In Confidence

Office of the Minister of Climate Change
Office of the Minister for Economic and Regional Development

Chair, Cabinet Business Committee

Carbon Neutral Government Programme: Report back and further implementation decisions

Proposal

- 1 Cabinet agreed to establish the Carbon Neutral Government Programme in November 2020 [CAB-20-MIN-0491 refers] and requested a series of reportbacks.
- This paper reports back and seeks decisions on how agencies will measure and report emissions, set reduction targets and plans, and on governance arrangements. It also provides detailed advice on implementation of different parts of the Carbon Neutral Covernment Programme.

Relation to government priorities

This programme directly relates to the Government's priorities to 'accelerate our economic recovery' and 'lay the foundations for the future'.

Executive Summary

- The Carbon Neutral Government Programme is a long-term work programme that aims to make a number of government organisations carbon neutral from 2025, and help them accelerate their emissions reduction journeys [CAB-20-MIN-0491 refers]. This paper sets out further decisions needed to implement the Carbon Neutral Government Programme.
- When the Carbon Neutral Government Programme was established, Cabinet decided targets would be set by 2023 [CAB-20-MIN-0491 refers]. It is important for the Government to also provide the overall ambition for these targets. We therefore propose that Carbon Neutral Government Programme participants set gross emissions reduction targets consistent with the intent and purpose of the Climate Change Response (Zero Carbon) Amendment Act 2019 and Paris Agreement of limiting the global average temperature increase to 1.5 degrees Celsius above pre-industrial levels. For Carbon Neutral Government Programme participants to be on a 1.5 degree pathway, guidance and assistance will be provided to help them set gross emissions reduction targets by December 2023, for 2025 and 2030.

- Organisations will report progress towards their individual targets annually to the Carbon Neutral Government Programme Lead (currently the Ministry for the Environment, MfE). The targets will also be collectively reviewed in 2025, 2028 and 2030 by the Carbon Neutral Government Programme Lead to ensure they are ambitious and practicable, taking into account actual greenhouse gas emissions data from participants.
- We propose emissions sources reported on by agencies will include Scope 1, Scope 2 and specified Scope 3 emissions (see Table 1), as aligned with national and international best practice¹ and guidance. We acknowledge constraints in current data availability and effort required to get this data from suppliers and that this may take time to collect.
- We propose that accountability is established for Carbon Neutral Government Programme participants to report their annual emissions, reduction plans and progress towards gross emissions reduction targets by December each year to the Carbon Neutral Government Programme Lead and in their annual reports.
- We propose that the Ministry of Education (MoE) reports on the direct greenhouse gas emissions from fuel use and indirect greenhouse gas emissions from imported energy on behalf of the state schooling sector from the 2022/23 financial year onwards. MoE will also report back by December 2021 to the Minister of Education and Carbon Neutral Government Programme Ministers on what other emissions sources can be collected and reported on, alongside the associated costs and recommendations for further reporting.
- We propose that the interim coordination and governance arrangements set out in November 2020 [CAB-20-MIN-0491 refers] continue over the next year and are reviewed in March 2022 by the Carbon Neutral Government Programme Ministerial Group² in the context of considering new broader ministerial climate change governance models of relevance.
- 11 We are reporting back on the following with regards to implementation of the Carbon Neutral Government Programme:
 - 11.1 guidance will be provided to agencies to help them meet the requirements of the Carbon Neutral Government Programme including how to set the boundaries of their reporting

¹ MfE officials are working with leading providers in the emissions measurement and verification space to ensure consistency with the over 400 New Zealand organisations (including a number of Carbon Neutral Government Programme participants) that already measure their emissions (including the mandatory scope 3 emissions we propose) as part of their annual emissions reporting
² Minister for Economic and Regional Development, Minister of Finance, Minister of Energy and Resources, Minister of Climate Change and Minister for the Public Service

- 11.2 guidance will also be provided for agencies that are required to follow the Government Procurement Rules (Procurement Mandated), on how to optimise their fleets, and when an exemption from procuring electric vehicles may be considered reasonable
- 11.3 there will be further investigation of alternative financing options for electric vehicles
- 11.4 the total cost to agencies, that are subject to the Property Functional Lead Mandate (Property Mandate), of undertaking NABERSNZ (the National Australian Built Environment Rating System New Zealand) assessments for leased office accommodation over 2,000m² is estimated to be Free and frank opinions

 EECA reports that buildings subject to recurring NABERSNZ assessments could realise estimated energy savings of four percent per year, in part due to optimisation and efficiency recommendations from assessors. EECA expects this would drive energy cost savings of Free and frank opinions across the portfolio, with the potential for further savings in future years
- 11.5 Confidential advice to Government
- 11 6 Confidential advice to Government
- 12 We note the agreed next steps include a report-back to Cabinet in June 2021 on how carbon neutrality could be achieved, "including confirming the feasibility of Carbon Neutral Government Programme organisations to offset" [CAB-20-MIN-0491 refers] and the report-back set out in paragraph 11.6. Progress across all parts of the Carbon Neutral Government Programme will be shared with Carbon Neutral Government Programme Ministers on an ongoing basis.

Background

- In November 2020, Cabinet agreed to establish the Carbon Neutral Government Programme, a long-term work programme that aims to make a number of government organisations carbon neutral from 2025, and help them accelerate their emissions reduction journeys [CAB-20-MIN-0491 refers]. The organisations part of the Carbon Neutral Government Programme are set out in Appendix 1³.
- The Carbon Neutral Government Programme was announced on 2 December 2020 and work has been underway since then to set up the programme and provide agencies with support including initial guidance on measuring and reporting emissions.
- 15 This is the first report-back on the programme. It covers the following:
 - 15.1 how agencies will set emissions reduction targets and plans
 - 15.2 how agencies will measure and report on their emissions
 - 15.2.1 scope of reporting
 - 15.2.2 accountabilities for Carbon Neutral Government Programme participants reporting on their emissions
 - 15.2.3 emissions reporting for the schooling sector
 - 15.3 arrangements for the Carbon Neutral Covernment Programme's ongoing coordination and governance
 - 15.4 updates on other aspects of the programme
 - 15.4.1 boundaries of reporting
 - 15.4.2 implementation of the new requirement that Procurement Mandated agencies choose electric vehicles when replacing fleet vehicles
 - 15.4.3 consideration of different financing options to support the procurement of electric vehicles, which may be able to reduce the up-front cost of vehicle purchase
 - 15.4.4 more detailed costings on implementing NABERSNZ ratings
 - 15.4.5 the potential future use of a rating systems, such as Green Star to evaluate the environmental attributes of buildings

³ Note that two organisations, the Office of the Clerk of the House of Representatives and Parliamentary Services have been amended in this table from 'instructed' to report their emissions (part of the first tranche of organisations) to 'encouraged' (part of the third tranche). These entities are responsible to the Speaker of the House and act independently

15.4.6 more information on the costs of the programme.

- There will be a further report-back to Cabinet in June 2021 on "how carbon neutrality could be achieved following further work by officials on opportunities, risks and constraints (including confirming the feasibility of Carbon Neutral Government Programme organisations to offset)" [CAB-20-MIN-0491 refers].
- 17 Confidential advice to Government
- Progress across all parts of the programme will be reported to Carbon Neutral Government Programme Ministers on an ongoing basis. They will escalate any applicable issues arising to Cabinet as needed

Analysis

How Carbon Neutral Government Programme participants will set emissions reduction targets and plans

- Carbon Neutral Government Programme participants (see Appendix 1) are being considered in three tranches for reporting their emissions, reduction plans, and progress towards their gross emissions reduction targets. These are to be reported to the Carbon Neutral Covernment Programme Lead (currently the Ministry for the Environment) by December each year, and summarised within their annual reports, with corresponding processes and deadlines:
 - 19.1 The first tranche Public Service Departments, Departmental Agencies and Non-Public Service Departments (excluding the Office of the Clerk of House of Representatives and Parliamentary Service)⁴ are proposed to be required to do so by Cabinet's agreement from the 21/22 financial year⁵. See paragraphs 37-41 for further details.
 - 19.2 The second tranche Crown Agents are proposed to be directed (following consultation) under the Crown Entities Act 2004 to do so from the 22/23 financial year⁶

Note that interdepartmental ventures are also part of the first tranche but no organisations exist in this category yet.

⁵ Note for the purposes of this Cabinet paper we have described Cabinet's agreement as an "instruction" to differentiate from the proposed direction to be issued under the Crown Entities Act 2004 to Crown Agents.

