unions have a strong voice in transition plans for specific industries. Develop active labour-market measures to support workers to retrain and to match skills development with available jobs when workers are made redundant due to industry changes. The Plan can outline initiatives to train more people for clean energy careers with a Clean 		
	 Energy Industry Transition Plan, developed with the energy industry, training providers, and unions. The Plan should reinstate the Equitable Transitions Strategy, to ensure there is a cohesive long-term strategy focused on the just transition. The Government's own advice demonstrates that emissions pricing impacts lower income households four times as much as wealthier households, and it is crucial that any emissions reduction plan takes this into account, devising policies to insulate families from the impacts of rising emissions pricing. The ERP should include targeted policies to support groups who are more impacted by pricing, including through recycling New Zealand ETS proceeds and considering a robust carbon rebate to low-income households. 		

Privacy statement and consent to release submissions

Who will see your submission

The Privacy Act 2020 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you provide as part of a submission will be managed in accordance with the Privacy Act.

All submissions will be accessible to Government agencies and Crown Entities that are responsible for developing or implementing parts of the second emission reduction plan. This includes, but is not limited to, the following:

- Ministry of Transport
- Ministry for Primary Industries
- Ministry of Business, Innovation and Employment
- Ministry for the Environment
- Waka Kotahi / New Zealand Transport Agency
- Energy Efficiency and Conservation Authority
- Civil Aviation Authority
- Maritime New Zealand
- KiwiRail
- The Treasury
- Land Information New Zealand.

How submissions will be used

The Ministry for the Environment will publish a summary of submissions which will not identify any individual submitters.

After receiving submissions, we will analyse them to help inform final decisions on the second emissions reduction plan which will be published by the end of 2024.

Publishing of your submission

The Ministry for the Environment may publish on its website the content of submissions (including names of submitters) as they are often of high interest to the public or share them in response to an Official Information Request (under the Official Information Act 1982).

The Ministry for the Environment will also retain your/your organisation's name and email address as part of a stakeholder list for future communication about ERP2 or related climate issues.

By providing a submission, the Ministry for the Environment will consider that you consent to the release and retention of your details.

If you do NOT wish your personal details to be released or retained please indicate that below.

If you think any part of your submissions should be withheld for publication or release under the Official Information Act please indicate what and why below.

We will consider your preference when responding to any requests for information. You have the right to request access to or to correct any personal information you supply to the Ministry.

Privacy statement and consent to release submissions	
A.	Have you read and understood our privacy statement on who will see your information and how it will be used?
	$oxed{\boxtimes}$ Yes, I have understood the statement (required)
В	Do you consent to your submission being published on the Ministry for the Environment's website?
	 Please choose one of the following answers: ⊠Yes □ Yes, but without publication of Submitter name □ No
С	If yes to the above, clearly state if there are parts of your submission that you do not want published.
	Click or tap here to enter text.
D	Do you consent to your details being kept as part of a stakeholder list for future communication about ERP2 or related climate issues?
	 Please choose one of the following options: ⊠Yes □No

