



# National Environmental Standard and National Policy Statement on industrial greenhouse gas emissions

Summary of submissions and recommendations



Ministry for the  
**Environment**  
*Manatū Mō Te Taiao*



**Te Kāwanatanga o Aotearoa**  
New Zealand Government

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# Contents

Executive summary	5
Introduction	6
Part A: Context and background to the proposal	7
1. Context and role of national direction	7
2. Process for developing national direction	9
3. Overview of submissions	11
Part B: Summary of submissions	12
4. Problem statement	12
5. Scope of national direction instrument	16
6. Objectives of national direction instrument	21
7. Avoiding/preventing new fossil fuel-fired assets	26
8. Phasing out fossil fuels in process heat from existing industrial sites	30
9. Greenhouse gas management plans	37
10. Non-statutory guidance on non-industrial emissions	41
11. Other issues	45
12. Key policy issues and recommendations	48
13. Te Tiriti o Waitangi/Treaty of Waitangi commitments	50
Appendix A: Consultation questions	54

# Tables

Table 1:	Breakdown of number of submissions received	11
Table 2:	Summary of submission points from Questions 1 – 4	13
Table 3:	Summary of submission points from Questions 6 – 8	18
Table 4:	Summary of submission points from Questions 9 – 11	23
Table 5:	Summary of submission points from Questions 12 – 18	27
Table 6:	Summary of submission points from Questions 19 – 23	32
Table 7:	Summary of submission points from Questions 28 – 35	39
Table 8:	Summary of submission points from Questions 36 – 39	42
Table 9:	Summary of submission points of other issues	46
Table 10:	Full list of recommendations and decisions	48

# Executive summary

On 6 April 2021, Cabinet approved the release of the discussion document *Phasing out fossil fuels in process heat: National Direction on industrial greenhouse gas emissions* to support public consultation. The document outlined the policy proposal and objectives and how these would be reflected in the national direction instrument.

The preferred national direction instrument comprises of a National Environmental Standard (NES) supported by a targeted National Policy Statement (NPS) on industrial greenhouse gas (GHG) emissions. This combined instrument would provide clarity and certainty on the rules and provisions around implementing the ban and phasing out of coal by 2037, avoiding the lock-in of new fossil fuel assets and reducing existing process heat emissions. It would also provide direction and rules to industry groups and local councils on their roles and responsibilities for phasing out fossil fuels in process heat.

One of the biggest opportunities to reduce industrial emissions is through the decarbonisation of process heat. This is because process heat currently contributes about 10 per cent of New Zealand's total GHG emissions and is seen as one sector that could potentially contribute to a lot of New Zealand's emissions reduction. Technically and economically viable alternatives exist in this sector, sitting towards the lower end of the marginal abatement cost curve. Therefore, a significant opportunity for emissions reduction is presented over the first three emissions budget periods under the Climate Change Response (Zero Carbon) Amendment Act 2019 (CCRA).

The policy objectives of the proposal are to:

- achieve national consistency and certainty in the management of industrial GHG emissions under the Resource Management Act 1991 (RMA)
- reduce industrial GHG emissions and support New Zealand's transition to a low-emissions economy.

The Ministry for the Environment (MfE) in partnership with the Ministry of Business, Innovation and Employment (MBIE) and the Energy Efficiency & Conservation Authority (EECA) have jointly developed the proposal, policy options and the national direction instrument.

Consultation on the proposal was held from 8 April 2021 to 20 May 2021. The consultation period included five workshops with partners, stakeholders and interest groups. 91 written submissions were received on the proposal.

This report has been prepared in accordance with section 46A of the RMA to provide a summary of submissions, recommendations and how the policy team has refined the proposal as a result.

# Introduction

This report provides a summary of submissions on national direction. The report has been broken down into two parts:

**Part A** provides context and background to the proposal.

- Context and role of the NES-NPS instrument
- Information on the process for developing national direction
- Overview of submissions (an extensive summary is provided in Part B of the report).

**Part B** of the report breaks down the proposal into policy options. The key issues raised in submissions have been grouped into the proposed policy options.

- Problem statement
- Scope of the national direction instrument
- The policy options consulted on
- Avoiding/prohibiting new fossil fuel-fired assets
- Accelerating phase out of fossil fuels in process heat
- Greenhouse gas management plans
- Non-statutory guidance on non-industrial emissions
- Key policy issues arising from submissions.

Other issues:

- Treaty of Waitangi analysis.

The consultation questions have been grouped according to the sections in Part B of this report.

# Part A: Context and background to the proposal

## 1. Context and role of national direction

Reducing greenhouse gas (GHG) emissions from the process heat sector is an important contribution to achieving emissions budgets and targets under the Climate Change Response (Zero Carbon) Amendment Act 2019 (CCRA). National direction would support decarbonisation of process heat by acting as a regulatory backstop to phase out the use of fossil fuels. A National Environmental Standard (NES) and National Policy Statement (NPS) would provide policy direction and regulation to reduce, and in some cases prohibit, emissions from the use of fossil fuels in process heat assets. The regulation would sit alongside the Government's wider programme to decarbonise the industry and energy sectors, which includes the New Zealand Emissions Trading Scheme (NZ ETS). Additional measures would be outlined in the Government's first Emissions Reduction Plan (ERP).

### Why national direction is appropriate

Under the RMA, the Minister for the Environment can prepare national policy statements (NPSs) outlining objectives and policies for matters of national significance relevant to achieving the purpose of the RMA. The Minister for the Environment can also prepare National Environmental Standards (NESs) under sections 43 and 44 of the RMA for environmental matters. NESs can include rules to prohibit or enable an activity or discharge to the environment and can also specify conditions that must be met. Together, rules and conditions within a NES can provide a consistent national approach to RMA decision-making on resource consents.

The Government considers that national direction on GHG emissions from the use of fossil fuels in process heat is a matter of national significance because:

- decisions by regional councils on resource consents for discharges to air could have a significant impact on the ability to achieve GHG emissions reduction from the industrial process heat sector
- existing air discharge rules are not fit-for-purpose to manage and reduce GHG emissions and support targets in the CCRA as they were designed to address different effects
- amendments made to the RMA<sup>1</sup> in 2020 repealing sections 70A and 104E, that specifically excluded the consideration of GHG discharges to air in relation to climate change, will come into effect in December 2021. Inconsistent decision-making on GHG emissions from industrial process heat could result without appropriate national direction.

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<sup>1</sup> The Resource Management Amendment Act 2020 was passed at the end of June 2020 and included three amendments relating to climate change mitigation: (1) Removing the statutory barriers to regional councils considering the effects of GHG emissions on climate change when making air discharge rules and assessing applications for air discharge permits (repealing sections 70A, 70B, 104E and 104F of the RMA); (2) Requiring local authorities to "have regard to" emissions reduction plans and national adaptation plans published under the CCRA when preparing regional policy statements, regional plans, and district plans; (3) Enabling a Board of Inquiry or the Environment Court to consider the effects of GHG emissions on climate change when a matter is called in as a proposal of national significance.

National direction in the form of a NPS and NES would provide the policy guidance and supporting rule framework for phasing out the use of fossil fuels in industrial process heat. The combined objectives of the NPS and NES are to:

- achieve national consistency and certainty in the management of industrial emissions under the RMA
- reduce industrial emissions and support New Zealand's transition to a low-emissions economy.

The RMA currently prevents regional councils from considering the effects of GHG emissions on climate change when making plans and considering applications for air discharge permits. Existing air discharge rules and consents regulate the 'discharge of contaminants into air' for the purpose of managing air quality rather than GHG discharges. However, GHG emissions are generally indirectly regulated or authorised as part of the overall 'discharge of contaminants into air'. Regional plans frequently have more lenient rules for the burning of fossil fuels for process heat compared to lower emissions fuels with higher particulate matter (for example, wood, biomass). There is a need for a consistent approach to managing and reducing GHG emissions. The NPS would provide the supporting policy for making decisions on resource consents and the NES would provide the rules for GHG discharges. The policies and rules would be applied to resource consents without the need for changes to be made to regional plans.

The importance of national direction to support the RMA amendments relating to climate change mitigation included in the Resource Management Amendment Act 2020 was articulated by the Environment Committee in their report as follows:

We acknowledge that it will be vital to have direction at a national level about how local government should make decisions about climate change mitigation under the RMA. Otherwise, there could be risks of inconsistencies, overlap of regulations between councils and emissions pricing, and litigation. Therefore, we recommend a delayed commencement for these changes, of 31 December 2021, to ensure there is sufficient time to make the policy arrangements.<sup>2</sup>

## **The role of national direction**

The role of national direction is to provide appropriate policy guidance to support decisions on resource consent applications, and to provide a rule framework to phase out the use of fossil fuels over time in process heat.

The NPS would include the following content:

- objectives to provide clear outcomes for phasing out the use of fossil fuels in process heat
- definitions of key terms such as fossil fuels, greenhouse gases, process heat, Best Practicable Option (BPO), economically viable, thresholds, suitably qualified practitioners, technologically feasible, and GHG management plan
- policies to guide local decision-making on consent applications that require use of fossil fuels in new process heat assets to be avoided unless it can be demonstrated that there are no economically viable and technically feasible alternatives, and BPO can be met through implementation of GHG management plans.

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<sup>2</sup> Environment Committee, 2019, Recommendation Report on RMA Amendment Bill.



The NES would include the following content:

- prohibited activity rule for no further discharges to air of GHGs from the use of coal in new assets to take immediate effect
- restricted discretionary status requiring resource consent to be obtained for use of coal in existing assets until 2037, and for use of other fossil fuels in new and existing assets, with specified conditions that must be met, including maximum consent duration for new and existing assets
- an exemption for low emitting activities that discharge less than 500 tonnes CO<sub>2</sub> per year of total thermal load at a site
- requirement for consent holders to produce and implement GHG management plans.

The effect of national direction would be that decision-makers on plans, policy statements, resource consents and other matters must consider the NPS as part of their process. The NES would set nationally consistent rules for prohibiting and avoiding the long-term lock-in of GHG discharges and assets.

It would also support business transition by encouraging and mandating BPOs to reduce emissions and consider what is technically and economically feasible for industry.

## 2. Process for developing national direction

### **Engagement ahead of public consultation: pre-consultation working group**

To develop the proposal and policy options for public consultation, the Ministry for the Environment (MfE) undertook a series of workshops with local government, the National Air Quality Working Group, EECA and MBIE. These workshops informed the problem definition and development of the proposals for the discussion document.

### **Technical Advisory Group (TAG)**

This independent group was established in October 2020 and is made up of members with expertise in law, energy, local government planning and consenting and air quality. The TAG provides technical oversight and additional policy and regulatory support to the policy team. Four workshops have been held with the TAG with further advice provided by email.

### **Consultation and engagement**

Public consultation was held on the proposed national direction from 8 April to 20 May 2021. The discussion document was released outlining the policy proposals, the objectives and the policy options proposed to implement the proposal.

In addition, the policy team led by MfE, ran five focused stakeholder workshops during the consultation period. The purpose of these was to discuss the policy proposals with key stakeholders, provide clarification on the options and inform stakeholders about the submission process. Two workshops were held with industry groups, two workshops with local government and one workshop with interested groups.

Invitations were sent to iwi and Māori for a proposed online hui however this did not go ahead as no responses were received. As a result of this, MfE went back out for engagement and focused on generating interest amongst iwi and Māori resulting in two discussions directly with Poutini Ngāi Tahu Papatipu Runanga and a Resource Management Consultant of Māori whakapapa from Northland. Although no formal submissions were received from these focused discussions, the policy team took on board the comments and concerns raised. This summary and analysis are explained further in the Te Tiriti o Waitangi section in this report.

The policy team conducted further one-on-one discussions with industry groups including Tomatoes NZ and Horticulture NZ, Genesis Energy, Fonterra and the Major Electricity Users' Group. The written submissions from these industry groups reflected the comments raised in these discussions. They will be examined later in this report.

A total of 91 submissions were received during the six-week consultation period through the online portal and by email.

### **Submission analysis**

The submission analysis process started immediately after consultation closed and ran for approximately three weeks. Submissions were analysed with support from EECA and MBIE, and a summary of key common messages and responses was developed.

In response to the key policy issues identified in the submissions, the policy team developed a list of policy issues that required further refining post-public consultation. These were the policy issues which informed the refinement process of the policy options. The options were then discussed further with the TAG group for guidance, technical oversight and regulatory support.

The summary of submissions for each policy option will be discussed further later in this report as part of the analysis of each policy option.

### **Section 32 Report under the RMA**

A draft evaluation report has been produced in accordance with section 32 of the RMA. This draft report provides analysis on the costs and benefits of the policy proposals set out in the discussion document. The policy team is still seeking further information on benefits and costs of options to inform a final section 32 report. A copy of the final report will be made available to the Ministers responsible for national direction.

### **Regulatory Impact Statement (RIS)**

A RIS has been developed to accompany this proposal. This RIS will be published on the Ministry for the Environment's website after Cabinet has considered the recommendations in this report.

### 3. Overview of submissions

A total of 91 submissions were received on national direction over the six-week consultation period. Submissions were received from a range of stakeholders which included industry bodies, local government, businesses, non-governmental organisations (NGOs), other interested groups and individuals.

Of the 91 submissions received, they are broadly categorised into the breakdown in table 1.

**Table 1: Breakdown of number of submissions received**

Category	Number
Industry bodies	31
Individuals	28
Businesses	16
Local government	7
Others	6
NGOs	2
Iwi/Hapū	1

Submissions were supportive of the overall policy objectives, the pathway towards zero emissions and aligning with the Government’s wider climate change targets. There was general agreement in most of the submissions on the total ban on new coal-fired assets, particularly to achieve national consistency and certainty in the management of industrial GHG emissions under the RMA. This ban would give a clear message and provide incentives for suppliers of alternative methods to scale up their operations.

Many industry groups were not in favour of additional regulation, instead preferring that mitigation policy should be left solely to the NZ ETS.

While there was general support for the ban on coal-fired assets, some submissions were also of the view that there was a lack of evidence and understanding of natural gas in the national direction instrument. This presented a risk that phasing out natural gas too quickly could result in unintended consequences for natural gas infrastructure. There were also concerns that requiring a switch away from natural gas too soon could impose significant costs on industry and stymie their ability to direct capital towards switching away from coal, and that the proposal lacked alternative fuel options for businesses to consider.

Submissions were generally in support of the proposed combined NES-NPS as the choice of instrument as it does not require plan changes under RMA Schedule 1 process. It also means the instrument itself would limit councils’ discretion and the NES could target specific activities and emissions creating uniformity and national consistency.