⁶ MfE officials will work with participants in the second and third tranches on the best way to report their data if their financial year does not run from July to June each year.

19.3 The third tranche – the Office of the Clerk of the House of Representatives and Parliamentary Service, Crown Entity Subsidiaries of NZIST, Tertiary Institutions (including Te Pükenga - NZIST), the Reserve Bank of New Zealand and Offices of Parliament – are proposed to be encouraged to do so from the 22/23 financial year.

Setting a gross emissions reduction target

- Cabinet needs to set the overall ambition for gross emissions reductions by Carbon Neutral Government Programme participants, so that participants can then set credible, practical and effective emissions reduction targets and plans, based on the reduction potential within their organisation by December 2023.
- We propose that Cabinet sets the overall ambition for participants' gross emissions reduction targets to be consistent with the intent and purpose of the Climate Change Response (Zero Carbon) Amendment Act 2019 and the Paris Agreement of limiting the global average temperature increase to 1.5 degrees Celsius above pre-industrial levels.
- For Carbon Neutral Government Programme participants to be on a 1.5 degree pathway, guidance and assistance will be provided to them by the Ministry for the Environment to help them set gross emissions reduction targets for their organisations for 2025 and 2030.
- This is consistent with the approach taken by business leaders in the Climate Leaders Coalition who are committing to the Paris Agreement target to keep warming below 2 degrees and to further pursue efforts to limit the temperature increase to 1.5 degrees.
- 24 This overall ambition would reflect the intent of the Carbon Neutral Government Programme and our public announcements by:
 - 24.1 showing overall leadership by reducing the government's own emissions, in order to demonstrate what is possible to other sectors in the New Zealand economy, and
 - 24.2 following best practice of reducing emissions as much as possible first before offsetting.
- 25 Carbon Neutral Government Programme participants' gross emissions reduction targets should:
 - 25.1 exclude the use of offsets or removals (e.g. department-owned forests)
 - 25.2 reflect absolute emissions as opposed to intensity-based emissions (e.g. total tonnes of abated emissions rather than emissions per Full-Time Equivalent, FTE)
 - 25.3 use scenarios that lead to the earliest emissions reductions and the least cumulative emissions.

- A culture of empowerment over compliance should be encouraged, whereby organisations communicate any challenges to progress they face. Reductions will not be linear, and the Carbon Neutral Government Programme and Government needs to be prepared and responsive to ensure success in the long-term. To support this intent:
 - 26.1 the base year to measure the target against will be chosen by each organisation to reflect their own circumstances, given agencies are at different stages in their reduction journeys. Further guidance will be provided to agencies on principles that ensure agency baselines are appropriate and representative⁷, particularly taking into account impacts such as Covid-19 on operations
 - 26.2 the gross emissions reduction targets will be reviewed in 2025, 2028 and 2030 to ensure they are ambitious and practicable, taking into account actual greenhouse gas emissions data from participants.

Methodology for setting the target

- Note that the targets chosen have implications for what options are available to reduce emissions, and the corresponding cost implications of these (both expenditure and savings).8
- We suggest a bespoke approach and methodology for Carbon Neutral Government Programme participants which largely aligns with the intent of international best practice including the "Science-Based Target Initiative" (SBTi). This means organisations would take an 'absolute contraction'9 approach, which means an absolute reduction rather than reductions per FTE (or other intensity-based measurements).

Developing credible reduction plans

Carbon Neutral Government Programme participants are proposed to be instructed, directed or encouraged (depending on which tranche they are in) to develop credible reduction plans to help them reach their gross emissions reduction targets. This will be implemented alongside the approach taken to require agencies to report on their emissions (see paragraphs 35-40). Participants will share these plans with the Carbon Neutral Government Programme lead agency and through their annual reports. The Carbon Neutral Government Programme Lead will provide an overall progress report to Ministers each year.

⁷ This is to ensure a meaningful and consistent comparison of emissions over time. For example, ensuring the base year chosen is reflective of the organisation's current structure (e.g. that there has not been a significant structural change since the setting of the base year).

⁸ Further work may be needed on the impact of non-discretionary activities on organisations' gross emissions and how such activity may be accounted for when setting targets (eg, the New Zealand Defence Force is directed by the Government on some of its activity, meaning it does not have full discretion on how and when it acts).

⁹ There are other methods, like intensity targets such as emissions per full-time employee. However these would not be acceptable as absolute reductions are required.

Tracking and reviewing progress on targets

- Carbon Neutral Government Programme participants are proposed to be instructed, directed or encouraged (depending on which tranche they are in) to measure and report progress towards their gross emissions reduction targets to the Carbon Neutral Government Programme Lead annually.
- Measurement on meeting the 2025 and 2030 targets (based on reporting from the previous financial year) will be calculated in December 2025 and 2030.
- As noted in paragraph 26.2, expected gross emissions reduction targets will be reviewed in 2025, 2028 and 2030 to ensure they are ambitious and practicable and take into account actual data from participants.

Scope of reporting

- We propose emissions sources reported on by Carbon Neutral Government Programme participants will include Scope 1, Scope 2 and specified mandatory Scope 3 emissions 10, set out in Table 1 below. This is aligned with international and national best practice (including hundreds of New Zealand organisations that use this approach) and guidance (ISO14064-1:2018 and the Greenhouse Gas Protocol), and ensures that the goal of carbon neutrality can be met.
- We acknowledge constraints in current data availability and effort required for participants to get this data from suppliers and that this may take time to collect.

Note: mandatory Scope 3 emissions may be harder to measure than Scopes 1 and 2 emissions because whilst they are a consequence of the activities of an organisation, they occur from sources not owned or controlled by the organisation. Participants may choose to measure additional Scope 3 emissions sources, especially if these are expected to form a significant proportion of their inventory. The requirement for carbon neutrality by 2025 will not apply to these additional, voluntarily reported emissions sources. However, for participants to credibly offset emissions and claim carbon neutrality in 2025, they will need to have measured their mandatory scope 3 emissions where possible.

Table 1 - Mandatory emissions sources for reporting

Scope	Direct/indirect emissions	Source category		
Scope 1 (mandatory)	Direct greenhouse gas emissions and removals	Fuel (e.g. fuel used for boilers or generators)		
		Refrigerant gas use and medical gases		
		Fleet vehicles and machinery		
		Rental vehicles		
		Nitrogen fertiliser application to owned land ¹¹		
Scope 2 (mandatory)	Indirect greenhouse gas emissions from imported energy	Purchased energy (e.g. electricity) Heat or steam consumed		
Scope 3 (mandatory)	Indirect greenhouse gas emissions from transportation	Stan/business travel (e.g. by air, rail, sea, reimbursed stati mileage, taxis) Freight transport		
Note there are Scope 3 non-	11/1/2	Working from home (electricity and waste) – an average		
mandatory	Indirect greenhouse gas	Waste to landfill		
sources such as staff commuting	emissions from products an organisation uses	Materials and waste		
	S., S. S. Martin, acco	Transmission and distribution losses		
	100,00	Water supply and wastewater treatment		

Reference: Quick guide: The Carbon Neutral Government Programme - Focusing on the first step: measuring and reporting. January 2021

Accountabilities for Carbon Neutral Government Programme participants reporting on their emissions

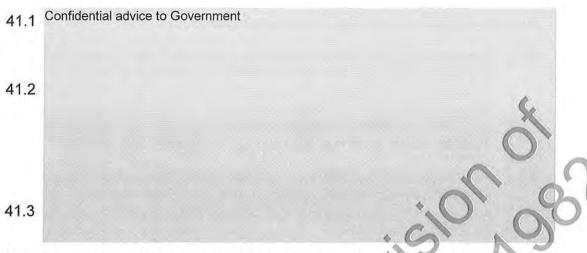
- A report-back was requested by Cabinet on reporting requirements and accountability by individual agencies to measure and report on their emissions.
- 36 We propose that:
 - 36.1 for Public Service Departments, Departmental Agencies and Non-Public Service Departments, excluding the Office of the Clerk of the House of Representatives and Parliamentary Service (collectively, "Departments"): Cabinet agrees all Departments must comply and Cabinet invites responsible Ministers to communicate this to their respective Departments by letters to their relevant Chief Executives (for which a template will be prepared by MfE officials). Reporting via

¹¹ Including urea-sourced and synthetic nitrogen fertilisers, as stated in the Ministry for the Environment's Measuring Emissions Guide 2020

- annual reports will provide Select Committees with the opportunity to scrutinise progress
- 36.2 for Crown Agents: a proposed direction will be developed under section 107 of the Crown Entities Act 2004 to require affected entities to comply with the proposed reporting requirements
- 36.3 for the Office of the Clerk of the House of Representatives and Parliamentary Service, Crown Entity Subsidiaries of NZIST, Tertiary Institutions (including Te Pūkenga NZIST), the Reserve Bank of New Zealand and Offices of Parliament: officials will encourage them to do so through sharing guidance, training and resources with them, maintaining regular communications and encouraging them to share this information with the Programme Lead and in their annual reports
- 36.4 for School Boards of Trustees: the Ministry of Education (MoE) will report on some Scope 1 and 2 emissions for the state schooling sector from the 2022/23 financial year onwards. See paragraphs 46-49 for further details.

Public Service Departments, Departmental Agencies and Non-Public Service Departments

- For Departments, Treasury and MiE officials have undertaken further work to determine options for ensuring participants are accountable for measuring and reporting on their emissions, targets and reduction plans.
- Officials recommend that the preferred option is to impose an annual reporting requirement (to report to both the Programme Lead, currently the Ministry for the Environment, and summarised as part of participants' annual reports) through Cabinet's agreement. We propose that Ministers communicate this decision to their relevant Chief Executives by letter (for which a template will be prepared by MfE officials).
- This option is the easiest to implement quickly and allows for comparable, easy-to-access reporting. It means agencies are directly accountable to their Ministers, and their progress can be scrutinised via Select Committees through the annual review process. It is also most feasible to fit with the timeframes for Departments to measure and report their emissions.
- An additional option to signal the seriousness by which we are taking emissions reporting, the priority it has, and to support the longevity of the programme is through longer-term legislative change, in addition to Cabinet's agreement to bind Departments in the shorter term. This would require amendments to legislation such as the Public Finance Act (and possibly other pieces of legislation) in their "contents of annual reports" provisions or to a relevant subject matter Act.
- Whilst this may improve longevity, officials advise that this would have significant time, resourcing and other implications and more work would be needed to set these out fully:



Note the correction in the table in Appendix 1 regarding which tranche the Office of the Clerk of the House of Representatives and the Parliamentary Service are part of. Previously this table identified that these entities could be instructed similarly to Departments. As these entities are only responsible to the Speaker of the House (rather than to Ministers) it is not possible to issue them a formal direction or instruction as such direction can only come from the Speaker of the House.

Crown Agents

- We propose that a Whole of Government direction under section 107 of the Crown Entities Act 2004 be developed for Crown Agents to be directed to report their emissions, reduction plans and targets. Directions are issued by the Minister of Finance and the Minister for the Public Service. However, the process to develop the directions can be led by other initiating Ministers. This type of direction suits multi-agency approaches and its application would be consistent with the purposes of improving services and managing risks to the Government's financial position.
- Cabinet Office Circular (13) 4 sets out the process required to develop and issue a direction, including the required content of the direction and consultation with affected entities. We propose to report back in June 2021, in collaboration with the Minister of Finance and the Minister for the Public Service, with a draft direction and to seek approval to consult with affected parties. We anticipate a direction could be issued to take effect from 1 June 2022.



Emissions reporting for the schooling sector

- In the context of a climate emergency, the Government has agreed that, by December 2023, Crown Agents and School Boards of Trustees are to be directed to report emission and publish reduction plans from the 2022/23 financial year onwards. Cabinet noted that some exemptions or a different approach to individual emission reporting may need to be made for entities such as School Boards of Trustees [CAB-20-MIN-0491 refers].
- The Ministry of Education has advised that if a requirement is placed on the 2,445 School Boards of Trustees across New Zealand to fully (i.e. across all scopes) measure, report and reduce their emissions it faces key challenges, including:
 - 47.1 the varying capability and expertise of Boards, and the number of different schools and their profiles
 - 47.2 placing additional burden on School Boards¹², whose focus needs to remain on improving education outcomes for our young people
 - 47.3 estimated cost of this approach on schools could be confident, edvice to Government noting schools may identify ongoing savings opportunities through more efficient resource use.
- Emissions scopes, what can be collected and what needs further investigation can be found in Appendix 2 (alongside what initiatives are already underway). The Ministry of Education has advised that:
 - 48.1 processes are underway to report and collect school emissions data for coal (Scope 1) and electricity use (Scope 2) and
 - 48.2 further investigation is planned to understand the costs, time and potential impact on School Boards, Schools and the Ministry of Education for collection of Scope 3 (e.g. school travel for activities or business, waste) and the remaining elements of Scope 1 (e.g. other fossil-fuelled boilers like gas).
- We propose the Ministry of Education, in consultation with the Ministry for the Environment, report back to the Minister of Education and the Carbon Neutral Government Programme Ministerial Group by December 2021 on their investigation and recommendations for further emissions reporting in the schooling sector.

13 Estimates from MfE for agencies and departments to do this work are Confidential advice to Government

Given the wide-ranging

nature of schools, costs may well be higher for larger schools.

¹² For example, School Boards of Trustees – a role performed largely by unpaid elected parents – must comply with at least 37 Acts of Parliament and perform a wide variety of often complex roles.

Arrangements for the Carbon Neutral Government Programme's ongoing coordination and governance

- 50 We were invited to report back in March 2021 on detailed proposals for the ongoing coordination and governance arrangements to support the implementation of the Carbon Neutral Government Programme [CAB-20-MIN-0491 refers].
- We propose that the coordination and governance arrangements agreed in November 2020 [CAB-20-MIN-0491 refers] continue over the next year and are reviewed in March 2022 (including considering other governance models of relevance e.g. the Climate Change Response Ministers governance group chaired by the Prime Minister). The interim arrangements have not yet been sufficiently tested to determine if they are working effectively so there is no reason to change them at this stage.
- This means the arrangements set up so far will continue including:
 - 52.1 an interim Carbon Neutral Government Programme Ministerial group, chaired by the Minister for Economic and Regional Development, and including the Minister of Finance, the Minister of Energy and Resources, the Minister of Climate Change and the Minister for the Public Service
 - the Ministry for the Environment (MfE) as the lead agency, coordinating regular working level meetings with officials at the Ministry of Business, Innovation and Employment (MBIE) and the Energy Efficiency and Conservation Authority (EECA)
 - 52.3 a senior level working governance group across MfE, MBIE and EECA that reports and provides advice to the existing Climate Change Chief Executives Board who hold overall governance responsibility as part of the wider climate change work programme.
- Roles and responsibilities across agencies for the different components of the Carbon Neutral Government Programme are set out below, with operational support from EECA particularly in its role delivering funding under the State Sector Decarbonisation Fund.

Key - x = lead agency, (x) = supporting agency:

Activity	MfE	MBIE	EECA
Programme coordination	Х		
Measuring, reporting and verifying emissions	Х		(x)
Setting targets and reduction plans	Х		
Phasing out coal-fired boilers		×	(x)
Transitioning the government fleet		x	(x)
Energy efficiency ratings for government offices		X	(x)
Low carbon new government buildings		x	(x)
Offsetting	Х	18.	7

Boundaries of reporting

- To enable consistent reporting boundaries to be set across the Carbon Neutral Government Programme participants with vastly different emissions profiles (infrastructure and operational activities vs office-based activities), guidance (with the necessary flexibility) is being developed and will be provided to Carbon Neutral Government Programme participants shortly.
- Guidance follows international and national best practice and generally aligns with legal and/or organisational structure; whilst noting a financial boundary may also be drawn within this to allow for emissions intensity measurement.¹⁴

Transitioning the government fleet to low-emissions vehicles

- In November 2020 Cabinet agreed that when replacing vehicles, Procurement Mandated agencies must prioritise battery electric vehicles (BEV), or a plug in hybrid electric vehicle (PHEV) where a BEV is not appropriate for use, unless there are operational requirements or other circumstances that prevent this [CAB-20-MIN-0491 refers].
- At the same time, Cabinet agreed that Procurement Mandated agencies should optimise their fleet with the aim of reducing the number of vehicles in the government fleet [CAB-20-MIN-0491 refers]. MBIE is in the process of amending the existing guidance (including on when an exemption may be considered reasonable) and procurement requirements for agencies to reflect these decisions. Further information on this is in Appendix 3.

https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/Measuring%20Emissions%20Detailed%20Guide%202020.pdf

¹⁴ From MfE Measuring Emissions Guide

- The previous government had a goal that, where practicable, the government's fleet should be emissions free by 2025/26. Progress towards this goal has been slow only one percent of the fleet is electric. We consider that the Carbon Neutral Government Programme commitment to prioritise electric vehicles or "electric vehicles first" where practicable, in the government fleet will result in a more significant shift towards transitioning the fleet. MBIE will revise the existing government fleet "dashboard" monitoring to reflect this policy, which will also provide more transparency on progress.
- We propose a further report back by 30 June 2021 on progress towards transitioning the fleet. The report back will include progress and advice on the development of a timeline for the transition. Agencies will be required to provide costed plans to MBIE for how they will apply the "electric vehicles first" approach. These plans will be used to inform and update the timeline for the transition as it is developed. We will also provide an update on any remaining barriers. Options to address the barriers, as well as advice on mechanisms to support agencies to accelerate the transition, including on different financing options will also be presented.
- Leasing (as opposed to owning) vehicles reduces the upfront capital cost barrier to transitioning the fleet. Officials are exploring the opportunity that leasing may provide and the associated different financing options. There are practical issues to work through to ensure the use of alternative financing options complies with the Public Finance Act 1989. Further information on this is in Appendix 4.