One key focus of submissions was around the assessment of technical feasibility and economic viability, and what this would mean to businesses unable to source alternative low-emitting options. Local government submitters also raised the need to support them in assessing consent applications once the NPS and NES take effect.

A more detailed overview of submissions is provided in Part B of this report.

# Part B: Summary of submissions

## 4. Problem statement

### Policy intent

The intent behind national direction is to create rules and policies that would allow regional councils to consider the effects of GHG emissions on climate change when making air discharge rules and considering permit applications.

This is to ensure there is uniformity and consistency in assessing and reviewing consent permits for low and medium temperature process heat across New Zealand.

National direction would support decarbonisation in this sector by seeking to stop the lock-in of emissions-intensive industrial heating and look to phase out existing emissions-intensive assets.

### Role of the New Zealand Emissions Trading Scheme (NZ ETS)

The NZ ETS remains a critical lever to drive emissions reduction in the energy industry in New Zealand. This is because the sector is price responsive, therefore emissions pricing is pivotal to incentivising its emissions reduction. A rising carbon price creates an incentive to reduce fossil fuel use through energy efficiency improvements and fuel switching opportunities. It is likely that, due to rational behaviour, cheaper emissions reduction opportunities would be taken up first.

As the industry is price responsive, emissions pricing is pivotal to incentivising emissions reduction in the sector. This is because it creates a relative price differential between fossil fuels and other low-emissions fuel sources such as electricity and biomass.

Some firms are already beginning to switch away from fossil fuels due to anticipation of higher emissions prices and other drivers. If the emissions price rises over time as expected, large fossil fuel users in the industry will face increasing energy costs. This will be the incentive to reduce fossil fuel use through energy efficiency improvements and fuel-switching opportunities, creating the shift to low-carbon.

### What we consulted on

Questions 1 – 4 of the consultation document set out the problem definition and characterisation of the status quo. They address the current regulatory gap in the RMA and the government's primary policy tool to drive process heat investment, the NZ ETS. A list of the consultation questions is in [appendix A](#) of this report.

### Key issues from submissions

A total of 60 submission points were received on the four questions regarding the problem definition. A summary of submission points is included in [table 2](#) below.

Submission points were generally supportive of the intentions of the proposal to align with the climate change targets and bridging the gap between the RMA and the CCRA for a consistent approach to climate change targets across legislations in New Zealand.

Submission points in response to questions 1 and 2 were generally supportive of the characterisation of the status quo in the discussion document. However, there were a few suggestions on what were considered barriers or shortfalls for the current characterisation.

- Submitters expressed a lack of understanding of the status quo and role of natural gas within the current scope. The proposal mentioned the inclusion of natural gas under ‘other fossil fuels’ with no further explanation on how natural gas would be treated in the current national direction instrument.
- Lack of information on economic/disproportionate/environmental impacts. There was little available information in the proposal to reflect the impacts of this policy proposal, so some submitters found it difficult to ascertain exactly what the impacts would be.
- The proposal does not reflect a wide range of low-emissions alternatives such as hydrogen and biofuel.
- Lack of understanding of complementary measures to mitigate the economic impacts of the proposal.

Submission points requested continuity of natural gas in the proposed national direction. They identified uncertainty and lack of information on the future of natural gas, therefore submissions called for the scope to focus on phasing out coal and other fossil fuels and to allow the continuous use of natural gas in new and existing sites.

There was general agreement on the characterisation of the problem regarding the regulatory gap (posed in question 3). The inability of the current RMA to respond to GHG emissions is a serious threat to achieving New Zealand’s climate change targets, therefore there is value in developing national direction for GHG emissions to reduce uncertainty and inconsistency in assessing and reviewing resource consent. Guidance is required for local authorities on how to exercise their authority and discretion on consents in response to the RMA amendments.

**Table 2: Summary of submission points from questions 1 – 4**

**Summary of submission points from questions 1 – 4**

Overall support

- The objectives of the proposal on the pathway towards zero emissions and aligning with government-wide climate change targets.

Agreement

- On a total ban on new coal-fired assets to give clear messages and provide clear incentive for suppliers of alternative methods and fuels to scale up their operations.

Other

- Current status quo shortfalls include not enough understanding of natural gas and LPG, not enough understanding of economic and disproportional impacts, and the current proposal not reflecting recent changes to the NZ ETS.
- More information on the use of natural gas, request for the use of natural gas to be a permitted activity due to very few alternatives.
- Consultation should have waited for advice from Climate Change Commission before venturing out. Pre-empting the Commission’s final advice.
- No supporting data has been published.
- Concerns over process heat in government-owned entities such as schools, hospitals.

## Summary of submission points from questions 1 – 4

- Support characterisation of the problem of the regulatory gap in the RMA and calls for national direction instrument to have clear provisions and policy direction to support consistency in decision-making by local authorities – supports the ban as proposed without exemptions, current air discharge rules are not designed to manage emissions.

### Disagreement

- Characterisation of the problem based on the following:
    - lacking te ao Māori lens/honouring the Treaty of Waitangi in the development
    - role of natural gas and LPG is complex and therefore not suited to national direction and the proposal should be limited to coal-based processes
    - current RMA limitations could mean the inability to respond to GHG emissions reduction, higher costs and consequences under RMA regulation
    - waterbed effect in that emissions could pop up elsewhere
    - the definition of coal-fired assets. Without this clarity, boilers that could use biomass or could be converted to using biomass, might be prohibited
    - regulatory risks
    - specific references to certain fuel types such as hydrogen and biogas within the RMA framework.
  - Proposal would create unnecessary competition between regions to secure large emissions reduction as quickly as possible.
  - Proposal would create further inconsistency across the board resulting in increased likelihood of court appeals and associated consenting delays which will disincentivise investors and create market distortion between regions. This is because the proposal also currently has a narrow scope and provides limited discretion.
  - Proposal to be integrated/complementary to other initiatives in government such as the NZ ETS, other national direction such as NES-Air Quality.
  - Mixed views on the need for a regulatory backstop to support the NZ ETS.
  - Views by some that the NZ ETS should be the primary mechanism but should be strengthened by improving price signals to encourage fuel switching.
  - NZ ETS is designed to be fuel agnostic, NZ ETS is appropriate for abatement of emissions from natural gas.
  - Reduce industrial allocations in the NZ ETS to improve its effectiveness and cap emissions.
  - Repeal the 2020 RMA amendments. Some industry submitters were not in favour of the RMA amendment itself and thought it should be repealed on the basis that the NZ ETS should be the sole driver of emissions reduction.
  - Supporting regulation is necessary to achieve emissions reduction, could be based on encouraging the uptake of low-emissions technologies by removing barriers to investment.
  - RMA has a role to play in reducing emissions.
  - NZ ETS floor price should be increased more rapidly and free allocation credits to heavy emitters to end by 2027.
  - Modelling has underestimated the effectiveness of the NZ ETS.
  - Alignment of tools is needed so that there is no double-counting, for example, national direction, NZ ETS, other legislation such as the Building Act.
  - Regulation will add unnecessary complexity and increase costs of alternative fuels.
- 

## Analysis

### Current status quo

Submissions were very supportive of the policy proposal and the overall objective to align with the Government's wider climate change targets. The alignment would allow local government to exercise its authority towards meeting the targets set by central government.

Some submissions were also supportive of national direction to resolve the regulatory gap due to the 2004 RMA amendments. This provision in the current RMA means existing air discharge rules address different effects and do not account for GHG emissions, which will be detrimental to achieving the climate change targets set by government. Because of this gap, regional rules and consents have not been designed to address GHG emissions from low and medium temperature boilers.

The RMA and national direction to support the amendments would be able to bridge this regulatory gap and require businesses who would be undertaking consenting or re-consenting to have regard to their GHG emissions. National direction would regulate the use of fossil fuels at existing industrial sites to ensure a level of national consistency and certainty in the management of GHG emissions under the RMA.

In contrast to this viewpoint, some submitters were not supportive of national direction as the NZ ETS is, and should remain, the sole driver of emissions reduction.

A few submissions raised concerns over the status quo, in particular natural gas and understanding the role of other emissions reduction policy tools such as the NZ ETS.

The scope of national direction, explained later in this report, will examine the role of natural gas and the implications of expanding the scope of the status quo.

### **Understanding the role of the NZ ETS**

The NZ ETS remains a critical lever to drive emissions reduction in New Zealand. This statement drew mixed views from submitters. Some saw the NZ ETS as the primary emissions reduction mechanism in New Zealand whereas other submitters felt the NZ ETS should have supporting regulation, such as national direction, to achieve emissions reduction.

There were also submissions that noted the need for supporting regulation to achieve emissions reduction which could be based on encouraging the uptake of low-emissions technologies by removing barriers to investment. In contrast to this view, there were a few submissions expressing concern that additional regulation could mean unnecessary complexities and an increase in costs to their operations.

A rising emissions price can signal to the market that investing to reduce emissions will be rewarded. However, these price signals are relatively short term, as NZ ETS caps are only set for a few years into the future. The uncertainty of the emissions price makes investing in reducing emissions riskier, so households and businesses may under-invest. Shadow emissions pricing anticipates future emissions prices and complements emissions pricing through the NZ ETS. This helps decision-makers account for emissions impacts and costs over the project's entire lifetime. Shadow emissions prices are especially important for government policy and investment decisions involving large resources, or that become long-lived or irreversible once made. This includes significant national infrastructure investments, such as those being made to support the COVID-19 recovery. Putting standards or target dates in place for phasing certain technologies in or out can also provide the certainty people need to invest in reducing their emissions in a timely manner.

### **Certainty of emissions outcomes**

The recent NZ ETS reforms have implemented a flexible, five-year rolling cap. An emissions price guides investment decisions but the combination of oversupply, price measures and a flexible cap in the NZ ETS mean it will not necessarily guarantee a specific emissions outcome.

The phase out date for coal, coupled with the use of shadow pricing to guide investment decisions provides a higher degree of certainty in emissions abatement. Emissions reductions that are expected to be achieved through complementary policies can be factored in when the cap is set. This certainty of emissions outcomes gives rise to the importance of the NZ ETS in driving emissions reduction.

However, there are many emissions reduction options available that are not responsive to the NZ ETS price signal, due to the presence of barriers at the prevailing price level. These emissions reductions can be cost-effectively captured through other regulatory measures, sector-specific policies and direct government investment. This is where national direction as a regulatory and policy tool can come in. The RMA and national direction instruments promulgated under it have a role to play in reducing emissions. Officials therefore recommend that national direction is required to address a regulatory gap in the RMA, and to provide a regulatory back stop to other emissions reduction policies and tools, including the NZ ETS.

## Recommendations and decisions

Recommendations:		
R1	Confirm the status quo	AGREE/DISAGREE
R2	Confirm the characterisation of the problem regarding the regulatory gap in the RMA	AGREE/DISAGREE
R3	Confirm the role of the NZ ETS and that national direction is a complementary measure	AGREE/DISAGREE

## 5. Scope of national direction instrument

### Policy intent

This national direction is focused on reducing GHG emissions from the use of fossil fuels in assets used for industrial process heat. There are a range of other GHG emissions that fall within the category of ‘industrial emissions’ given the broad RMA definition of ‘industrial and trade premises. The discussion document proposed limiting the scope to industrial process heat activities, with the following exemptions and out-of-scope activities:

- low GHG emitting process heat assets operating fewer than 400 hours per year or emitting below a specified threshold (for example, 50kW, 2 MW or 100 t CO<sub>2</sub>-e/year). These activities include small scale discharges that do not require resource consent
- prohibited activity and phase out rules for coal only applying to coal-fired assets for low and medium temperature process heat requirements
- co-generation facilities for energy generation
- emissions from electricity generation (eg, coal generation at the Huntly Power Station, back-up diesel generators)
- emissions from waste (eg, landfills).

Potential assets to consider within the current scope include commercial space and water heating. This is on the basis that the issues and technology options are similar, and publicly owned coal-fired assets are subject to the Carbon Neutral Government Programme (CNGP) objectives to phase out coal use in assets using coal or other fossil fuels.



## What we consulted on

Questions 6, 7 and 8 sought views on the scope of the national direction. A list of the consultation questions is in [appendix A](#) of this report.

## Key issues from submissions

Fifty submission points were received on the three questions regarding the scope of the proposed national direction (questions 6, 7 and 8). A summary of submission points is included in [table 3](#).

There was general support for the focus of national direction on fossil fuels, with an emphasis on phasing out the use of coal by the proposed date, and natural gas over a longer timeframe. Clarification on the inclusion of used oil was requested.

Views were expressed in opposition to the proposed scope, including the need to:

- take a systems-wide approach to emissions reduction across sectors rather than focusing on process heat individually
- focus on incentivising new technology and practices and removing regulatory and financial barriers to alternative fuel sources
- provide more information on the economic, social and environmental impacts, for example the risk of business closures, stranded assets and relocation of emissions offshore.

Exclusions for the electricity sector were supported. These included generation, the use of back-up generators and supporting transition to renewable energy. Clarification on how the national direction applies to co-generation activities was sought. Exemptions were also sought for the use of fossil fuels for the heritage and voluntary sectors, including trains and boats.

Inclusion was requested for other high-temperature processes and sectors such as lime kilns, combustion/incineration, pyrolysis, gasification of non-biomass waste streams (eg, plastics, tyres), and waste to energy options, along with a review of exemptions that currently exist under the Emissions Intensive Trade Exposed allocations.

Mixed views were expressed on question 7 regarding inclusion of commercial water and space heating. Nineteen submission points were raised on this question. In particular, the need to clearly define process heat, industrial heat, and include requirements for commercial water and space heating. There were suggestions about assessing space heating requirements, considering total building emissions, and supporting carbon performance standards. Reference to and connections with the Building for Climate Change Programme were made, with one submitter indicating it may be a more appropriate programme for this sector to achieve emissions reduction.

Respondents expressed views on boiler sizes and thresholds for commercial space and water heating, to include all boilers regardless of commercial or public use, having no size threshold, and with a requirement to consider all emissions with multiple boilers on one site.

Some submitters raised providing for a clear and staged transition over a longer timeframe. A wide range of industries, users and sectors would be affected if commercial and space heating were to be included. Inclusion of commercial and space heating could result in lower costs for alternative fuel sources as it would increase demand for fuels including electricity and biomass.

**Table 3: Summary of submission points from questions 6 – 8**

#### Summary of submission points from questions 6 – 8

- Focus on coal only, treat waste and electricity separately.
- Support for excluding electricity generation including emissions from transmission infrastructure, sub-stations, backup generators, need to retain some thermal generation to support transition, phase out of fossil fuels in the electricity sector is underway.
- Clarify how national direction applies to co-generation, take a more flexible approach to natural gas.
- Include other fuels and processes, including waste oil and non-boiler heat plants, for example, lime kilns, combustion/incineration, pyrolysis, and gasification of non-biomass waste streams (eg, plastics, tyres), and waste to energy options, and review any Emissions Intensive Trade Exposed (EITE) allocations.
- Exclude heritage and voluntary organisations, bitumen, and asphalt.
- Provide clarification and definitions for process heat and industrial emissions and with high level principles and guidance rather than prescription.
- Focus on removing regulatory barriers from use of other fuels/energy sources, for example, electricity through national direction.
- Extend scope to include research and development on alternative fuel sources and infrastructure and local impacts of banning coal use.
- Take a system-wide approach to emissions reduction across sectors rather than focusing on process heat.
- Focus on incentivising new technology and practices and take care not to cause business closures, stranded assets, and relocation of emissions offshore.
- The need to treat emissions from water and space heating separately because the definition of process heat in the discussion document does not provide for commercial space and water heating, and other sectors would be affected.
- The social and economic impacts of including this sector in the proposals.
- Different space requirements and total building emissions would need to be considered in assessments and thresholds, carbon performance standards could be useful, Building for Climate Change Programme may be a more appropriate instrument.
- Including the commercial space and water heating sector could drive down the cost of alternative fuel sources, such as electricity and biomass.
- Provide for a clear and staged transition over a longer timeframe, and consider a wide range of uses, for example gas heating for aircraft hangars.
- All boilers should be covered by the regulation, including 318 coal-fired boilers (public and commercial).
- Include space heating but do not make it subject to a size threshold, consider all emissions from heat on one site collectively.

## Analysis

### Scope of fossil fuels

Submitters were in general agreement that coal should remain the focus of the proposed national direction, with supporting transitional provisions to minimise economic and social impacts. The proposals as drafted provide for no new use of coal in medium and low temperature process heat assets and a transition away from the use of coal in existing assets. This is to be achieved through the resource consent process and supporting GHG management plans. Officials recommend retaining this proposal.

Respondents requested greater flexibility for natural gas to be used as a transition fuel. They also raised using gas as a supporting fuel, for example, to aid co-generation in the electricity sector. Submitters raised the need to ensure existing infrastructure is not decommissioned in the short term, and to consider investment in research and development for retrofitting to support low-emissions fuel sources in the future. While recognising that the useful economic life of existing assets should provide for the continued use of gas, officials consider that

providing policy direction on the need to avoid locking in new fossil assets would allow the sector to prepare and replace assets over time. It would also enable the continued use of existing infrastructure which may be used for other fuel sources in the future. This may result in less emissions reduction in the short term, followed by significant increases over the longer term as more investment in new technology is made.

Officials recommend that policy direction in the NPS is needed to support decision-making on resource consent applications for the use of gas as a short-term fuel. Certainty that users and consent holders are on a pathway to phase out the use of natural gas would be provided through a restricted discretionary activity status (RDA), a requirement to implement BPO and via emissions targets outlined in a GHG management plan in the NES.

Several submitters sought clarification on the inclusion or exclusion of waste oil. Waste oil is used in process heat assets during asphalt, bitumen, and food and wood fibre production. The policy proposals focus on the phase out of all fossil fuels and apply to waste oil in process heat assets in the same way they apply to diesel and other fuels. Officials recommend including definitions of fossil fuels in the NPS to clarify that NPS policies and NES rules apply to the use of all fossil fuels in process heat assets.

### Scope of activities

The proposed scope for national direction includes assets used in process heat activities. The proposed ban on the use of coal in new assets and the phase out in existing assets applies to low to medium temperature processes. High temperature assets were excluded from this proposal due to the need for further impact analysis and assessment of feasible alternatives. Officials recommend retaining the proposed scope for the ban and phase out of coal limited to assets used for low and medium temperature process heat while further research and development into alternatives is carried out. The Government Investment in Decarbonising Industry (GIDI) Fund focuses on accelerating the uptake of low carbon process heat.

The consultation document proposed that the phase out of other fossil fuels should still apply to high, medium, and low temperature assets, which included requirements to upgrade practices, technology, and where possible fuels over time through GHG management plans. Officials recommend retaining the requirement for high temperature assets to comply with NPS and NES policy and rules to phase out the use of other fossil fuels through consent processes.

The electricity sector sought an exemption for the use of fossil fuels for electricity generation, including in transmission infrastructure, sub-stations, and for the use of back-up generators. They also raised the need to retain some thermal generation to enable transition to electrification. Some submitters raised the need for a systems-wide approach to developing a strategy for the energy sector that includes removing barriers for increased generation, particularly from renewable sources. The proposed national direction scope excluded the electricity sector due to the programme underway to decarbonise the sector. This is in addition to the need for a National Energy Strategy, recommended by the Climate Change Commission to achieve emissions reduction from the sector and to enable and provide for increased energy generation from renewable sources.

Officials recommend that GHG emissions from electricity generation remain outside the scope of the national direction due to the Government and sector programmes underway to increase energy supply and decarbonise the sector.

Complementary national direction should also be considered, and where appropriate provided for, within the National Planning Framework as part of the Resource Management System reforms.

Submitters sought clarification on the application of the proposals for electricity co-generation. Officials recommend that the ban and phase out proposals for the use of all fossil fuels, including coal and natural gas, do not apply to co-generation activities.

The wastewater sector sought the use of back-up generators. The intention is for small-scale use of fossil fuels in small-scale assets and generators to remain outside of the national direction scope.

Exemption was sought for the use of heritage engines in trains and boats. Heritage engines in transport activities would fall outside of the definition of process heat, and it is not the intention of the proposals to regulate emissions from transport activities. Officials therefore do not consider that a specific exemption is needed in the regulation for heritage transport activities. Officials recommend that clarification could be provided in supporting guidance to remove any ambiguity.

Views were sought on the inclusion of emissions from commercial water and space heating, however few submissions were received. From the feedback collected, submitters raised reviewing the definition of industrial process heat if this sector were included in the proposals, including specific requirements for the sector which could differ from industrial processes (for example, the size of space to be heated), and water volume.

Discharges to air from this sector are currently regulated under regional air plan rules in the same way discharges to air from industrial heat processing activities are. There is efficiency in developing a national policy and rule framework that can apply to the management of GHG emissions from boilers for the use of commercial water and space heating. However, further analysis of the impact of regulation on the sector is required. This would include considering the appropriate method to achieve the reductions, for example through RMA regulation, or measures under the Building Act and Building Code to improve operational efficiency and meet targets. The Government is currently investigating options under the Building for Climate Change Programme, along with an appropriate timeframe for this sector.

Submitters asked if a range of other heat plants were included in scope, including lime kilns, combustion/incineration, pyrolysis and gasification of non-biomass waste streams, and waste-to-energy options. Assets referred to in the consultation document include fuel burning equipment used to generate process heat and could also include ovens, furnaces and kilns depending on the heat requirements. Fuel burning equipment and devices would need to comply with the NES for Air Quality. Officials recommend that clarification on alignment with the air quality regulations is provided in supporting guidance.

## Recommendations and decisions

<b>Recommendations:</b>		
R4	Provide policy direction in the NPS for the use of other fossil fuels in existing assets for process heat.	<b>AGREE/DISAGREE</b>
R5	Provide for used oil in NPS and NES in the definition of fossil fuels.	<b>AGREE/DISAGREE</b>
R6	Clarify that GHG emissions from electricity generation and ancillary activities are outside the NPS and NES scope.	<b>AGREE/DISAGREE</b>
R7	Clarify in supporting guidance that the use of fossil fuels in heritage transport engines is outside the scope of the NPS and NES.	<b>AGREE/DISAGREE</b>
R8	Clarify that the NPS and NES proposals to ban and phase out the use of fossil fuels in process heat do not apply to co-electricity generation.	<b>AGREE/DISAGREE</b>
R9	Commence further engagement with the commercial water and space heating sector on inclusion of commercial space and water heating assets in the NPS and NES.	<b>AGREE/DISAGREE</b>
R10	Work with the Resource Management System Reform Programme to develop complementary national direction on renewable energy and other alternative fuel sources.	<b>AGREE/DISAGREE</b>
R11	Clarify in supporting guidance how the NES for Air Quality applies to alternative fuels.	<b>AGREE/DISAGREE</b>

## 6. Objectives of national direction instrument

### Policy intent

The objectives of the national direction are to:

1. achieve national consistency and certainty in the management of industrial GHG emissions under the RMA
2. reduce industrial GHG emissions and support New Zealand's transition to a low-emissions economy.

To achieve the objectives the recommended national direction is a NES supported by a targeted NPS.

The national direction instrument would provide the objectives, policies, rules, methods and standards to manage GHG emissions from industrial process heat activities. The NES and NPS would reduce the need for regional councils to include policies and rules in regional plans on GHG emissions and would provide a consistent approach in decision-making.

The NPS would provide policies to be considered when making decisions on resource consents for discharges to air of GHGs involving the use of fossil fuels in process heat activities. The NES would provide the activity status, conditions and matters of discretion for granting resource consents and specify the maximum consent duration that can be applied. The conditions would reflect the need to transition to new technology and alternative fuel sources through an economically and technologically viable pathway set out in a GHG management plan. The NES

would also contain rules that prohibit the use of coal in new low-to- medium temperature process heat assets.

The policy objectives of the proposal are consistent with the purpose of the RMA to promote the sustainable management of natural and physical resources and would assist with meeting New Zealand's broader climate change goals.

## What we consulted on

Questions 9, 10 and 11 relate to the preferred national direction instrument of a NPS and NES. A list of all consultation questions is in [appendix A](#) of this report.

## Key issues from submissions

Thirty-eight submission points were received on questions 9, 10 and 11 relating to the preferred instrument and impact analysis. A summary of submission points is included in [table 4](#) below.

There was overall support for the preferred instrument of a targeted NPS and NES. Reasons for support included:

- no requirement for councils to promulgate plan changes under the RMA Schedule 1 process
- the ability for a NES to target specific activities and emissions, and to provide national consistency
- the ability to limit discretion in local decision-making.

Clarification was sought on the impact of regional decisions on national emissions, interactions with the CCRA and the emissions reduction plan, and how hard-to-abate industries would be managed. One submitter preferred to rely on the NZ ETS and a cap-and-trade mechanism rather than regulation.

Impacts of the national direction were also noted, particularly regarding costs to businesses needing to upgrade technology and processes, and the potential for uncertainty with a requirement to assess the technical and economic feasibility of a proposal. Further impact analysis was requested on imposing a higher threshold for new coal use but not a ban, feasible alternatives, the impact on transportation of other fuels such as biogas and hydrogen, and local government capacity to assess consent applications. The Climate Change Commission's advice on the need for a National Energy Strategy was also noted.

Twenty-five submission points were received on question 11 relating to fair and reasonable duration for resource consents. A range of consent durations were regarded as preferable with most submitters agreeing that there is a need to achieve a balance between providing certainty for investment decisions while also achieving emissions reduction. Preferred consent durations ranged from 10 to 25-year periods with some submitters suggesting reviews every five years. Some submitters raised the need for greater flexibility to allow consent authorities to make case-by-case decisions based on the availability of fuels and technology, with one suggesting no maximum consent duration would be needed if GHG management plans and consent conditions were enforced. There was support for no consents granted for coal use beyond 2037, and for a longer timeframe for the use of other fossil fuels.

**Table 4: Summary of submission points from questions 9 – 11**

**Summary of submission points from questions 9 – 11**

- No requirement for plan changes under RMA Schedule 1 process.
- NES can target specific activities and emissions.
- NES can provide national consistency.
- NPS and NES would limit discretion in local decision-making.
- NPS best suited to issues that require local flexibility.
- NES only to limit council discretion.
- Prefer to rely on NZ ETS and cap-and-trade mechanism.
- Support objectives of national direction but some proposals would increase costs for businesses and create uncertainty, for example, assessment of economic and technical feasibility.
- Clarify how regional decisions would impact on national emissions.
- Include requirement to have regard to ERP and hard-to-abate industries in the NPS.
- Aim for a fuel neutral approach.
- Clarify how the NPS and NES would interact with the CCRA.
- Alternative options including a high threshold for new coal use but not a ban, and assessment of feasible alternatives.
- Impact of a coal ban on pathways to achieving low-cost sustainable futures, and impacts on transportation of other fuels including biogas and hydrogen.
- Impacts on business viability.
- Climate Change Commission advice on the need for a National Energy Strategy and work programme to invest in alternative fuels and technologies to target hard to abate industries.
- Local government capacity to assess consent applications.
- Longer duration of between 15 and 20 years to allow for alternative, cost effective fuel sources to become available.
- 10 to 15 years consent with 5-year review periods.
- 10 year maximum consent to align with third emissions budget under CCRA.
- Five-year review period for long term consents.
- No consents for coal beyond 2037.
- Medium to long-term consents for fossil fuels except for coal, subject to emissions-based rather than fuel-based controls.
- Greater flexibility to allow consent authorities to make case-by-case decisions based on availability of fuels, technology and practices.
- Potential for no maximum consent duration needed if GHG management plans and consent conditions are enforced.

## Analysis

### Preferred instrument

A NES supported by a targeted NPS can provide the clarity and certainty to local decision-making that will be required when the RMA amendments are enacted in December 2021. Officials consider that the NPS would provide policy direction and a reasonable amount of flexibility for resource consent decisions on the use of fossil fuels. This would be supported by the NES setting a rule framework and conditions that must be met to provide certainty that emissions reduction would be achieved.

Modelling to inform development of the proposals has determined that in 2035, emissions are estimated to reduce by 2.8 to 3.5 MT, with the proposal responsible for 1 to 1.4 MT and the NZ ETS driving 0.3 to 0.4 MT (assuming \$35/t). It is acknowledged that if the ETS price

increases significantly then more reductions could be achieved through the ETS. The NPS and NES provides certainty that further emissions reduction would be achieved by prohibiting the use of coal in new assets and phasing out the use of fossil fuels in existing assets over a 16-year timeframe.

The NPS and NES would be designed to help achieve emissions budgets and targets set by the CCRA. National direction on industrial process heat is also likely to be a listed action for delivery in the Emissions Reduction Plan. While some submitters raised a preference for the NZ ETS as the primary mechanism for reducing emissions, the cost of an emissions price cannot be fully relied on to achieve the required emissions reduction to meet national targets under the CCRA. The emissions price has not been strong enough to drive emissions reduction at the scale necessary. This is in part due to the industrial allocation scheme, whereby emitters who are emissions intensive and trade exposed are not subject to the full NZ ETS obligations.