Estimated costs of implementing NABERSNZ for the government office portfolio

- Agencies that are subject to the Property Mandate with leased office accommodation over 2,000m² are now required to begin the NABERSNZ assessment process at the next available opportunity (such as a lease renewal). Agencies with leases that are not due for renewal before the end of 2025 will be required to complete their first assessment by December 2025.
- The Government Property Group (GPG) and the Energy Efficiency and Conservation Authority (EECA) have developed more detailed estimates of the cost for agencies subject to the Property Mandate, with leased sites over 2,000m2, to implement NABERSNZ [CAB-20-MIN-0491 refers]. EECA advises that the cost for undertaking a NABERSNZ building assessment is estimated to be between Free and frank opinions. GPG estimates that the total cost to agencies of undertaking NABERSNZ assessments across those properties to which the requirement applies will be between Free and frank opinions
- This estimate of costs does not include the investment that may be required to achieve the required rating level, as it is not possible to quantify this until after the NABERSNZ assessment has been completed. EECA advises that some buildings may only require low cost systems and operating changes, but some buildings may require further capital investment. Where investment is

- necessary to meet the required rating an agency would, if practicable, achieve the rating over an agreed period of time.
- 64 EECA reports that buildings subject to recurring NABERSNZ assessments could realise estimated energy savings of four percent per year, in part due to optimisation and efficiency recommendations from assessors. EECA expects this would drive energy cost savings Free and frank opinions across the portfolio, with the potential for further savings in future years. Further information on this can be found in Appendix 5.

Potential future use of Green Star

The environmental impact of buildings and the development of sustainable building rating systems

- The construction, occupancy, renovation, and demolition of buildings have an environmental impact. Concern about these environmental impacts has resulted in the creation of sustainable building standards and rating systems which aim to mitigate the environmental impacts of buildings.
- The first sustainable building rating system, was launched in 1990¹⁵ and it is estimated that there now are around 600 sustainable building rating systems in use internationally¹⁶. Green Star was introduced in New Zealand in 2007 and evaluates the environmental attributes of a range of different types of buildings, with a focus on new buildings and building fit-outs. In assigning a rating, the Green Star system considers a range of sustainability factors such as water efficiency, environmental sourcing of building materials, indoor environment quality, transport, land use and ecology, management, emissions, social aspects as well as energy and innovation.
- MBIE is undertaking further work on options for the use of rating systems. Green Star is one of a number of potential systems available to support agencies to reduce greenhouse gas emissions (Emissions) from government buildings. Given the wide range of options available the market would likely expect an opportunity to participate in supporting agencies in their goal of reducing Emissions.

Measuring what matters - setting clear objectives for rating systems to deliver on

- Emissions are generated over the whole lifecycle of a building, resulting from building materials, construction processes, operational use, building maintenance, and how materials are disposed of at the end of a building's life. The Carbon Neutral Government Programme seeks to reduce Emissions. The inclusion of Emission reduction factors within rating systems, such as Green Star, means that they have the potential to support the objectives of the Carbon Neutral Government Programme.
- Rating systems also consider a range of other environmental and social factors, such as the health and wellbeing of building users. Criteria for

¹⁵ https://www.wbdg.org/resources/green-building-standards-and-certification-systems

¹⁶ https://www.researchgate.net/publication/318302908_A_critical_comparison_of_green_building_rating_systems

comparing rating systems could include the extent to which they place emphasis on, and will be effective at, reducing Emissions; or to balance a range of environmental and social factors, including reducing Emissions. The objectives that rating systems would be expected to meet for agencies will need to be consistent with the criteria for comparing them. This will ensure that rating systems effectively support agencies to deliver their objectives and can be measured and reported on consistently.

Setting a minimum standard

- Rating systems assess buildings and assign a rating. Higher ratings are associated with improved environmental outcomes or reduced environmental impact. Introducing a rating system or systems may benefit from a minimum standard being set, which in scope buildings would then be required to meet as appropriate.
- If a minimum standard was to be set, then further work on a number of areas would need to be carried out to understand the implications of this approach and ensure an ability to measure its effectiveness. These areas could include setting up a standards development project with a committee and public consultation. The committee would consider if there are any related international standards, why a related international standard would not be appropriate for adoption, the benefits stakeholders to be consulted, funding, identified risks or issues and other relevant information required to initiate the development of a new proposed standard¹⁷.
- There have been estimates of the cost of Green Star, in Australia, adding from 1.5 percent to 3.2 percent cost per square metre to development projects¹⁸. The World Green Building Council estimated that cost premiums for green rated buildings fall within the 0%-12.5% range. Research also suggests that upfront cost may increase as the environmental standard required increases¹⁹.

Implementation approaches

MBIE will also investigate the range of options by which a rating system or systems or tool/s could be introduced. These could include the continuation of voluntary use by setting up a panel of rating systems suppliers, by setting a standard and allowing the use of any rating system that complies with that standard, by mandating the use of a single rating system, or by requiring use under legislation or regulation.

¹⁹ World Green Building Council (2013), The business case for green building: A Review of the Costs and Benefits for Developers, Investors and Occupants

https://www.standards.govt.nz/develop-standards/how-standards-are-developed/new-zealand-standards-development/
 https://www.aph.gov.au/Parliamentary_Business/Committees/House/ITC/DevelopmentofCities/Report/section?id=committees/2Freportrep%2F024151%2F25690

Implementation options would be assessed against a range of factors, such as the government agencies and buildings that would be in scope. Other factors may include cost implications across agencies and the construction sector, likely impact on effectiveness of implementation, potential impacts on supply markets, and the ability to effectively measure outcomes.

Cost to agencies to implement rating systems

There will be a range of costs to agencies and investment required to implement rating systems and meet rating standards. These costs, for agencies, may include additional design costs, additional capital cost to meet minimum rating standards, assessment and certification costs as well as ongoing costs to maintain certification at the required standard. Areas for further consideration include the cost of rating tools. Some are free while some require specialist assessors and audit services to be set up.

Benefits of implementing rating systems

The benefits of implementing a rating system or systems will vary depending on the objectives, minimum standards and implementation approach. There are a range of reported benefits from buildings which are more sustainable, or have reduced environmental impacts. These are reported to include operational cost efficiencies resulting from reduced energy and water use, reduced long-term operation and maintenance costs. Green design attributes of buildings have also been reported to improve indoor environments, boosting the health and well-being of building occupants²⁰.

Confidential advice to Government

Financial Implications

78 We were invited to report back on the costs associated with broadening out this programme [CAB-20-MIN-0491 refers].

There are short to medium terms costs associated with the Carbon Neutral Government Programme

As advised in November 2020, Carbon Neutral Government Programme initiatives will require further funding to put the Government on track to reducing emissions and achieving carbon neutrality in line with best practice [CAB-20-MIN-0491 refers]. In the short to medium term, this includes funding for:

World Green Building Council (2013), The business case for green building: A Review of the Costs and Benefits for Developers, Investors and Occupants

- a lead agency to coordinate and provide a Secretariat to the Carbon Neutral Government Programme, and provide tools, training, guidance and high-level support to Carbon Neutral Government Programme participants – note that this is a centralised support function only and agencies would need to fund any specific individual support out of their own baseline²¹
- policy analysis and advice to develop and implement the initiatives
- the additional capital costs associated with investing in low-emissions technologies (e.g. to replace coal boilers and internal combustion engine vehicles)
- the costs of getting a NABERSNZ assessment for certain Carbon Neutral Government Programme participants²² and subsequent improvements to buildings
- the increased costs of monitoring and reporting of emissions by Carbon Neutral Government Programme agencies
- A bid has been submitted for Budget 2021 for funding to support some of these short to medium term costs (refer to Table 2 below).
- Note there will be ongoing savings at an agency level from some of these initiatives due to either energy efficiency (e.g. in buildings) or lower energy costs (e.g. using electricity instead of petrol) that will counteract some (or all) of the costs.