This is also because low emissions prices have had a small or negligible impact on the economics of firm decisions regarding renewable and efficient use of process heat. Even with the changes to the NZ ETS in 2020, the current price (around \$45 per New Zealand Unit) means that renewable fuels are relatively more expensive than fossil fuels. Officials recommend that the national direction instrument together with the ETS are required to achieve emissions reduction from the sector.

### Impact analysis

Submitters raised the need for further impact analysis on a range of issues, including investigating the barriers to and costs of alternative fuel sources. The Climate Change Commission's final advice to Government recommended developing and implementing a national energy strategy, which would include supporting development and deployment of low-emissions fuel options. Many submitters raised the need for removal of barriers and regulations to support increased generation of renewable energy as an important companion programme to the proposed national direction.

The costs to local government in applying the national direction instrument to resource consent processes were also raised. There would be an increased number of consents to be processed, particularly for existing small coal-fired assets currently permitted under regional air plan rules, that may exceed the NES thresholds and thus not be exempt from the phase out rules. Officials recommend an 18-month lead in period to apply for resource consents to allow for councils and applicants to prepare, and for the appropriate guidance to be in place. This period would start when the NES and NPS are gazetted and would apply to those activities that do not already have consents in place. The activities affected would be those with assets operating up to a 1–2MW energy threshold that are currently permitted under regional plans.

The NES would only allow permits for coal to be granted with a maximum permit duration up to 2037 and the discharge could not be reconseented past this date.

Officials recommend an implementation plan be developed for the NPS and NES that includes provision for access to relevant skills and expertise, and guidance on determining economic and technical feasibility and BPO in consenting processes. There is a role for central government to take in facilitating the sharing of knowledge and expertise amongst practitioners.



## Resource consent duration

Specifying a maximum consent duration in the NES would provide certainty to consent applicants that discharges would be authorised for a certain period. It would ensure there is a limited period for the discharge, and the use of fossil fuels would be phased out. It would also apply consistency to local decision-making and reduce the risk for wide variation across regions. It would enable consenting to be aligned with changes to industry practice and technology and adapt to available fuel sources. A 10-to-15-year timeframe was proposed for the use of fossil fuels in new and existing assets, and a shorter timeframe for the use of coal in existing assets.

Alternative suggestions for no consent term and for allowing more discretion by local authorities for case-by-case assessments would provide less certainty that fossil fuel use would be phased out over time. This option would not achieve the objectives of the national direction to provide certainty that emissions reduction would be achieved by less use of fossil fuels, and to achieve consistency in decision-making.

Submitters raised a range of options for duration from between 3 to 35 years, with most indicating between that a 10- to-20-year period would be preferable with 5-yearly review periods built into the consent conditions. Officials recommend a maximum consent term of 10 years is specified in the NES for the use of coal in existing assets, with a requirement that consent duration cannot exceed the 2037 timeframe. A 10-year consent duration would also apply to the use of other fossil fuels in existing assets, where re-consenting of an existing discharge is required. For the use of other fossil fuels in new assets a maximum consent duration of 20 years is recommended. This would provide a reasonable timeframe for new practices to be adopted and for alternative fuel sources to become available. Councils would have the discretion to determine whether an interim review is warranted and included in the conditions on the consent.

## Recommendations and decisions

### Recommendations:

R12	Confirm an NES and targeted NPS are the preferred national direction instrument.	<b>AGREE/DISAGREE</b>
R13	Develop an implementation plan to provide support and expertise to local government and include guidance on assessing technical feasibility and economic viability and applying BPO.	<b>AGREE/DISAGREE</b>
R14	Specify an 18-month lead in time in the NES to apply for resource consents for activities that do not have discharge to air consents in place.	<b>AGREE/DISAGREE</b>
R15	Specify in the NES a 10-year maximum consent duration for the use of coal in existing assets with a requirement that duration cannot be granted beyond 2037.	<b>AGREE/DISAGREE</b>
R16	Specify in the NES a 10-year maximum consent duration for the use of other fossil fuels in existing assets and 20 years in new assets.	<b>AGREE/DISAGREE</b>

## 7. Avoiding/preventing new fossil fuel-fired assets

### Policy intent

The policy intent of the options identified below is to prevent the discharge of GHG emissions from new fossil fuel-fired assets. The main considerations for these options set out in the consultation document were whether:

- the policy approach should target particular fuels (for example, coal use for process heat) or take a more ‘fuel-neutral’ approach that focuses on reducing the use of fossil fuels to achieve the lowest amount of GHG emissions
- a different approach is required for coal compared to other fossil fuels due to coal being the cheapest and most emissions-intensive fuel and the lack of technical alternatives to natural gas for certain industries
- an absolute avoidance approach (for example, a prohibited activity rule in a NES) is warranted or if some degree of flexibility is required to provide certain exemptions and/or to consider site-specific opportunities and constraints through consenting processes.

### What we consulted on

The discussion document set out four options for preventing the discharge of GHG emissions from new fossil fuel assets with option 1.1 and option 1.2 being the preferred options. Questions 12 – 18 sought feedback on these options. A list of the consultation questions is in [appendix A](#) of this report.

The proposed approach was to avoid the discharge of GHG emissions from new coal-fired assets through a prohibited activity rule in a NES. For other fossil fuels, the proposal was to avoid the discharge of GHG emissions from new assets unless the applicant can demonstrate there are no economically and technically feasible alternatives and the applicant prepares a GHG management plan in line with best practice requirements.

### Key issues from submissions

Submission points were received on the policy options and seven questions outlined in section 3.1 of the discussion document on avoiding new fossil fuel-fired assets. Summary of points is included in [table 5](#) below.

There was general support for imposing a ban on new coal-fired boilers for medium and low temperature process heat. Some individual submitters were concerned of the 2037 deadline, however there was general favourable support for the 2037 deadlines by industry bodies, businesses and others as it provides enough leeway for their transition.

Exemptions for small-scale coal use were generally supported. Some submitters requested exemptions for coal use also apply to heritage trains, boats and ships, coal-fired power generation, and back-up generators.

A smaller number of submitters did not support the proposed ban on the discharge of GHG emissions from new coal-fired assets because they felt there was a lack of accessible and cost-effective alternatives. Submitters who did not support the ban on new coal-fired assets generally felt the amendments to the RMA should be removed.

Industrial submitters tended to favour the use of the NZ ETS as the primary and best mechanism to drive down industrial process heat emissions. Many industrial submitters argued that additional national policies and regulation, such as this proposed national direction, undermine the policy underpinning the NZ ETS and its ability to be effective. These submitters also generally argued there is a lack of viable fuel alternatives at a cost-effective price, which is a key barrier to fuel switching and decarbonisation of the process heat sector.

Some industrial submitters questioned whether there would be the ability to offset GHG emissions through the resource consent application process. Conversely, some individual submitters argued that reductions in process heat should be gross and not net.

There was strong feedback from natural gas users that gas should be viewed as a transition fuel. That is, North Island businesses who use natural gas in some capacity should be able to prioritise the transition away from coal and use natural gas as short-term fuel.

There was broad support across individual submitters, environmental groups and some local government submitters for avoiding the discharge of GHG emissions from new fossil fuel-fired assets in addition to coal. Some submitters asked that the ban be extended to all fossil fuels and not just coal.

There was general concern from local government and industry submitters about the capability and capacity of councils to determine the 'economic and technical feasibility' of different fuel options. There was particular concern about the use of 'economic' feasibility for determining whether a consent should be granted. Most industry submitters also had issues with this aspect of the proposal, and many asked for more information around what the economic feasibility test might look like and how this would be applied by councils.

There was greater support for the use of BPO as this is an established concept within the RMA applied to the discharge of contaminants, supported by case law. It was noted by some submitters that councils and applicants are well versed in applying different BPO tests to resource consent applications. As such, many submitters felt there was less risk in applying BPO than creating new tests and terms relating to economic and technical feasibility. Many submitters considered there needed to be further guidance and certainty on how to apply these tests in practice.

There was support across most submitters for taking a fuel neutral approach. This was generally because submitters felt a fuel neutral approach may better provide for gradual adoption of renewable fuels and decarbonisation of process heat.

**Table 5: Summary of submission points from questions 12 – 18**

#### Summary of submission points from questions 12 – 18

- General support for ban on new coal-fired assets for medium and low temperature heat processing:
  - apply ban to all coal-fired assets, alternatives exist for small-scale coal use
  - some individual submitters concerned by 2037 date but overall support for 2037 to allow leeway.
  - clarify what is meant by a new asset.
- Exemptions supported for small-scale coal use:
  - provide exemptions for small scale coal-fired assets, including for heritage trains and boats/ships
  - exclude coal-fired power generation
  - government support for small scale upgrades
  - threshold of below 400 hours or emissions threshold, use Cost Benefit Analysis to inform decisions

- 
- tonnes of fuel used is a better measure than size threshold
  - another possible threshold, sites emitting less than 500t of CO<sub>2</sub> per year
  - support exemptions for back-up generators.
  - Opposing views:
    - no ban supported until reliable, cost effective alternatives exist
    - need to consider proportion of GHG emissions coming from NZ compared to other countries, only introduce measures that support NZ's clean and green image
    - NZ ETS is the appropriate primary option
    - high threshold for new coal use rather than a ban
    - need to provide for coal-fired boilers as a transition mechanism
    - rescind 2020 RMA amendments
    - remove reference to climate change mitigation from the RMA
    - effect of fuel conversion could result in high GHG emissions, for example from coal to biofuels if account for transport effects
    - provide funding for community buildings to upgrade from coal use, for example schools, community halls.
  - General support with some opposing views. Issues raised in support:
    - only allow use of fossil fuels as a back up
    - determining feasibility of alternatives
    - define economic and technical feasibility
    - MPI, MBIE and EECA could prepare geospatial data on biomass and other fuel sources
    - also consider role of the NZ ETS
    - provide for energy generation from burning waste
    - encourage government to accelerate bioeconomy
    - link policy to national net GHG emissions targets
    - require BPO instead of best practice and GHG management plans
    - change wording to ban new fossil fuel assets unless it can be reasonably demonstrated there are no feasible alternatives
    - use taxes, for example vehicle fuel, as a supporting measure to generate revenue to help transition
    - increase local government capacity for feasibility and best practice assessments or establish a central government role for reviewing applications
    - factor in ability for assets/infrastructure to operate on low-emissions fuels in feasibility assessments, and impacts of other fuels, for example biomass and cost of mitigation measures to run cleanly.
- 

## Analysis

### Implementing a ban on new coal-fired boilers

There was no significant opposition from submitters on the use of a prohibited activity rule as the preferred method to implement a ban on the discharge of GHG emissions new coal-fired boilers. It was recognised that this ban has already been signalled by the Government and a prohibited activity rule is the most certain and effective method to achieve this outcome. Officials therefore recommend retaining the proposal to prohibit the discharge of GHG emissions from new coal-fired assets through a prohibited activity rule in a NES.

### Preventing discharge of GHG emissions from new fossil fuel assets in process heat

This section of the discussion document elicited much more diverse feedback from submitters than the proposed ban on new coal-fired assets (option 1.1 in the discussion document). Many industry submitters were concerned about the proposed stringent approach to other fossil fuels, particularly natural gas. Submitters emphasised the need to continue to use natural gas to transition off coal.

The proposed approach is intended to provide a slightly more flexible approach for natural gas (and other fossil fuels) compared to coal while still providing clear direction that the establishment of new fossil fuel assets should be avoided unless there are no feasible alternatives. We note this is generally consistent with feedback from many businesses that the phasing out of coal be prioritised over natural gas, based on a range of factors, including the higher costs associated with switching away from natural gas.

Natural gas is currently the most used fossil fuel in process heat. Our modelling suggests that significant reductions can be achieved through the phase out requirement, particularly in the natural gas sector. It is therefore important for national direction to distinguish between phasing out of GHG emissions from natural gas in existing assets, from the policy objective of preventing GHG emissions from new natural gas assets.

There is greater ability to consider economically viable and technically feasible fuel options to natural gas when establishing a new process heat asset compared to existing assets. It is also important to incentivise industry to consider all low carbon options when establishing (or replacing) process heat assets given the long-term operational life of these assets. Therefore, officials recommend retaining the proposal to prevent the discharge of GHG emissions from the use of natural gas in new assets (with some refinements) and applying a more flexible approach for re-consenting existing natural gas assets, also discussed in this report.

The recommended approach for preventing the discharge of GHG emissions from new fossil fuel assets (other than coal) is as follows:

- a restricted discretionary rule in a NES with a requirement for a GHG Management Plan, application of BPO, and emission reduction targets to be set (supported by guidance on how these tests should be applied)
- a requirement to prepare a GHG management plan as part of a resource consent application
- policy direction in NPS that consent must not be granted unless an applicant demonstrates there are no technically feasible or economically viable low-emissions alternatives to transition to, and they have applied the BPO; for new assets should avoid the lock-in of long-lived emissions-intensive assets, and consideration should be given to the Climate Change Commission’s carbon price trajectories relevant to the lifetime of the asset
- a condition within a NES that consent must not be granted for longer than 20 years.

Submitters were in general agreement that there should be greater support for businesses to transition away from fossil fuels, for example greater EECA funding and more work on the bioeconomy. While this is outside the remit of national direction, this would be part of the emissions reduction plan and wider strategic work. This work would be critical to supporting the sector to transition.

## Recommendations and decisions

### Recommendations:

R17	Confirm the proposal to prohibit the discharge of GHG emissions from new coal-fired assets under a prohibited activity status in a NES to ensure no new resource consents are granted.	AGREE/DISAGREE
R18	Confirm and refine the proposal to prevent GHG emissions from other new fossil fuel assets through the following approach:	AGREE/DISAGREE

- a restricted discretionary rule in a NES that states that they have applied the BPO(s) to minimise GHG emissions outlined in the NPS.
- a requirement to prepare a GHG management plan as part of a resource consent application.
- policy direction in a NPS that requires consent not to be granted unless an applicant can demonstrate there are no technically feasible or economically viable low-emissions alternatives; application of the BPO, avoidance of the lock-in of long-lived emissions-intensive assets, and consideration of the Climate Change Commission’s carbon price trajectories relevant to the lifetime of the asset.

R19 A condition within a NES that consent must not be granted for longer than 20 years.

**AGREE/DISAGREE**

## 8. Phasing out fossil fuels in process heat from existing industrial sites

### Policy intent

There has been extensive work demonstrating the need to phase out fossil fuels in process heat to meet New Zealand’s emissions reduction targets.

The intent of these policy options is to accelerate the phase out of fossil fuels in process heat in existing industrial assets and support the transition to lower emissions fuels such as electricity and biomass. This would be achieved through strong policy direction to phase out fossil fuels in process heat in a NPS to direct decision-making on resource consent, and rules in a NES for re-consenting existing fossil fuel assets to progressively reduce emissions and prevent discharge consents for existing assets being granted beyond a specified date, and for long periods of time.

The main considerations for how to phase out the use of fossil fuels in process heat in existing industrial sites through national direction are:

1. whether to target particular fuels or take a more ‘fuel-neutral’ approach that focuses on reducing the use of fossil fuels
2. the appropriate ‘phase out’ date and if this needs to be flexible based on the sufficiency of low-emissions fuel markets
3. how to address GHG emissions from existing assets on industrial sites with long-term consent durations
4. transitional arrangements and incentives for industry to switch fuel sources.

### What we consulted on

Section 3.2 of the discussion document set out three preferred options for phasing out fossil fuels in existing industrial sites.

- Option 2.1: Phase out coal in existing assets by 2037 for low and medium temperature process heat requirements through re-consenting processes.

- Option 2.2: Phase out other fossil fuels in existing assets through re-consenting processes and best practice requirements in a NES.
- Option 2.3: Require regional councils to review consent conditions for significant GHG emitters with long-term permits.

The three options provide for a fuel-based approach and set a clear ‘phase out’ date of 2037 for the use of coal in low and medium temperature process heat assets, while also providing strong regulatory incentives to phase out the use of other fossil fuels in existing industrial assets over time.

Questions 19–27 of the consultation document explore the above policy options in greater detail. A list of the consultation questions is in [appendix A](#) of this report.

## Key issues from submissions

53 submissions provided responses to questions 19–23, 31 to question 24, 28 to question 25 and 36 to questions 26–27. A summary of points relating to phasing out fossil fuels in existing industrial assets is provided in [table 6](#) below.

### Phasing out coal in existing industrial sites

Submissions were generally in support of the proposed 2037 phase out date for coal, noting this provides sufficient time for businesses and industry bodies to transition through future investment decisions and undertake work to assess the availability of fuel alternatives. There were a few submissions with opposing views, which were mainly individual submitters requesting the phase out date for 2037 to be brought earlier to 2030. This was on the basis that phasing out the use of coal and other fossil fuels in existing sites is, and should be, undertaken immediately.

### Phasing out other fossil fuels in existing industrial assets

There was general support to phase out other fossil fuels in existing industrial assets provided the implementation of phasing out is over a 10-year period with additional support for councils to assess and support industry for the consent and re-consenting process.

As was the case with phasing out fossil fuel in process heat above, submissions were supportive of the prioritisation of phasing out coal with more flexibility for natural gas and other fossil fuels. There is minimal understanding and information available on alternative options to natural gas. Alternatives to natural gas are available, however they are not necessarily economically viable, which is in line with the issues and concerns raised by submitters.

There was concern about the stringent approach to natural gas. Some national level companies with multiple sites across the country noted the uncertainty and disruption to natural gas supply in New Zealand. From a business continuity risk perspective, it was noted by submitters that companies need to be able to continue to make their products without having too many significant infrastructure changes at the same time. These submitters generally put forward that, to transition away from coal, their sites need to be able to operate existing gas assets during the transition period. Many submitters, from a range of sources, felt the NZ ETS should ‘be left to do its job’ and is sufficient to ensure industry will transition over time to support meeting our climate change targets.

There were mixed views on question 23 on whether there should be a set phase out date for fossil fuels other than coal, including natural gas. Businesses and industry groups understand the need to minimise emissions but are also calling for greater flexibility in the use of natural gas and for no specified phase out date. Whilst a set phase out date for other fossil fuels, including natural gas, signifies an absolute end date and to decarbonise the industry over time, there is still a need for natural gas users to allow time to retrofit infrastructure for low-emissions fuels. A number of submitters therefore requested to extend the phase out date beyond 2037 for other fossil fuels including natural gas.

## Consent reviews

There was some support in principle for the proposal to require regional councils to review consent conditions of significant GHG emitters with long-term permits to help reduce emissions. However, many submitters raised the issue of cost to applicants and regional councils in undertaking the reviews, and the uncertainty of outcomes in terms of emissions reduction that reviews would provide. They also raised the risk of appeals to the Environment Court on decisions, adding to delays and increased costs to councils and applicants. To some submitters, these issues are seen as challenges that could be detrimental to their ability to lower emissions.

**Table 6: Summary of submission points from questions 19 – 23**

### Summary of submission points from questions 19 – 23

Support for 2037 phase out date with investment in infrastructure and availability of fuel alternatives:

- aligns with projected emissions price trajectory
- consent terms should be left to run their course
- five-yearly interim reviews
- longer lead in time for coal and permitted activities to apply for consents.

Opposing views:

- 2037 is too late, immediate coal ban is needed
- support for 2025 or 2030 review timeframes
- longer lead in time needed
- account for 50-year life span of plants
- picking one year for phase out is arbitrary, need more certainty of when alternatives will be available
- enable consents to be renewed after 2037
- more investment in research and development is needed.

General support for phase out:

- implement phase out over a 10-year period
- combine with NZ ETS pricing
- provide support for councils and one consent process
- focus on incremental improvements
- allow for mixed/combined use of fuels.

Alternative views:

- only focus on coal
- no new fossil fuel plants from 2025
- permit use of gas, don't apply a phase out date
- focus on improving electricity supply
- concern about regional approach to consent assessments and GHG management plans
- focus on national approach to energy supply and decarbonisation
- consent reviews impose costs, time and do not provide certainty of outcome



- 
- mixed views on set phase out date and the need for greater flexibility
  - set phase out date provides certainty to plan for transition
  - phase out date signals the need to decarbonise industry, provides time to retrofit infrastructure for low-emissions fuels
  - extend phase out date to 2050
  - longer timeframe for phase out of natural gas
  - flexible approach to re-consenting
  - provide for hospitals and schools
  - could result in emissions leakage overseas
  - rely on NZ ETS
  - take fuel and technology agnostic approach
  - legal implications of consent reviews.

General support for consent reviews:

- develop a framework to collect emissions data to contribute to national accounting
- five-year consent durations and regular reviews
- include exemptions for back-up generators.

Opposing views:

- subject to legal challenge and goes further than reviewing BPO requirement
- creates investment uncertainty
- subject to appeal, offers no certainty of outcome
- build in best practice requirements to consent conditions and upgrade steps rather than review
- reviews should not be mandatory
- significant time, costs and expertise needed for review.

Other feedback:

- submitters gave very little feedback on the actual thresholds:
    - some support for greater than 0.5MW with 2 years maximum to review permits
    - a site aggregate of 10MW combustion capacity signifies a medium size facility which should have the capability to engage with regulators
    - the threshold should be set by volume of emissions and at a level that would capture at least 75% of industrial process heat emissions. This would enforce the preparation of emissions reduction plans and signal intent to address fossil fuel emissions effectively. A target date of five years for completion of reviews should be achievable
    - define threshold by environmental risk
  - a lot of submitters were concerned about the instrument of the ban to re-consenting existing boilers
  - more information required regarding the details of the consent review process and total GHG emissions that fall into this category to justify the extra complexity
  - individual submitters tended to see the compliance costs as minimal, or that the costs shouldn't be weighted higher than the cost to the environment of further fossil fuel use
  - a lot of concern this would result in the closure of many businesses. Particularly smaller growers in the horticulture sector who use coal, or that businesses would no longer be able to remain internationally competitive
  - submitters generally saw a role for central government to support local regulators in processing the consents, and to help them understand and evaluate the consents with respect to the above guidance
  - a lot of industry submitters noted that there would be significant capital costs involved in this proposal
  - some local government submitters noted the costs involved in compliance and monitoring were likely to be high especially where there might be a requirement to 'review and revise' (one local government submission noted the cost would likely be between \$20k and \$50k for the review).
-

## Analysis

### 2037 phase out date for coal in existing assets

Officials recommend retaining the 2037 phase out date for the use of coal in existing assets. This would involve rules in a NES which state that resource consents for use of coal in existing assets must not be granted with a consent duration beyond 2037. This date provides sufficient flexibility to existing industrial activities to explore their options of low-emissions fuel availability and establish their transition plan, as well as to take stock of consents that are due for re-consenting. This recommendation is consistent with the Government's direction on phasing out the use of coal and the Climate Change Commission's advice to the Government on phasing out fossil fuels in process heat.

The discussion document noted that some industries would be required to apply for a resource consent to discharge GHGs that are currently operating under permitted activity rules in regional plans. In this situation, limited existing use rights apply under section 20A of the RMA which essentially allows for activities to continue provided the effects are of a similar character, scale and intensity and resource consent is applied for within six months of the NES coming into force.

The consultation document proposed a longer lead in time (12-18 months) to enable these permitted activities more time to prepare their application and GHG management plan. Submitters generally supported a longer lead in time to apply for resource consents over the default lead in time of six months provided for under section 20A of the RMA. Officials recommend providing an 18-month lead in time from the date the NPS and NES are gazetted to provide adequate time for industry to apply for resource consent and for councils to prepare for consent processing.

Submitters commented on the proposal to review the phase out dates for coal and other fossil fuels by 2026 to align with changes in industrial practices, energy supply and availability of other low emission fuels. Officials recommend retaining this proposal to review the proposed national direction five years after it comes into force as discussed below.

### Phasing out other fossil fuels in existing industrial assets

A key issue raised in submissions in relation to the proposal to phase out other fossil fuels relates to the treatment of natural gas. Several submitters asked for a re-evaluation of the definition of 'other fossil fuel' with more flexibility to continue to use natural gas in existing industrial sites until there is more certainty on an appropriate phase out date.

While phasing out the use of coal in process heat is priority, the use of natural gas and other fossil fuels also needs to decline significantly to meet the 2050 climate target. Nonetheless, a strong 'phase out' date for natural gas (and LPG and diesel alike) could have significant impacts and make some operations unviable due to the lack of technically feasible and economically viable alternative options. Submitters requested the policy approach to phasing out other fossil fuels through re-consenting processes and best practice requirement in an NES allow for the careful continued use of natural gas while preventing a hard phase out date for natural gas use.

In response to the submissions received, officials recognise the need for some ongoing use of natural gas in existing industrial assets, consistent with the Climate Change Commission's emissions reduction pathways. It is also recognised there are limited feasible fuel switching options for many existing industrial sites with natural gas. Therefore, the same test for

new industrial assets to demonstrate there are no other economically and technical feasible fuel options may not be as appropriate for existing sites and may cause undue uncertainty and compliance costs for existing industrial sites. As such, officials recommend some refinements to the approach for phasing out other fossil fuels, including natural gas, in existing industrial sites.

The recommended approach for phasing out the use of other fossil fuels, including natural gas, in existing industrial assets is as follows:

- a restricted discretionary rule in a NES with the adoption of BPO(s) to minimise GHG emissions, the content and quality of a GHG management plan, and monitoring, reporting and review requirements in the NPS
- a requirement to prepare a GHG management plan as part of a resource consent application
- policy direction in NPS stating consenting decisions for existing assets shall:
  - consider the remaining useful economic life of assets, considering the Climate Change Commission’s carbon price trajectories relevant to the lifetime of the asset
  - focus on achieving emissions reduction through energy efficiency improvements recognising the lack of feasible fuel switching options for many existing industrial sites, including those with high-temperature requirements
  - consider relevant policies and targets for industrial process heat in the relevant emissions reduction plan.
- a condition within a NES that consent must not be granted for longer than 10 years.

Officials consider this approach provides an appropriate balance between allowing for continued use of natural gas as a transitional fuel while still ensuring requirements for industry to take reasonable steps to reduce emissions and avoid the long-term lock-in of GHG emissions.

### **Economic and technical feasibility and Best Practicable Option (BPO)**

A key issue raised in submissions for both new and existing industrial assets relates to the assessment of the economic viability and technical feasibility of other fuel options and how this would be interpreted and applied by councils. There was a strong preference for a form of BPO as an alternative as this is an established concept and practice under the RMA in relation to the discharge of contaminants that both councils and applicants are more familiar with. The BPO was also considered to provide more flexibility, less risk that consent would be declined, and at the same time provide for greater uniformity of assessments during reviews.

Officials therefore recommend that applicants are required to apply the BPO to minimise GHG emissions and for this to be assessed by councils through the consent process and matters of discretion. As defined in the RMA, this allows for consideration of the nature of discharge and the sensitivity of the receiving environment, along with financial implications, and technical feasibility and economic viability of different options. To ensure consistency and certainty on how the BPO is applied through consenting processes, officials recommend guidance is developed on how to assess BPO in relation to GHG emissions and a method for determining technical feasibility and economic viability of low-emissions alternatives.

## Consent requirements and thresholds

Submitters commented on the need for a threshold to determine when the ban and phase out requirements (involving a consent process) would apply. A threshold is also important to ensure the NES does not unnecessarily require resource consent for activities with small volumes of GHG emissions. Considering submissions and further analysis, officials recommend:

- no threshold for the ban on the discharge of GHG emissions from new coal-fired boilers. This is consistent with the more stringent approach to coal proposed for national direction generally
- a threshold that excludes fossil fuel use of process heat for small-scale activities defined as those emitting less than 500 tonnes of CO<sub>2</sub>-e per annum of total thermal energy use at a site.

## Mandatory consent reviews

The proposal to require councils to review resource consent conditions to implement BPO requirements received submissions from councils and industry outlining concern regarding cost of the process and uncertain outcomes. The ability to review consent conditions under s128 of the RMA imposes costs on councils and consent holders and creates the potential for regulatory uncertainty and litigation. Only certain conditions on consents can be reviewed, and decisions can be appealed at the Environment Court. Therefore, any requirement within a NES that requires regional councils to review existing discharge permits to impose GHG management plan requirements needs to be carefully considered to ensure the benefits in terms of emissions reductions (which are highly uncertain) outweigh the compliance costs.

As outlined in the consultation document, the policy options to phase out fossil fuels in existing industrial assets are applied through re consenting processes when existing discharge permits expire. However, this approach means some significant emitters with long-term permits would be able to continue discharging GHG emissions well into the future, beyond 2050 in some cases, without being subjected to any requirements in national direction to reduce emissions. Mandatory consent reviews of significant emitters with long-term permits were therefore proposed in the discussion document to address this issue and inequity to some degree.