There is uncertainty about the longer term costs of the Carbon Neutral Government Programme as they depend on future actions and decisions

- In the longer term, Carbon Neutral Government Programme agencies may also seek increased baseline funding to manage the costs of offsetting that they will face from 2026. These costs will be dependent on the emissions profile of the agency, what actions it has taken to reduce emissions, and the future cost of offsets. This will be discussed further in the report back to Cabinet in June 2021.
- There may be further costs in the longer term as the Carbon Neutral Government Programme develops over time and if it expands to apply to more agencies. New initiatives may also be added as we gain a better understanding of Carbon Neutral Government Programme participants' emissions and where efforts should focus in future. These longer-term costs will be highly dependent on decisions made about the Carbon Neutral Government Programme in future.
- 84 Table 2 below sets out the latest understanding about Carbon Neutral Government Programme costs, and how they might be addressed.

government office accommodation over 2,000m².

MfE officials understand that there is sufficient capability and capacity in the market for this.
 The Property Mandated agencies who occupy single tenanted, co-tenanted or co-located

Table 2 - Estimated costs across the programme

Short to medium term	Estimated cost	How are these costs being addressed?
Lead agency to coordinate and provide a Secretariat, and provide tools, training, guidance and high-level	Confidential advice to Government	Budget 2021 bid
support to Carbon Neutral Government Programme participants	Confidential advice to	.00
Policy analysis and advice to develop and implement initiatives	Government	Budget 2021 bid
Additional capital costs associated with investing in low-emissions technologies Replace coal boilers Transition fleet to electric vehicles ²³	Confidential advice to Confide Treatign to the ntiesting State Sector Decarbonisation Fund ²⁴)	Budget 2021 bid
Support with optimising fleets and additional operating costs associated with leasing electric vehicles	-Confidential advice to Government	Budget 2021 bid
NABERSNZ assessments	Confidential advice to Government	Within agency baselines Increased baselines may be sought in future
Increased costs of measuring and reporting of emissions by Carbon Neutral Government Programme participants	\$10k-\$100k per agency per year (depending on size and complexity of organisation)	Within agency baselines Increased baselines may be sought in future
Longer term Costs to Carbon Neutral Government Programme participants of offsetting from December 2025	Not able to be estimated at this time	Within agency baselines Increased baselines may be sought in future

 $^{^{23}}$ The numbers are based on EECA estimates of transitioning ~7,000 vehicles (the number it estimates could reasonably be replaced by EVs) in the 'mandated' fleet

²⁴ \$200 million was allocated in January 2020 for projects to reduce State sector emissions from heating, cooling, lighting and road transport.

Short to medium term	Estimated cost	How are these costs being addressed?
Additional capital and operational costs associated with achieving gross emissions reduction targets, particularly replacing natural gas boilers ²⁵ .	Confidential advice to Government	Within agency baselines Confidential advice to Government

Legislative Implications

- 85 Legislative implications are not applicable for the options recommended in this paper.
- However, if Cabinet would prefer that Departments are held accountable to measure and report on their emissions through legislative change (in addition to Cabinet's agreement), there would need to be legislative amendments to existing reporting legislation. Note that priority would need to be sought on the legislative programme if legislative change was the preferred approach.

Te Tiriti o Waitangi Implications

In the widest context, climate change impacts are a significant issue for Māori (for example, the Wai 2607 claim). However, there are expected to be limited direct effects of the Carbon Neutral Government Programme on iwi and Māori. The direct impact of the Carbon Neutral Government Programme will be on the organisations included within it (see Appendix 1), their employees and any other building inhabitants of these organisations, which may include Māori individuals. Carbon Neutral Government Programme participants will be reminded to consider the impacts of reducing their emissions on iwi/Māori and wider community.

Impact Analysis

Regulatory impact Statement

A regulatory impact statement is not required for determining how agencies will be required to report on emissions if an annual reporting requirement through Cabinet's agreement is chosen. However, it would be required for any legislative change.

²⁵ EECA estimates natural gas accounts for around 37 percent of the State sector's non-transport energy emissions (see Appendix 6 for further information on where natural gas is used within the State sector). It may therefore be necessary for some organisations within the remit of the Carbon Neutral Government Programme to replace gas boilers in order to achieve their gross greenhouse gas emissions reduction targets.

Climate Implications of Policy Assessment (CIPA)

- As noted in the previous Cabinet Paper on the establishment of the Carbon Neutral Government Programme [CAB-20-MIN-0491 refers], CIPA requirements apply to this Cabinet Paper since an objective of the Carbon Neutral Government Programme is to reduce greenhouse gas emissions. However, collating further data since December has not yet been possible since the requirement is for the first tranche of organisations (Public Service and non-Public Service departments) in the Carbon Neutral Government Programme to report their emissions by December 2022. Therefore, we expect to provide a full CIPA based on these reports in the first half of 2023 which will be provided to Carbon Neutral Government Programme Ministers.
- The CIPA team notes that some of the abatement options that Carbon Neutral Government Programme participants could take to reduce emissions will be high cost. Participants should consider the cost of abatement options alongside the shadow emissions price to inform decisions on the cost-effectiveness of emissions reduction options²⁶.

Consultation

91 Consultation has been undertaken with: All Departments, Departmental Agencies and Non-Public Service Departments, plus Crown Agents – Kāinga Ora and the Energy Efficiency and Conservation Authority.

Communications

Parts of this proposal may be shared with Carbon Neutral Government Programme participants most likely in the form of additional guidance.

Proactive Release

93 Note that all Cabinet and Cabinet committee papers and minutes will be proactively released within 30 business days of decisions being confirmed by Cabinet, subject to Official Information Act considerations.

Recommendations

The Minister for Climate Change and the Minister for Economic and Regional Development recommend that the Committee:

note that in November 2020, Cabinet agreed to establish the Carbon Neutral Government Programme, a long-term work programme that aims to make a number of government organisations carbon neutral from 2025, and help them accelerate their emissions reduction journeys [CAB-20-MIN-0491 refers], and this was announced on 2 December 2020;

How Carbon Neutral Government Programme participants will set emissions reductions targets and plans

²⁶ The shadow emissions price is a measure of the cost or benefit to the Government of increased or avoided emissions based on estimates of future costs of emissions reductions (abatement) required to reach New Zealand's emissions targets

- note that Cabinet invited a report back on how the proposed Carbon Neutral Government Programme participants will measure emissions, manage and report on them, and have set gross emissions reduction targets and credible reduction plans by December 2023;
- agree that participants will set a gross emissions reduction target consistent with the intent and purpose of the Climate Change Response (Zero Carbon) Amendment Act (2019) and the Paris Agreement of limiting the global average temperature increase to 1.5 degrees Celsius above pre-industrial levels, measured against a base year set by each agency and based on the reduction potential within their organisation, for 2025 and 2030;
- 4 note that to support Carbon Neutral Government Programme participants to be on a 1.5 degree reduction pathway, guidance and assistance will be provided by the Ministry for the Environment;
- agree that expected gross emissions reductions targets will be reviewed in 2025, 2028 and 2030 to ensure they are ambitious and practicable and take into account actual greenhouse gas emissions related data from participants;
- agree that measurement on meeting the 2025 and 2030 targets (based on reporting from the previous financial year) will be calculated in December 2025 and 2030;

Scope of reporting

- agree the proposed mandatory scopes of reporting for Carbon Neutral Government Programme participants will include Scope 1, Scope 2 and specified mandatory Scope 3 emissions (noting the different approach for School Boards of Trustees in recommendation 17);
- 8 note this scope of reporting is aligned with international and national best practice and guidance;

Accountabilities for Carbon Neutral Government Programme participants reporting on their emissions

- 9 agree that for the first tranche of participants:
 - 9.1 Public Service Departments, Departmental Agencies and Non-Public Service Departments (excluding the Office of the Clerk of House of Representatives and Parliamentary Service) must:
 - 9.1.1 report their emissions and set a gross emissions reduction target for 2025 and 2030, in accordance with guidance to be provided by the Ministry for the Environment;
 - 9.1.2 develop and implement credible reduction plans to help them reach their gross emissions reduction targets;