However, considering submissions and further analysis, officials recommend the proposal for mandatory consent reviews is removed, and guidance is developed on appropriate circumstances for when councils should initiate reviews. It is important to emphasise that this recommendation is based on the current limitations in the RMA associated with consent reviews. This position is based on a view from officials that long-term fossil fuel consents should be addressed in future. It is understood the intention is to strengthen the ability to review consents as part of the resource management reforms, and officials recommend this issue be revisited when new legislation is enacted.

## Recommendations and decisions

Recommendations:		
R20	Retain phase out of use of coal in existing assets by 2037 through policy direction in a NPS that requires applications to demonstrate that there are no technically feasible and economically viable low emission alternatives, and application of the BPO; and a restricted discretionary activity status for resource consents granted up to 2037 with a maximum of 10 year consent duration, and a prohibited activity status for discharges of GHG emissions from coal-fired assets after 2037 in an NES.	AGREE/DISAGREE
R21	Provide an 18-month lead in time to apply for resource consents under a NES for use of fossil fuels in existing assets that are currently permitted under regional plans for discharging to air.	AGREE/DISAGREE
R22	Refine the approach to phase out other fossil fuels in existing assets as follows: <ul style="list-style-type: none"> <li>• a restricted discretionary rule in a NES with the matters of discretion relating to the adoption of BPO(s) to minimise GHG emissions, the content and quality of GHG management plan and emissions reduction target, and monitoring, reporting and review requirements</li> <li>• a requirement to prepare a GHG management plan as part of a resource consent application</li> <li>• policy direction in NPS that states consenting decisions for existing assets shall:               <ul style="list-style-type: none"> <li>– consider the remaining useful economic life of assets, considering the Climate Change Commission’s carbon price trajectories relevant to the lifetime of the asset</li> <li>– focus on achieving emissions reduction through energy efficiency improvements recognising the lack of feasible fuel switching options for many existing industrial sites, including those with high-temperature requirements</li> </ul> </li> <li>• a condition within a NES that consent must not be granted no longer than 10 years.</li> </ul>	AGREE/DISAGREE
R23	Retain requirement for the Minister for the Environment to initiate a review of the phase out dates for coal and other fossil fuels in 2026.	AGREE/DISAGREE
R24	Remove requirement for mandatory consent reviews of significant discharges and revisit this issue as part of the reform of the resource management system.	AGREE/DISAGREE

## 9. Greenhouse gas management plans

### Policy intent

This policy option encourages industry to accelerate energy efficiency improvements, adopt best practices and proactively plan for transitioning to low carbon technology over time,

through the preparation and implementation of a 'greenhouse gas management plan' specific to their site.

The main considerations for imposing GHG management plans and best practice requirements through national direction are:

- the information required in the GHG management plan and whether this should be provided through a NES schedule or non-statutory guidance
- the thresholds to trigger the preparation of a GHG management plan and different requirements based on the size of the site and if it is new or existing
- the role of regional councils in receiving, reviewing and assessing GHG management plans
- the level of discretion to adopt best practices where 'technically and economically feasible', and how to assess what is feasible for a particular operation
- technical support to assess compliance with best practice requirements
- monitoring, review and reporting requirements.

## What we consulted on

Questions 28 – 35 sought feedbacks on the proposal to impose best practice requirements on supporting uptake of best practices and transitioning firms to lower emissions in industrial heating through requiring GHG management plans. A list of the consultation questions is in [appendix A](#) of this report.

This part of the proposal would require industry to submit a GHG management plan as part of a resource consent application, both for new assets and existing assets through re-consenting processes.

Fifty-five submissions were received on the eight questions regarding supporting the uptake of best practices and transitioning to low-emissions through GHG management plans. A summary of points is included in [table 7](#) below.

## Key issues from submissions

There were not many detailed submissions on the proposed thresholds in question 28. Industry submitters generally disagreed with the proposed threshold and suggested not using a threshold or increasing the threshold.

There was general concern from industry and local government submitters about the availability of suitably qualified practitioners (SQP) and the costs associated with the use of these, and quality assurance of plans. There was also some concern around economic feasibility and whether there would be any protections within councils for commercially sensitive information contained within the GHG management plans.

There was significant concern across a range of submitters on what constitutes technical feasibility and economic viability.

**Table 7: Summary of submission points from questions 28 – 35**

#### Summary of submission points from questions 28 – 35

- There was general support for central guidance made in collaboration by industry and resource management experts.
- Strong support for provision of standard templates and best practice examples of GHG management plans for industry to follow.
- General agreement for the use of SQE from industry and local government submitters. It would be important to clearly define what qualifies as a 'suitably qualified expert'.
- Individual submitters tended to focus on setting standards that would be best for climate change outcomes, with less concern for what is technically or economically feasible.
- Local government submitters generally had a preference that requirements should be structured around a BPO as this is already understood across industry and consent authorities and has been the subject of much case law. Their view was this approach would provide greater consistency and clarity.
- Both industry and local government submitters criticised the concept of 'economic feasibility' and how this would be set, as well as what the implications of this might be for businesses. There was also concern from industry this would be trying to apply a 'one size fits all' approach when each site is different.
- There was also some concern around economic feasibility, and whether there would be any protections within councils for commercially sensitive information contained within the GHG management plans.

## Analysis

### Thresholds and guidance

There was general support for central guidance on technical feasibility and economic viability assessments, best practice and BPO made in collaboration with industry and resource management experts. There was strong support across a range of submitters for standard templates and best practice examples of GHG management plans to help industry transition.

For the best practice requirements, individual submitters tended to focus on setting standards that would be best for climate change outcomes, with less concern for what is technically feasible or economically viable. Local government submitters generally had a preference that requirements should be structured around BPO as this is already understood across industry and by consent authorities and has been the subject of much case law. Their view was this approach would provide greater consistency and clarity.

Both industry and local government submitters criticised the concept of 'economic viability' and how this would be set, as well as the implications for businesses. There was also concern from industry that this would be trying to apply a 'one size fits all' approach when each site is different.

Officials recommend retaining the requirement for all consent holders to implement a GHG management plan, with appropriate guidance provided on BPO and the plan content that is required for activities emitting above and below 2000 tonnes of CO<sub>2</sub> per year. GHG management plans provide an important tool for ensuring industries adopt measures to reduce emissions that can be tailored to specific circumstances.

### Independent review by a suitably qualified practitioner

There was general agreement for the use of SQE from industry and local government submitters. It would be important to clearly define what qualifies as a 'suitably qualified practitioner'. One submitter noted the option to use the approach EECA has implemented for its Energy Transition Accelerator programme, that is, a panel of pre-qualified expert providers.

There was general concern on cost, the administrative burden and practicability (for example, a limited pool of SQPs). Local government submitters supported the NES to enable consent authorities to consult experts with cost recovery from applicants.

Officials recommend establishing a panel of SQPs that can provide independent review of GHG management plans for activities emitting above 2000 tonnes of CO<sub>2</sub> per year. The role of the panel would also be to develop a community of professional knowledge and expertise amongst experts to ensure the GHG management plans are an effective tool for industry and government in supporting decarbonisation.

### GHG management plans as a mandatory requirement for consents

Local government submitters tended to support the GHG management plans. Industry submitters saw it as appropriate for plans in some instances, but not in others, based on the site. Generally, there was support for these plans to be determined based on site-specific conditions rather than mandatory across the board. There was some support from smaller industries for high temperature industrial sites to prepare a GHG management plan, particularly based on equity.

Officials recommend retaining the requirement for GHG management plans for resource consents, but with different requirements tailored to different scales of activity. For example, a requirement for review by an SQP is recommended for activities emitting greater than 2000 tonnes of CO<sub>2</sub> per year.

## Recommendations and decisions

<b>Recommendations:</b>		
R25	Confirm the requirement of GHG management plans for resource consent, with a requirement for review of plans by an SQP for activities emitting 2000 tonnes of CO <sub>2</sub> per year.	<b>AGREE/DISAGREE</b>
R26	Provide guidance on plan content and implementing BPO to support implementation.	<b>AGREE/DISAGREE</b>
R27	Establish a panel of SQPs to provide independent review of GHG management plans for activities emitting greater than 2000 tonnes of CO <sub>2</sub> per year, and to develop a professional network and knowledge base on industry practice.	<b>AGREE/DISAGREE</b>
R28	Retain requirement for technical feasibility and economic viability assessments to apply to new assets seeking resource consent and existing coal-fired assets, with appropriate guidance to be provided.	<b>AGREE/DISAGREE</b>



## 10. Non-statutory guidance on non-industrial emissions

### Policy intent

This option involves developing non-statutory guidance on how to assess resource consent and plan change applications involving GHG emissions under the RMA from activities other than industrial process heat. The intent of the guidance is to assist local authorities to consider GHG emissions when making decisions from 31 December 2021 when the statutory barriers are repealed. The guidance would act as interim direction until new legislation is in place under the Resource Management System Reforms.

The guidance could be considered as an “other relevant matter” under section 104(1)(c) of the RMA, but it would not have any legal status in decision-making.

Guidance on quantifying and assessing emissions from key sectors such as waste, forestry, agriculture, transport and urban form was proposed. Views on the following implementation issues were also sought.

- The extent to which the cumulative contribution of individual GHG emissions to national and global emissions and associated climate change effects should be considered by local authorities.
- Whether the GHG emissions impacts of individual projects (for example, linear transport infrastructure) can or should be quantified, and whether ongoing emissions associated with a project should be considered.
- How emissions reduction targets and plans prepared under the CCRA should be considered in consent decision-making and when preparing plans and policy statements.
- The obligation on consent authorities to consider proposals by applicants to offset GHG emissions (for example, an afforestation programme or carbon capture storage).
- The extent to which the ‘permitted baseline’ should be considered.

### What we consulted on

Questions 36 to 39 relate to the development of non-statutory guidance for assessing GHG emissions from other sectors. A list of the consultation questions is in [appendix A](#) of this report.

### Key issues from submissions

Fifty submission points were made on questions 36, 37, 38 and 39 regarding the value, scope and potential content of non-statutory guidance. A summary of submission points is included in [table 8](#) below.

There was general support from submitters for the guidance, however it was noted by some that it would have no legal effect in decision-making and would not reduce the risk of litigation when the RMA amendments take effect on 31 December 2021. Suggestions were made by some submitters for a NPS rather than non-statutory guidance, developed in preparation for the National Planning Framework under the Resource Management System Reforms.

Submitters raised the need for a wide range of activities to be included in the scope of the guidance, including agricultural emissions and regenerative agriculture, green infrastructure in urban areas, use of electric cars and improved transport networks, energy efficient housing,

zero emissions heating and hot water, power generation, Treaty of Waitangi considerations, and embodied emissions.

Mixed views were expressed on including guidance on direct and indirect emissions and noting the wide scope of activities this would cover. Suggestions included guidance on how to assess and treat GHG emissions in land use change, for example from the conversion of forestry to pasture, and from rural land use to greenfield subdivisions, and how to recognise terrestrial and marine carbon sinks. Infrastructure projects were also noted as requiring recognition of indirect and direct effects.

Submitters noted the need to ensure emissions were not being double counted through multiple consent processes if both direct and indirect effects were considered. It was also suggested that the guidance should be limited to the direct and indirect emissions covered by Scope 1 and Scope 2 emissions under the GHG Protocol. The need for consistency with Climate Change Commission advice was also noted.

Some submitters sought guidance on the ability to offset emissions both within and outside regions and districts. Submitters also sought guidance on calculating and quantifying emissions and assessing the cumulative effects. One submitter suggested that assessments should be made at the national level rather than case-by-case local decision-making. Requirements for reporting, verification, auditing, and industry standards and accreditation were also suggested.

Submitters commented on a range of over-looked issues in the discussion document including the need to consider improved technology, affordability and reliability of solar energy, opportunities to reduce transport commuting, and provision of more green spaces to improve mental and physical wellbeing.

**Table 8: Summary of submission points from questions 36 – 39**

#### Summary of submission points from questions 36 – 39

##### Non-statutory guidance

- Support required for re-generative agriculture, electric cars and green infrastructure in urban areas.
- Include agriculture and methane from livestock.
- Need to clarify roles and responsibilities, guidance on offsets, carbon capture storage (CCS), audit process, industry standards and accreditation.
- Clear regulations and strict requirements are needed rather than non-statutory guidance.
- Guidance should cover energy efficient housing, zero emissions heating and hot water, power generation.
- Guidance and policy direction should include Treaty of Waitangi inclusion, native trees planted as part of RMA, adequate green spaces and eco-systems, more 'clean green fuel', less meat/dairy consumption and improved transport networks.
- Indirect emissions, such as embodied energy and carbon in construction products, must be considered, and guidance is needed.
- Guidance should focus on embodied carbon and energy to assist in decisions that reduce emissions across the supply chains. It should also cover transport of raw materials to manufacturing plants.
- Ensure local government is suitably resourced, unintended consequences would be energy poverty, reduced productivity and reduced global competitiveness.
- Include all CO<sub>2</sub> and methane emission industries.
- Include how to assess and treat GHG emissions in land use change (forestry to pasture, agriculture, greenfield subdivisions), and how to recognise terrestrial and marine carbon sinks.
- Include recognition of indirect and direct submissions from infrastructure.
- Guidance would not have any legal effect and would not minimise litigation risk.
- Prepare guidance in a manner and format that allows for it to be easily converted to statutory guidance later.

## Summary of submission points from questions 36 – 39

- Guidance should explicitly state who is responsible for what parts of the process.
- Avoid double counting emissions through consent processes regarding direct and indirect effects.
- Repeal the 2020 RMA amendments and focus on climate change policy under the CCRA.
- Guidance should limit direct and indirect emissions to the Scope 1 and Scope 2 emissions under the Greenhouse Gas Protocol.
- Include information on how to access professional expertise, explanations of key considerations, for example definitions of the different protocols, ISO14064, GHG Protocols, definitions of the different scopes within them, where to find advice on measuring and reducing emissions, requirements on reporting and verification.
- NPS rather than non-statutory guidance, work collaboratively with stakeholders, stage development to integrate with RMA Reforms.
- Non-statutory guidance could provide a first step to developing a NPS.
- Clarify how offsetting could apply and whether it can occur between different regions.
- Scope of activities is too broad.
- The requirement to consider indirect effects does not apply to other types of activities and effects and would be inconsistent with the Climate Change Commission advice on carbon inventories and accounting and allowing exporting of emissions.
- Include the ability to offset (eg, afforestation), calculation of emissions, assessing cumulative emissions, quantifying emissions and whether ongoing emissions should be considered, and at what point emissions could or should be disregarded as de minimis.
- Leave assessments of affects to the national level.
- Include industries/practices, such as waste management and farm wintering practices that contribute to the cumulative pressure on emissions, in the scope but have yet to understand how these could be assessed and/or managed.
- Include guidance on biomass fuels.
- Guidance should address and consider impact on global emissions, carbon leakage, availability of alternative fuels and technologies and supporting an equitable and least-cost pathway to meeting our national target.

### Overlooked issues

- Improve technology, affordability and reliability of solar panels as energy back up with increased reliance on electricity.
- Reduce commuting and increase electric transport.
- Provide more green spaces to assist with improved mental and physical wellbeing and electricity generation assisted by further academic research.
- Require consideration of and reporting on embodied carbon and transport emissions in products.
- ETS is the most appropriate tool to manage the transition, national direction, the role of national direction should be focused on encouraging the uptake of low-emissions technologies by removing barriers to investment.
- Auditing of forestry offsets and standards for auditing are needed.
- Tools are needed for quantifying emissions and determining adverse effects from activities.
- Increased workloads for local authorities with a transition to new fuel sources.

## Analysis

Non-statutory guidance to assist decision-making on other activities that are not within the scope of the proposed national direction was regarded by many submitters as valuable. The guidance would act as an interim measure before the National Planning Framework is developed as part of the Resource Management System Reforms, presenting further opportunity for developing national direction on GHG emissions. While non-statutory guidance does not have legal weight, it could support the development of a knowledge base, quantification and assessment tools, and collation of mitigation examples, that could support decision-making within the planning system. This would align with the Climate

Change Commission's final advice on the need to develop an evidence base, methodologies and tools to support decision-making, particularly regarding urban development and infrastructure proposals.

Officials acknowledge the scope of activities emitting greenhouse gases is wide and spans regional and district council functions if indirect effects are to be considered. The guidance could focus on the greatest opportunities for reducing emissions and provide information and links to government programmes underway to support industry sectors, for example the He Waka Eka Noa Climate Change Partnership, to support the reduction of agricultural emissions, and the Building for Climate Change Programme that includes measures to reduce operational and embodied emissions. Having information that local authorities can access and reference which outline how emissions are being addressed through other programmes and processes (eg, under the Building Act) would help inform where the planning system can provide additional opportunities for reducing emissions. Determining where the planning system has a role, along with the scale of activities that require consideration of GHG effects would also respond to submitters' concerns that all consents and plan changes would need to be considered.

Submitters raised the need for guidance on how to consider offsetting in local decision-making processes. Offsetting is practiced for managing some air quality discharges in polluted airsheds. There is also guidance on the offsetting of greenhouse gases that can be adopted by industry on a voluntary basis. These examples could be considered within the scope of the guidance, along with examples to demonstrate that offsetting is an available tool. Officials consider the key focus of the guidance should be on incorporating emissions reduction into decision-making through assessment of alternative practices, design, and other mitigation measures.

Overlooked issues raised by submitters could also be relevant GHG emissions mitigation measures that may be appropriate for some types and scales of activities. For example, the ability to install and use reliable solar energy, transport commuting modes, and provision of greenspace in design of urban environments.

When submitting on guidance and supporting initiatives to support national direction, many stakeholders asked that work be done on the system to support the transition away from fossil fuels. For example, in parallel to this instrument, more work to be done by government on stimulating and accelerating the bioeconomy and better supporting the development of other renewable fuels such as biogas and hydrogen. Some key suggestions from submitters for BPO considerations (for the guidance) include:

- is the site new or existing, that is, greenfield or brownfield
- process heat temperature requirements
- availability of regional renewable fuel, for example biomass
- air quality considerations
- available land for installation of new equipment and fuel storage
- availability and price of electricity
- proximity to neighbouring sites also requiring process heat
- proximity to major electrical infrastructure
- proximity to major natural gas infrastructure.

Other suggestions included:

- giving tax deductions to businesses that install solar panels and use battery electric vehicles
- awarding carbon credits where firms switch away from coal boilers
- hypothecate and ring fence Crown revenue from the NZ ETS
- reinvest in process heat decarbonisation and increase the availability of EECA funding.

When giving feedback on compliance costs, industrial submitters generally gave feedback that the compliance costs associated with many aspects of the proposal, particularly the phase out requirements were high. Some submitters said the impacts of increased costs to their business could result in a reduction in international competitiveness, increase of imported goods and social and economic impacts on local communities through employment loss. This is due to increased fuel costs (some renewable alternatives to coal and natural gas are slightly more expensive), consultant fees to develop management plans and the capital costs of new assets.

## Recommendations and decisions

### Recommendations:

R29 Develop non-statutory guidance to support the consideration of GHG emissions in planning decisions on other activities.

**AGREE/DISAGREE**

## 11. Other issues

### Proposal consulted on

Submitters were able to raise further issues at the end of their submission.

### Key issues from submissions

Forty-seven submission points were made regarding other issues. In some cases, submitters raised the same issues to those raised in other questions on the proposals. A summary of submission points is included in table 9 below.

The key themes included:

- the need for clarification and alignment with other government policy on energy, in particular the Climate Change Commission's final advice to the Government
- further clarification on scope and exemptions
- views on timeframes for the phase out
- the need for alternative fuels and technologies to facilitate the use of biomass and other waste to energy streams
- NZ ETS as the primary instrument
- the need for further engagement on draft instruments
- increased support for small scale emitters.

**Table 9: Summary of submission points of other issues**

**Summary of submission points of other issues**

- Proposal is a step in the right direction, may set the tone and pace for upcoming climate policy.
- Need concrete measures based on international examples, such as government investment in green economies.
- Exempt heritage machinery such as ships and trains.
- No transition from coal to gas as need to get to zero emissions and no offsetting.
- Phase out by 2030 noting climate crisis.
- Economic impacts should be noted.
- Waste to energy has been overlooked as a potential contributor to emissions reduction and a way to mitigate energy poverty.
- Ban coal mining and bring forward date for ending coal for process heat for food production to 2027.
- Government should carry out a life-cycle analysis of energy systems to formulate a long-term strategy.
- Industrial use of natural gas should be a permitted activity in the first phase while working on the introduction of low carbon alternative.
- Need more context and understanding to have robust conversations with Māori.
- Draft NES provisions with care to avoid adverse outcomes as s44A of the RMA means councils must remove duplication or conflicting plan provisions.
- Clarify waste streams that are used as fuel, for example waste oil, waste tyres, waste plastic
- Policies and rules should honour Te Tiriti o Waitangi, and consultation with iwi when draft NPS or Regional Plan is developed is essential.
- Regulations should be regularly reviewed to ensure they align with these new developments in technology and science.
- Transition timeframe needs to allow for a return on investment.
- Decarbonisation policy should integrate with wider energy and climate strategies to avoid policy inconsistency, reduce instability for required investment, maintain the social licence for the energy transition and avoid perverse outcomes.
- Do not include natural gas in the phase out for the next five years.
- Action is needed now to provide supportive planning frameworks and rules that would support grid and distribution network projects that enable the transition of process heat to electrification.
- Need supporting amendments to the NPS Electricity Transmission.
- Align national direction with the Climate Change Commission's final advice.
- A plan for increased woody biomass and bioenergy is needed.
- Feasibility should be defined on best practice rather than BPO.
- The NBEA must provide an enabling framework for renewable generation, including national direction and simplified and fast consenting.
- NZ ETS should be the primary tool.
- Need for increased skills and support of GHG emissions assessment.
- Need to consider global emissions reduction.
- Support greater collaboration between government and industry in implementing emissions reduction opportunities.
- Need to consider the temperature range for low/med/high.
- An Integrated National Mitigation and Adaptation Plan is needed.
- Transition from coal to electricity/biomass would cost at least \$80 million.
- Need government support for low volume emitters.
- Submitters are concerned on non-binding guidance, normally awarded little weight by the Courts.
- Offsetting guidance needed for emissions which cannot be avoided, remedied or mitigated.
- Direct conflict with Waste Management Act goals, emissions from waste sector have not been incorporated into national direction.
- Risk with how biomass combustion emissions are calculated (and sequestration rates).

## Analysis

Several submitters raised the need for the national direction to be aligned with other government policy in development in response to the Climate Change Commission's advice. The Climate Change Commission released its final advice to the Government in May 2021 and included specific recommendations for the energy and industrial sectors under Recommendations 20 and 21. This included the need to develop a comprehensive energy strategy to decarbonise the energy system and ensure the electricity sector is ready to meet future needs. The Commission also recommended setting a renewable energy target along with providing increased investment in energy efficiency. The strategy should be able to consider:

- emissions reduction and removals
- system reliability and affordability
- future energy developments
- infrastructure
- equitable industry transitions
- regional and national economic development planning
- supply chains
- workforce and skill needs.

Submitters also raised the need for availability and security of affordable energy alternatives, and this is also noted in the Climate Change Commission's advice for the need for low-emissions electricity that is affordable, accessible and reliable, and which enables the decarbonisation of process heat and transport.

The Commission also recommends the halting of investment in new fossil fuel assets, no new use of coal and a phase-down in the use of other fossil fuels including natural (fossil) gas. It references the consultation underway on proposed national direction as a mechanism for achieving this.

The Government is currently developing policy to respond to the Climate Change Commission's advice and will release the first Emission Reduction Plan in December 2021. It will contain actions and measures for the energy and industrial sectors and provides the opportunity to align policies and actions for emissions reduction from the industry and energy sectors, while addressing the need for security and availability of energy supply to support transition. Officials also recommend continuing to define opportunities within the Resource Management System Reform to ensure regulatory settings are appropriate for enabling low-emissions energy sources.

While providing for availability and security of low-emissions energy sources, submitters also raised the need for government support to assist upgrades in technologies and practices that would be required to meet the proposed requirements in national direction. Contestable funding is currently available through the Government Investing in Decarbonisation of Industry Fund. Support is available for energy audits and feasibility studies to help identify fuel-switching and efficiency opportunities. Officials recommend considering how this fund could apply to smaller scale, lower emitting industries where there is currently significant fossil fuel in use, in particular coal.

The need for further engagement on national direction proposals was also raised by submitters. Officials recommend ongoing engagement with iwi/Māori, local government and industry sectors on draft instruments before they are considered by Cabinet.

Other issues raised regarding scope, timeframes, exemptions, and incorporation of the Treaty of Waitangi are addressed in the earlier sections of this report.

## Recommendations and decisions

<b>Recommendations:</b>		
R30	Note the Climate Change Commission’s recommendations on the need for specific policy and actions on energy and industrial emissions included in the Emissions Reduction Plan, required under the CCRA.	<b>AGREE/DISAGREE</b>
R31	Provide for ongoing engagement with iwi/Māori, sectors and local government in the drafting of the NPS and NES.	<b>AGREE/DISAGREE</b>
R32	Develop an Implementation Plan to support local government and sector implementation of the NES and NPS.	<b>AGREE/DISAGREE</b>
R33	Investigate support options available to assist in the transition for small scale emitters to new technologies, practices and fuels to comply with the NES and NPS.	<b>AGREE/DISAGREE</b>

## 12. Key policy issues and recommendations

As a result of public consultation and targeted workshops, the policy team was able to refine some policy positions and options which has resulted in the following recommendations.

The full list of recommendations in this report for consideration is contained in table 10 below.

**Table 10: Full list of recommendations and decisions**

<b>Full list of recommendations and decisions</b>	
<b>PROBLEM STATEMENT</b>	
R1	Confirm the status quo.
R2	Confirm the characterisation of the problem regarding the regulatory gap in the RMA.
R3	Confirm the role of the NZ ETS and that national direction is a complementary measure.
<b>SCOPE OF NATIONAL DIRECTION INSTRUMENT</b>	
R4	Provide policy direction in the NPS to provide for the use of other fossil fuels in existing assets for process heat.
R5	Provide for used oil in the NPS and NES definition of fossil fuels.
R6	Clarify that GHG emissions from electricity generation and ancillary activities are outside the NPS and NES scope.
R7	Clarify in supporting guidance that the use of fossil fuels in heritage transport engines is outside the scope of the NPS and NES.
R8	Clarify that the NPS and NES proposal to ban and phase out the use of fossil fuels in process heat do not apply to co-electricity generation.
R9	Commence further engagement with the commercial water and space heating sector on inclusion of commercial space and water heating assets in the NPS and NES.



## Full list of recommendations and decisions

R10 Work with the Resource Management System Reform Programme to develop complementary national direction on renewable energy and other alternative fuel sources.

R11 Clarify in supporting guidance how the NES for Air Quality applies to alternative fuels.

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### OBJECTIVES OF NATIONAL DIRECTION INSTRUMENT

R12 Confirm that an NES and targeted NPS are the preferred national direction instrument.

R13 Develop an implementation plan to provide support and expertise to local government and include guidance on assessing technical feasibility and economic viability and applying BPO.

R14 Specify an 18-month lead in time in the NES to apply for resource consents for activities that do not have discharge to air consents in place.

R15 Specify in the NES a 10-year maximum consent duration for the use of coal in existing assets with a requirement that duration cannot be granted beyond 2037.

R16 Specify in the NES a 10-year maximum consent duration for the use of other fossil fuels in existing assets and a 20-year maximum consent duration for new assets.

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### AVOIDING/PREVENTING NEW FOSSIL FUEL-FIRED ASSETS

R17 Confirm the proposal to prohibit the discharge of GHG emissions from new coal-fired assets under a prohibited activity status in an NES to ensure no new resource consents are granted.

R18 Confirm and refine the proposal to prevent GHG emissions from other new fossil fuel assets through the following approach:

- a restricted discretionary rule in a NES that states that they have applied the BPO(s) to minimise GHG emissions outlined in the NPS
- a requirement to prepare a GHG management plan as part of a resource consent application
- policy direction in a NPS that requires consent not to be granted unless an applicant can demonstrate there are no technically feasible or economically viable low-emissions alternatives; application of the BPO, avoidance of the lock-in of long-lived emissions-intensive assets, and consideration of the Climate Change Commission’s carbon price trajectories relevant to the lifetime of the asset.

R19 A condition within a NES that consent must not be granted for longer than 20 years.

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### PHASING OUT OF FOSSIL FUELS IN PROCESS HEAT FROM EXISTING INDUSTRIAL SITES

R20 Retain phase out use of coal in existing assets by 2037 through policy direction in a NPS that requires applications to demonstrate that there are no technically feasible and economically viable low emission alternatives, and application of the BPO; and a restricted discretionary activity status for resource consents granted up to 2037 with a maximum of 10 year consent duration, and a prohibited activity status for discharges of GHG emissions from coal-fired assets after 2037 in an NES.