- 9.1.3 report their emissions, reduction plans and progress towards their gross emissions reduction targets to the Carbon Neutral Government Programme Lead (currently the Ministry for the Environment) by December each year, commencing December 2022, in accordance with guidance to be provided by the Ministry for the Environment; and
- 9.1.4 include summarised information provided to the Ministry for the Environment in their annual reports, from the 21/22 financial year onwards;
- 9.2 responsible Ministers will communicate the decision outlined in recommendation 9.1 to the Chief Executives of their relevant departments via letter (for which a template letter will be prepared by Ministry for the Environment officials);
- 10 Confidential advice to Government
- agree that for the second tranche a whole of government direction issued under section 107 of the Crown Entities Act 2004 is the preferred approach to ensuring that Crown Agents comply with the proposed reporting requirements;
- note that Ministry for the Environment officials will develop a proposed section 107 direction to apply to Crown Agents, requiring them to take the actions set out in 9.1.1-9.1.4 from the 22/23 financial year onwards;
- authorise the Minister of Finance and the Minister for the Public Service to consult with affected Crown Agents in June 2021 on the proposed section 107 direction:
- note that for the third tranche officials will encourage the Office of the Clerk of House of Representatives, the Parliamentary Service, the Reserve Bank of New Zealand, Offices of Parliament, Universities and Tertiary Institutions (including NZIST) to take the actions set out in 9.1.1-9.1.4 from the 22/23 financial year onwards, by sharing guidance, training and resources with them, maintaining regular communications and encouraging them to share this information with the Programme Lead and in their annual reports;
- note the correction in the table in Appendix 1, that the Office of the Clerk of the House of Representatives and Parliamentary Services can only be encouraged (rather than instructed);
- 16 Confidential advice to Government

Emissions reporting for the schooling sector

- agree that the Ministry of Education report on the direct greenhouse gas emissions from fuel use (Scope 1) and indirect greenhouse gas emissions from imported energy (Scope 2) for the state schooling sector from the 2022/23 financial year onwards;
- note that the Ministry of Education, in consultation with the Ministry for the Environment, will report back to the Minister of Education and Carbon Neutral Government Programme Ministers by December 2021 on what other sources of Scope 1 and Scope 3 emissions can be collected and reported on for the state schooling sector, the associated costs and recommendations for further emissions reporting in the schooling sector;

Arrangements for the Carbon Neutral Government Programme's ongoing coordination and governance

agree that the interim coordination and governance arrangements set out in November 2020 [CAB-20-MIN-0491 refers] continue over the next year and are reviewed in March 2022 by the Carbon Neutral Government Programme Ministerial Group;

Boundaries of reporting

20 note that guidance will be provided to Carbon Neutral Government Programme participants on the boundaries of reporting and this will align with international and national best practice whilst maintaining some flexibility;

Transitioning the government fleet to low-emissions vehicles

- 21 note that in November Cabinet agreed that when replacing vehicles, Procurement Mandated agencies be required to choose a battery electric vehicle, or a plug-in hybrid electric vehicle if a BEV is not appropriate for the proposed use, unless there are operational requirements or other circumstances that prevent them from doing so [CAB-20-MIN-0491];
- note that the Ministry of Business, Innovation and Employment is in the process of amending the existing fleet procurement guidance and requirements for agencies to reflect the above decision, including working with the Energy Efficiency Conservation Authority (EECA) to develop parameters to guide agencies on why a low-emission vehicle may not be a practical option and when an exemption to procure a petrol or diesel vehicle may be considered reasonable;
- 23 note that leasing (as opposed to owning) vehicles reduces the upfront capital cost barrier to transitioning the fleet and that officials are exploring the opportunity that leasing may provide and the associated different financing options;
- note that the Ministry of Business, Innovation and Employment will revise the existing government fleet 'dashboard' monitoring to reflect the "electric vehicles first" policy and provide more transparency on progress;
- invite the Minister for Economic and Regional Development and the Minister of Climate Change to report back to Cabinet by 30 June 2021 on:

- 25.1 progress towards transitioning the government fleet to low-emissions vehicles;
- 25.2 the development of a transition timeline;
- 25.3 any remaining barriers to the transition and options to address them;
- 25.4 advice on mechanisms to support agencies to accelerate the transition, including on different financing options;
- 26 direct Chief Executives of Procurement Mandated agencies to provide costed plans for transitioning to low-emissions vehicles to MBIE for inclusion in the June 2021 report back above;

Estimated costs of implementing NABERSNZ for government offices

- 27 note that the Government Property Group estimates that the total cost to those agencies subject to the Property Mandate, to undertake National Australian Built Environment Rating System (NABERSNZ) assessments for leased office accommodation over 2,000m² is expected to be between Confidential advice to Government
- 28 note that:
 - 28.1 the estimate of cost for agencies in undertaking NABERSNZ for leased office accommodation over 2,000m² for agencies under the Property Mandate, does not include the investment that may be required to achieve the rating level, as it is not possible to quantify this until after an assessment has been completed;
 - 28.2 where investment is necessary to meet the required rating an agency would, if practicable, achieve the rating over an agreed period of time;
- 29 note that:
 - 29.1 EECA reports that buildings subject to recurring NABERSNZ assessments could realise estimated energy savings of four percent per year, in part due to optimisation and efficiency recommendations from assessors;
 - 29.2 ECCA expects this would drive energy cost savings Confidential advice to Government con must be a cross the portfolio, with the potential for further savings in future years;

Potential future use of Green Star

- note that the inclusion of emission reduction factors within the Green Star rating system means that Green Star has the potential to support the objectives of the Carbon Neutral Government Programme;
- 31 note that Green Star has been available in New Zealand since 2007 and that there are now other suppliers of sustainability rating services available to agencies;

- note that in Australia the use of Green Star is voluntary and the Australian Government is considering broader application of a number of rating systems including and similar to Green Star;
- note that further work is underway to consider the role of rating systems and tools, such as the Green Star rating system in supporting agencies to assess and reduce carbon emissions:

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Financial implications

- note that a bid has been submitted to Budget 2021 to support some of the short to medium term costs of putting the Government on track to reducing emissions and achieving carbon neutrality in line with best practice;
- note that there will be ongoing savings at an agency level from some of these initiatives due to either energy efficiency (e.g. in buildings) or lower energy costs (e.g. using electricity instead of petrol) that will counteract some (or all) of the costs:
- 37 note that there are longer term costs that are dependent on future actions, decisions and the cost of offsetting, so the magnitude of these costs is highly uncertain at this time.

Authorised for lodgement

Hon James Shaw

Minister of Climate Change

Hon Stuart Nash

Minister for Economic and Regional Development

Appendices

Appendix 1 – Organisations included in the Carbon Neutral Government Programme

- The table below sets out which milestones apply to the various organisations within the Public Sector.
- Note the correction in the table below regarding the Office of the Clerk of the House of Representatives and the Parliamentary Service. Previously this table noted that these departments could be instructed. However, the table has been amended to state that these departments can only be encouraged to measure and report their emissions, as these organisations are only responsible to the Speaker of the House (rather than to Ministers who can issue instructions of this nature).

		Measure, verify and report emissions	Phase out coal boilers	Purchase EVs and reduce fleet size	NABERSNZ rating requirement for large buildings
Public	Departments (32)	instructed	V X	X	Х
Service	Departmental Agencies (4)	instructed	x	x	х
Non-Public Service	In the Executive Branch	1. J.			
departments	New Zealand Defence Force	instructed	X)	х	х
	New Zealand Police	instructed	X	X	X
	Parliamentary Counsel Office	instructed	x	х	х
	In the Legislative Branch	(4)			
	Office of the Cle is of the House of Representatives	encouraged			
	Parliamentary Service	encouraged			
Crown	Statutory entities	())			
entities	Crown Agents Accident Compensation Corporation	directed	×	х	×
	Callaghan Innovation	directed	X	X	X
	Civil Avia ion Authority of New Zealand	directed	х	х	х
	District Hearth Boards (20)	directed	X	х	
N /	Earthquake Commission	directed	Х	X	X
	Education New Zealand	directed	X	X	X
No	Energy Efficiency and Conservation Authority	directed	х	х	х
	Environmental Protection Authority	directed	х	х	х
	Fire and Emergency New Zealand	directed	х	Х	х
	Health Promotion Agency	directed	Х	X	X
	Health Quality and Safety Commission	directed	Х	х	х
	Health Research Council of New Zealand	directed	х	х	Х
	Kāinga Ora – Homes and Communities	directed	X	х	X
	Maritime New Zealand	directed	X	X	X

New Zealand Walking Access Commission Pharmaceutical Management Agency Real Estate Agents Authority Social Workers Registration Board Sport and Recreation New Zealand Tertiary Education Commission WorkSafe New Zealand Crown Entity Subsidiaries of NZIST (16) School Boards of Trustees Tertiary Institutions Universities (8) Universities (8) Universities (8) Idirected X X Authority Airected X X Authority Airected Authority Airec	requirement size for large buildings
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Appendix 2 – Work already underway in the schooling sector to reduce emissions

Areas of reporting and further investigation

The table below²⁷ indicates what could be realistically collected and reported on by MoE immediately, prioritising Scope 1 and 2 emissions. This table also provides further detail on areas for investigation to understand costs, time and potential impact on School Boards, Schools and the Ministry of Education for collection of Scope 3 and elements of Scope 1 emissions:

Scope	Direct/Indirect	Source categor	у	00	
	emissions	Collect and report	Investigate	Not covered of	
Scope 1 (Mandatory)	Direct greenhouse gas emissions removals	Fuel: coal boilers.	Other fossil fuels used in boilers and generators Refrigerant use Fleet vehicles and machinery Rental vehicles	Nitrogen ferti/izer application to owned land	
Scope 2 (Mandatory)	Indirect greenhouse gas emissions from imported energy	Purchased energy: electricity	Heat or steam consumed		
Scope 3 (Mandatory) Note there are Scope 3 non-mandatory sources such as staff	Indirect greenhouse gas emissions from transportation		Staff/student travel for school business or activities (e.g. by car, bus, air), Leased fleet vehicles	Freight transport Working from home (electricity and waste)	
commuting	Indirect greenhouse gas emissions from products an organisation uses		Waste to landfill Materials and waste	Transmission and distribution losses Water supply and wastewater treatment	

²⁷ Table covers all mandatory scopes for other Carbon Neutral Government Programme participants.

- The centralised and targeted approach will mean some exclusions and risks to the intent of the Carbon Neutral Government Programme. Under best practice, comprehensive data collection of mandatory emissions from all three scopes needs to be completed to accurately offset and claim carbon neutrality.
- Note that MoE will seek assistance from MBIE on how suppliers can provide better data e.g. regulatory settings in some industry sectors make the regular collection and exchange of energy and emissions data more difficult than it needs to be for example the gas industry does not have a mechanism enabling the easy exchange of usage data like the electricity industry does.

Complementary action

- The information and data that MoE collects will be shared with schools, which will enable schools to integrate this into their delivery of the New Zealand Curriculum, of which sustainability is a core value and enable schools and their students to take their own actions to understand and reduce emissions.
- Actions to reduce emissions in this approach would be driven by existing Ministry initiatives in replacing coal boilers, installing more efficient lighting and adopting more sustainable construction practices. This includes Ministry programmes in the next four years to:
 - 5.1 remove high emission sources by replacing up to 90 coal boilers with very low-emission biomass alternatives:
 - 5.2 improving the quality and operational efficiency of learning environments (including installation of highly efficient LED lights and insulating buildings at hundreds of schools) and improving the amount and quality of data made available to state schools to inform planning and decision-making such as centrally collecting electricity data, detailed energy efficiency trials at 56 schools and carbon footprinting of school buildings).
- The Ministry of Education is also a significant participant in the construction sector, building new schools, providing additional teaching spaces at schools in areas of high population growth, rebuilding schools in Christchurch as well as redeveloping schools with significant property issues. The Ministry is undertaking trials and audits of construction and demolition waste, and is carbon profiling some school buildings to identify the embodied carbon and forecast the operational carbon over a buildings lifecycle. This will inform future school design decisions, as well the further of incorporation of carbon into asset decision making processes.

Exclusion of state-integrated schools

- A centralised approach means that state-integrated schools and their Boards are out of scope from Carbon Neutral Government Programme measurement and reporting requirements, as the different ownership of property and key infrastructure of these schools (which is owned by third party proprietors such as the Catholic Church) may make clearly identifying and accounting for emissions generated by the "government" component of state-integrated schools too difficult to determine.
- Excluding state-integrated schools from the formal measurement and reporting requirements of the Carbon Neutral Government Programme will not prevent these schools, their Boards or their Proprietors from measuring and reporting their emissions and seeking to make reductions in mell emissions. The Ministry of Education will provide information and guidance developed for State schools to state-integrated schools should they wish to participate.

Appendix 3 – Transitioning the government fleet to low-emissions vehicles

Optimising the government fleet with the aim of reducing vehicles

- Procurement Mandated agencies²⁸ are now required to optimise their fleets, with the aim of reducing the number of vehicles. EECA and MBIE are working to develop guidance to assist agencies to understand their transport requirements and optimise fleets while ensuring public value and ongoing service levels. Planning is underway to identify ways to further support agencies, including consideration of a qualified panel of experts that can provide advice on fleet optimisation, charging infrastructure and educating fleet users.
- 2 EECA has a small amount of co-funding available to support Procurement Mandated agencies to optimise their fleets.

Prioritising low-emission vehicles

- When replacing vehicles, Procurement Mandated agencies are now required to prioritise battery electric vehicles (BEV), or a plug in hybrid electric vehicle (PHEV) where a BEV is not appropriate for use, unless there are operational requirements or other circumstances that prevent this. MBIE is in the process of amending the existing guidance and procurement requirements for agencies to reflect this "electric vehicles first" (where practicable) policy. Agencies will be required to provide costed plans to MBIE for applying the "electric vehicles first" approach. The plans will include costs associated with the transition such as the vehicles, charging intrastructure, driver training and education; monitoring technology such as telematics; and termination fees for current contracts.
- Agency commitment to transitioning to low-emission vehicles will continue to be measured and demonstrated through the government fleet dashboard, which will be revised to reflect this policy and provide more transparency on progress.
- MBIE is working with EECA to develop parameters to guide agencies on why a low-emission vehicle may not be a practical option and when an exemption to procure an ICE vehicle may be reasonable. Some agencies may have specific operational requirements that are not covered by this guidance and may choose to develop internal guidance.
- Agencies will be asked to ensure that where they are not purchasing a low-emission vehicle that they have in place an exemption process that documents the operational requirements or other circumstances that mean a low-emission vehicle is not a practical option. These exemptions will be required to be in writing and authorised at the appropriate level within the agency.

²⁸ Around 139 agencies are required to apply the Government Procurement Rules. See Appendix 1 for which organisations this applies to within the Carbon Neutral Government Programme.

Work on this is progressing to ensure charging infrastructure rollout is coordinated and that chargers are future-proofed.

Impact of transitioning to low-emission vehicles on existing arrangements

- The Government Procurement Rules have included a focus on the procurement of low-emissions goods, including the procurement of low-emission vehicles, since October 2019. The all of government (AoG) motor vehicle panel has a range of low-emission vehicles available to ensure agencies can reduce their emissions profiles.
- Vehicle suppliers apply to be part of the AoG motor vehicle panel and are subject to the AoG Motor Vehicle Terms and Conditions. Being on the AoG motor vehicle panel does not provide a supplier with a commimment that an agency or agencies will procure vehicles from that supplier²⁹. Some suppliers on the AoG motor vehicle panel do not supply low-emission vehicles confidential advice to Government
- There are mechanisms within the AoG contract that allow New Zealand Government Procurement (NZGP) on benalf of the government to assure itself of pricing constructs to deliver public value.

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²⁹ Some agencies may have other contractual arrangements in place with a particular vehicle supplier or suppliers due to specific operational requirements.

Appendix 4 – Consideration of different financing options to support the procurement of electric vehicles

Agencies can either own or lease vehicles in their fleet, and (all else being equal) it will cost them more either way to replace one with an electric vehicle

- Electric vehicles have a high upfront cost that creates a barrier to agencies purchasing them. The State Sector Decarbonisation Fund provides capital of up to \$30,000 per electric vehicle and up to \$5,000 per charger, and experience to date suggests this level of funding is sufficient to enable agencies to cover the upfront incremental costs of replacing internal combustion engine vehicles with EVs. For EV projects funded to date, the average capital contribution paid by EECA under the State Sector Decarbonisation Fund is \$26,800 per vehicle and \$3,185 per charger.
- Agencies have the option of leasing instead of owning their vehicle fleet about one third of Procurement Mandated agencies have leasing arrangements. Leasing vehicles spreads the cost out over a number of years as an operating expense (as opposed to spending capital upfront). Taking out a lease on an electric vehicle will likely cost more than a lease on a petrol or diesel vehicle.
- Agencies need not replace every vehicle in their fleet with an electric vehicle we have directed Procurement Mandated agencies to undertake fleet optimisation with the aim of reducing the size of the fleet, and therefore the cost of the transition.