R21 Provide an 18-month lead in time to apply for resource consents under an NES for use of fossil fuels in existing assets that are currently permitted under regional plans for discharging to air.

R22 Refine the approach to phase out other fossil fuels in existing assets as follows:

- a restricted discretionary rule in a NES with the matters of discretion relating to the adoption of BPO(s) to minimise GHG emissions, the content and quality of GHG management plan and emissions reduction target, and monitoring, reporting and review requirements
- a requirement to prepare a GHG management plan as part of a resource consent application
- policy direction in NPS that states that consenting decisions for existing assets shall:
  - consider the remaining useful economic life of assets, considering the Climate Change Commission’s carbon price trajectories relevant to the lifetime of the asset
  - focus on achieving emissions reduction through energy efficiency improvements recognising the lack of feasible fuel switching options for many existing industrial sites, including those with high-temperature requirements
- A condition within a NES that consent must not be granted no longer than 10 years.

R23 Retain requirement for the Minister for the Environment to initiate a review of the phase out dates for coal and other fossil fuels in 2026.

R24 Remove requirement for mandatory consent reviews of significant discharges and revisit this issue as part of the reform of the resource management system.

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### GREENHOUSE GAS MANAGEMENT PLANS

### Full list of recommendations and decisions

- R25 Confirm the requirement of GHG management plans for resource consents, with a requirement for review of plans by a SQP for activities emitting above 2000 tonnes of CO<sub>2</sub> per year.
- R26 Provide guidance on plan content and implementing BPO to support implementation.
- R27 Establish a panel of SQP to provide independent review of GHG management plans for activities emitting greater than 2000 tonnes of CO<sub>2</sub> per year, and to develop a professional network and knowledge base on industry practice.
- R28 Retain requirement for technical feasibility and economic viability assessments to apply to new assets seeking resource consent and existing coal-fired assets, with appropriate guidance to be provided.

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### NON-STATUTORY GUIDANCE ON NON-INDUSTRIAL EMISSIONS

- R29 Develop non-statutory guidance to support the consideration of GHG emissions in planning decisions on other activities.

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### OTHER ISSUES

- R30 Note the Climate Change Commission's recommendations on the need for specific policy and actions on energy and industrial emissions included in the Emissions Reduction Plan, required under the CCRA.
- R31 Provide for ongoing engagement with iwi/Māori, sectors and local government in the drafting of the NPS and NES.
- R32 Develop an Implementation Plan to support local government and sector implementation of the NES and NPS.
- R33 Investigate support options available to assist in the transition for small scale emitters to new technologies, practices and fuels to comply with the NES and NPS.
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This extensive list of issues, decisions and recommendations includes policy decisions and landing points that were both retained or refined following public consultation.

## 13. Te Tiriti o Waitangi/Treaty of Waitangi commitments

### Background

Engaging with iwi/Māori is particularly important as Māori are Te Tiriti o Waitangi (Treaty of Waitangi) partners and kaitiaki of the environment. Iwi/Māori bring a unique perspective on environmental issues that has been developed and honed over many generations through experience and observation. Recognising this unique relationship is important in government policy and decision-making as it brings to light lessons learnt and best practices that we can adopt.

Engaging with iwi/Māori also assists with understanding the impacts of the proposals on iwi/Māori. It supports the building of closer partnerships by appropriately recognising the interests and role of Māori.

This is reflected by the final advice by the Climate Change Commission on effective relationship with iwi/Māori on the grounds of partnership, participation, protection and equity. It is these principles that underpin the unique relationship between the Government and iwi/Māori under Te Tiriti o Waitangi.

An equitable transition for iwi/Māori, consistent with Recommendation 26 of the Climate Change Commission, aims to ensure a robust engagement and consultation process, and equitable access to information and resources. This would allow for maximum understanding and awareness of government policies and initiatives and to ascertain all impacts and onflow effects.

## Role of national direction and Te Tiriti o Waitangi

Engaging with iwi/Māori is important to understand the impacts of the policy on Māori and is also fundamental to Te Tiriti o Waitangi and requirements under settlement legislation.

### Distributional impacts

The proposals outlined would affect people and communities differently, and impacts are likely to arise from capital expenditure required to replace existing infrastructure and the increased costs of low-emissions energy sources.

The manufacturing sector, particularly food and beverage, would be affected by changes to the sanitation of equipment (eg, food processing and drying food products) and mining, gas, biofuels, and electricity sectors would all be affected to differing degrees.

Māori currently account for 23% of employment in high emissions-intensive industries. This is the highest concentrated group in emissions-intensive industries such as sheep and beef farming, meat manufacturing and road and rail transport.

While the impacts of the proposals alone on Māori are not anticipated to be significant, the cumulative effects of emissions reduction policies on Māori are likely to be. Work is underway as part of the development of the emissions reduction plan to consider the distributional impacts of emissions reduction policies on Māori, including any measures needed to mitigate these impacts.

In addition to the above distributional impacts, it is envisaged the proposed changes would bring new opportunities and co-benefits to iwi/Māori. These benefits, as well as the risks associated with the proposal are outlined below.

During public consultation, several issues were also raised from discussions with two Iwi/Māori representatives – Poutini Ngāi Tahu Papatipu Runanga and a representative from Northland. The following risks and concerns were raised:

- concerns about the onflow effect of banning coal on boilers and its effect on food security and food production for NZ communities. For example, if a ban is placed on coal-fired boilers companies such as Fonterra and Synlait would have to find alternative fuel energy sources to power their plants meaning an increase in capital costs and expenditure. To recover these costs companies would increase prices, making their products expensive and unaffordable, mainly to poorer NZ families
- there needs to be interventions from the Crown to address these 'green premiums'. The regulatory backstop provided by the policy proposal is fine, but the real issue is how to address the ongoing need for green energy and solutions. For example, if you remove boilers in Southland, is there enough alternative green energy to meet the normal demand level
- coal is a cheap energy source for many companies in the market. Fuel-switching could have a flow on impact on consumers in more vulnerable parts of New Zealand
- banning coal in plants can also result in loss of jobs for many workers, particularly as these plants are now unable to operate and provide job opportunities for the people. Loss of jobs, loss of incomes and eventually the ability to afford eco-friendly options such as electric vehicles as they become more available in the market.

### *Opportunities:*

While there are risks and concerns, there are also opportunities and co-benefits of the proposals for iwi/Māori:

- an increase in demand for low-emissions fuel options and renewable energy – this would create economic opportunities for regions currently using coal and other fossil fuel as a decline in coal and fossil fuel use would mean an increase in production of low emissions fuels thus creating job opportunities for these regions
- the proposal seeks low-emissions fuel options such as biomass, electricity, woodchip and so forth. With a large, vested interest in forestry, this is an opportunity for iwi/Māori, including Ngāi Tahu, to increase capacity in production of woodchips to provide for an increase in demand as an alternative fuel option to coal and other fossil fuels
- a transitional economy creates labour market policies, skills and education programmes and measures to support the growth of low-emissions economic activity. This proposal has the potential to create onflow effects such as developing programmes to support the uptake of low-emissions technology and upskilling to meet the transformation changes
- economic opportunities through developing employment and business opportunities to respond to changes in a just transition economy
- Iwi/Māori are involved in key industries such as forestry, dairy, tourism, transport – what opportunities there are in the supply chain to exert iwi/Māori influence over
- opportunities for hydrogen and other renewable alternatives as the focus of iwi/Māori is on hydro and other natural resources as energy sources (wind and solar energy). With opportunities of sourcing alternative fuels elsewhere, this would eventuate to a demand in transportation of low-emissions alternatives using low-emissions transportation to reduce emissions across the economy.

## **Conclusion**

In developing national direction, we note the impacts the proposal would have on iwi/Māori. While we had ascertained this understanding at inception, further engagement and consultation has provided us more insight into the risks, concerns and opportunities in a just transition.

This national direction proposal has an onflow effect in that iwi/Māori are potentially affected through the supply chain and as end-users. The risks and concerns as well as the opportunities listed gives an understanding of the differences in the issues and how the policy could be shaped.

Continued engagement with iwi/Māori is pivotal in domestic policy development. To mitigate the adverse impacts to iwi/Māori through the supply chain, advanced and effective engagement is crucial to creating an understanding of the approach by government and for government, to alleviate the effects.

An effective engagement and stronger emphasis on investment into local and regional low-emissions economic development would better prepare iwi/Māori communities to respond to local and regional environmental and economic shocks caused by the effects of climate change.

It is also important to note this is a series of climate change and environmental work proposed by government across all sectors to reduce emissions in New Zealand. Other wider work would include the ERP and the NAP and the wider reform of the RMA. All these programmes would also provide opportunities for iwi/Māori to provide their views and feedback on some of the policy proposals and work programmes by government.

# Appendix A: Consultation questions

Questions released for public consultation.

## Questions released for public consultation

### Problem definition, objectives and scope

1. Do you agree with this characterisation of the status quo? If not, please provide evidence to support your views.
2. How would you describe the status quo? What other factors should be considered?
3. Do you agree with the characterisation of the problem regarding the regulatory gap in the RMA? If not, why not?
4. Do you agree with the characterisation of the problem regarding the regulatory backstops to support the NZ ETS? If not, why not?
5. In your view, what is an effective and efficient threshold for low-GHG emitting process heat sites that would be out of scope of the requirements? Options and combinations of options include: below 100 tonne CO<sub>2</sub>-e/year, 50kW, 2 MW, assets operating fewer than 400 hours per year. Please explain why.
6. Do you agree with the scope of industrial emissions proposed to be subject to national direction instruments? If not, why not?
7. Should commercial sector water and space heating (above an appropriate size threshold) be included in the scope of national direction? If not, why not?
8. What is your view on the proposal to exclude emissions from other sectors in the current scope (note: intention is for a more fulsome package of national direction on climate change to be developed through

### Preferred RMA national direction instrument

9. Do you agree that the preferred option (a NES supported by a targeted NPS) will be the most effective way to achieve the policy objectives and to reduce implementation costs and uncertainty for local authorities, applicants and consent holders? If not, why not?
10. Do you agree with the impact analysis of this option?
11. In your view, what is a fair and reasonable duration for consents that would balance the need for investment certainty with the need to improve energy efficiency and reduce emissions over time? (the new resource management system).

### Preventing discharge of GHG emissions from new fossil fuel assets

12. Should the ban on new coal-fired assets for low and medium temperature requirements be implemented through a prohibited activity rule in national direction? Should there be any exemptions for small-scale coal-fired assets (for example, below 50kW, 2 MW or 100 tonne/year) or flexibility to consider site specific constraints through consenting processes?
13. Do you agree with the approach to avoid new fossil fuel assets (excluding coal) unless it can be demonstrated there are no feasible alternatives, and where the applicant prepares a GHG emission plan, and complies with relevant best practices? Are there more effective and efficient ways to achieve this outcome?
14. How can national direction and guidance best assist applicants and consent authorities to assess economically and technically feasible alternative fuel options?
15. Should the policy approach for new process heat assets target specific fossil-fuel sources or should it take a fuel neutral approach? In your view, what is the best approach to define thresholds and requirements?
16. Referring to each option, what are the likely compliance costs and impacts on your firm? Who are the small to medium size industry users that could struggle to meet the requirements?

## Questions released for public consultation

17. What supporting initiatives are needed to transition away from fossil fuels in new industrial sites?
18. Is there anything that you feel has been overlooked in this section with regards to the reality of your businesses' industrial practices? Or for local government: is there anything that you feel has been overlooked in this section with regards to the reality of consenting practices?

### Phasing out fossil fuels in process heat

19. Is 2037 an appropriate 'phase-out' date for low and medium temperature coal process heat requirements? Is it necessary to include a review date within the national direction instrument (potentially around 2025) to assess the development of alternative fuel markets closer to the phase out date?
20. Should there be a longer lead-in time for existing coal-fired assets that are currently permitted before these are subject to the NES consent requirements?
21. Is it appropriate to phase out other (non-coal) fossil fuels in existing industrial assets through consenting processes and best practice requirements?
22. Is a more flexible approach for the re-consenting of other (non-coal) fossil fuel-fired assets warranted/needed?
23. Should there be a set phase-out date for other (non-coal) fossil fuels, including natural gas? What are the potential benefits and risks?
24. Should the NES require regional councils to review consent conditions of significant GHG emitters with long-term permits to help reduce emissions? What are the benefits and risks?
25. What are the appropriate size (operating capacity and/or volume of emissions) and/or consent duration thresholds to trigger a review of existing discharge permits? What is a realistic and achievable timeframe for regional councils to undertake a review of the discharge permits for large emitters in their region?
26. Referring to each option, what are the likely compliance costs and impacts on your firm? Who are the small-to-medium size industry users that could struggle to meet the requirements?
27. Is there anything that has been overlooked in this section with regards to the reality of business practices? For local government: is there anything that you feel has been overlooked in this section with regards to the reality of consenting practices?

### GHG emissions and best practice requirements

28. Do you agree with the proposed thresholds for small sites being between 100 and 2,000 tonne CO<sub>2</sub>-e/year and large sites, being over 2,000 tonne CO<sub>2</sub>-e/year, in the preparation of a GHG emissions plan?
29. Do you agree with the proposed requirement that GHG emissions plans for large sites be reviewed/certified by a 'suitably qualified expert'? Should this be limited to larger sites?
30. What guidance and templates would be useful to help industry and councils prepare and review GHG management plans?
31. How should best practice requirements be incorporated into national direction? What factors should councils consider when determining what is economically and technically feasible at the site-level?
32. For large boilers and combustion plants, should an emission limit value be included in the consent conditions, based on the specific application outlined in the GHG emissions plan (fuel use x emission factor), as occurs in Europe and the US?
33. Referring to each specific schedule, do you agree with the content of the GHG emissions plans for small (Schedule 1) and large (Schedule 2) sites?
34. In your view, are the materials referenced in Appendix Two appropriate for each sector and across sectors?
35. Is there anything that has been overlooked in this section with regards to the reality of business practices? For local government: is there anything that you feel has been overlooked in this section with regards to the reality of consenting practices?

**Non-statutory guidance on non-industrial emissions**

36. Do you support the development of non-statutory guidance on how to consider wider GHG emissions (direct and indirect) through RMA planning and consenting processes?
  37. What are the key areas that guidance needs to cover?
  38. How can this guidance complement work underway to support emission reductions in other sectors, including urban development, transport and electricity generation?
  39. Is there anything that has been overlooked in this section with regards to the reality of business practices? For local government: is there anything that you feel has been overlooked in this section with regards to the reality of consenting practices?
-