Leasing vehicles provides an opportunity for different financing options

- Leasing (as opposed to owning) vehicles reduces the upfront capital cost barrier agencies face in transitioning their fleets, and can also provide an opportunity for different financing options. Agencies considering an alternative financing option for vehicle leasing will need to ensure compliance with the Public Finance Act 1989, which will need to be assessed on a case by case basis³⁰.
- An example of a financing option is the electric vehicle financing product offered by Sustainable Fleet Finance (SFF), a subsidiary of New Zealand Green Investment Finance (NZGIF).³¹ NZGIF invests its capital, in combination with other investors on a commercial basis, in companies, projects and technologies that accelerate emissions reductions³².

³⁰ While the Public Finance Act does not prohibit alternative financing / operating lease arrangements, there is some complexity and practicalities that need to be considered, such as the potential to need for approval from the Minister of Finance.

³¹ NZGIF is a Crown owned company established (with an initial \$100 million) to accelerate investment into New Zealand's low carbon future. The Minister of Finance and Minister for Climate Change each hold 50 percent of NZGIF's issued share capital. It is listed in Schedule 4A of the Public Finance Act 1989 and makes its own independent investment decisions.

³² NZGIF recently invested in SFF through its purchase of Carbn Group

6 Confidential advice to Government

This

could include the development of collective approaches that may improve economies of scale or supply-side challenges. Officials will also further investigate any issues with, and solutions to, complying with the Public Finance Act.

Appendix 5 – Estimated costs of implementing NABERSNZ for the government office portfolio

- The Government office accommodation portfolio is a significant part of the commercial office accommodation sector in New Zealand³³. This allows Government to take a leadership role to influence energy efficiency in the office market. The National Australian Built Environment Rating System New Zealand (NABERSNZ) rates the energy performance of office buildings on a six-star scale.
- Agencies that are subject to the Property Mandate; see Appendix 1 for which Carbon Neutral Government Programme participants the NABERSNZ requirement applies to) with leased office accommodation over 2 000m² are now required to work with their landlords who will engage an accredited assessor to begin the NABERSNZ assessment process. This assessment will be a base building³⁴ assessment. For office accommodation over 5000m², agencies will also engage an assessor to obtain a tenancy³⁵ assessment. These agencies are required to begin NABERSNZ at the next available opportunity (such as a lease renewal). Agencies with leases that are not due for renewal before the end of 2025 will be required to complete their first assessment by December 2025.
- The initial NABERSNZ assessment and monitoring period is 12 months. At the end of this period, the assessor will advise the energy efficiency rating and discuss what, if any, action might be needed to bring the building up to the required NABERSNZ rating³⁶. For some office buildings, it may take several yearly reassessments³⁷ and adjustments over a number of years to reach the required four star NABERSNZ energy efficiency rating.
- The Government Property Group (GPG) has worked with the Energy Efficiency and Conservation Authority (EECA) to develop more detailed estimates of the cost, for agencies subject to the Property Mandate, with leased sites over 2,000m², to implement NABERSNZ [CAB-20-MIN-0491 refers]. The NABERSNZ requirement is expected to apply to 104³⁸ of the 570 buildings currently leased by Property Mandated agencies. The leases for these 104 buildings are neld by 35³⁹ of the 67 Property Mandated agencies.

³³ The Government office portfolio is 970,460m² across 570 buildings and in Wellington accounts for approximately 30 percent of the office premises market.

A base build assessment measures the energy performance of a building's core services, including but not limited to, the lifts, stairwell lighting, common toilets, air conditioning and ventilation.

³⁵ A tenancy assessment measures just the floors and areas occupied exclusively by the tenant, including energy use such as computers, lighting, data centres, and staff kitchens.

³⁶ The e will be a requirement to achieve a minimum of a four star rating, but to target a rating above five stars, when establishing a new lease on an existing building or renewing an existing lease. Agencies entering into a lease for a new build project will need to achieve a minimum of a five star rating.

³⁷ Each reassessment requires a 12 month monitoring period.

³⁸ Across the Government office portfolio expected to be 104 leases are for leased office accommodation over 2000m² and these will require a Base Building assessment, and around 43 leases are for office accommodation over 5000m² and these will also require a tenancy assessment.
³⁹ This means that 32 of the 67 Property Mandated agencies do not lease office accommodation sites that are over 2,000m².

- 5 EECA advises that the cost for undertaking a NABERSNZ building assessment is estimated to be between Free and frank opinions GPG estimates⁴⁰ that the total cost to agencies of undertaking NABERSNZ assessments across those properties to which the requirement applies will be between Free and frank opinions
- This estimate of costs does not include the investment that may be required to achieve the required rating level, as it is not possible to quantify this until after the NABERSNZ assessment has been completed. EECA advises that some buildings may only require low cost systems and operating changes, but some buildings may require further capital investment. Where investment is necessary to meet the required rating an agency would, practicable, achieve the rating over an agreed period of time.
- FECA reports that buildings subject to recurring NABERSNZ assessments could realise estimated energy savings of four percent per year, in part due to optimisation and efficiency recommendations from assessors. EECA expects this would drive energy cost savings of Free and frank opinions across the portfolio, with the potential for further savings in future yearsProperty mandated agencies have varying office accommodation portfolios. This is due to agency size, location needs and multi-office requirements. This means that some agencies will be more impacted by the NABERSNZ requirement than other agencies, as the larger their property portfolio is, the more assessments will be required to achieve the required NABERSNZ rating⁴¹. For further information, the table below shows the number of agencies that are affected and an estimation of how many assessments will take place over the next five years.

Summary of the forecast NABERSNZ assessments by calendar year

The table below snows the forecast NABERSNZ assessments (first assessments and estimated reassessments) for each calendar year, recognising that each assessment and reassessment takes 12 months. The actual number of reassessments will depend on the level of the initial rating achieved.

Free and frank o	ומ	in	101	าร
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⁴¹ There will be a requirement to achieve a minimum of four stars when establishing a new lease or renewing an existing lease, and a minimum of five stars for a new build project.

Forecasted	NABERSNZ assessments b	y calendar year	
	Total first assessments completed (base build and tenancy)	Estimated reassessments completed	Estimated buildings achieving minimum rating by Dec 2025
2021	First year commences with	initial assessments a	nd collection of energy data
2022	31	0	5
2023	42	24	13
2024	26	50	23
2025	26	44	36
Cumulative	125	118	A C

- Assumptions: The forecast of NABERSNZ assessments by calendar year assumes that the quality or grade of an office building is likely to indicate the number of assessments that will be required to reach the minimum four star NABERSNZ rating and that:
 - grade A office buildings achieve a minimum star rating after first assessment;
 - grade B office buildings achieve a minimum star rating on the third assessment;
 - grade C office buildings and lower require at least three assessment to achieve the minimum star rating.

Appendix 6 - Snapshot of boilers in the State sector

- A high level snapshot of boilers in the State sector is provided below. Note that:
 - This information should be treated as indicative only, particularly for nonnatural gas boilers because for some subsectors EECA does not hold these numbers.
 - Where a table cell has no value below (shaded) this means that EECA does not hold the data. A shaded cell does not mean that the value for that cell is zero.
 - EECA has not presented an indicative total for several columns where they do not hold enough information to provide a meaningful figure.
 - This is a boiler count, and does not discriminate in size. There are subsectors with only a few small boilers, while others are mostly small boilers.

		Indi	cative # of b	ollers by fu	iel type ⁴²	
Sector	Coal	Diesel	Natural Gas	LPG	Biomass	Electric
Health (DHBs)	25	35	194	3	5	16
Education (Primary / Secondary)	211	149	797			
Education (Tertiary) ⁴³	5	1	293			
Corrections	N T	3	9	3	1	
NZDF 6	2	(2)	>40		1	
Indicative total	244	189	1,333			

⁴² Shaded cells denote no information available, not 'zero'

⁴³ Does not include polytechnics