



Education Report: Report back on emissions reporting for the state schooling sector as part of the Carbon Neutral Government Programme

To:	Carbon Neutral Government Programme Ministerial Group Hon Chris Hipkins, Minister of Education		
Date:	17 January 2022	Priority:	High
Security Level:	In Confidence	METIS No:	1277851
Drafter:	Elliot Jones	DDI:	+6444638712
Key Contact:	Will Jensen	DDI:	+6444395496
Messaging seen by Communications team:	No	Round Robin:	No

Purpose of Report

This report outlines the Ministry of Education's options for emissions reporting on behalf of the state schooling sector as part of the Carbon Neutral Government Programme.

Summary

- 1 Cabinet established the Carbon Neutral Government Programme (CNGP) in November 2020, which aims to make the government carbon neutral by 2025. Cabinet noted that some exemptions or a different approach to reporting may need to be made for entities such as the 2,416 School Boards of Trustees [CAB-20-MIN-0491]. This recognised that many School Boards were unlikely to have the capacity or capability to undertake comprehensive emissions reporting as part of the CNGP.
- 2 In March 2021, the Cabinet Business Committee agreed that Te Tāhuhu o te Mātauranga | Ministry of Education (the Ministry) would undertake emissions reporting for Scope 1 and Scope 2 sources on behalf of the state schooling sector [CBC-21-MIN-0030]. The Cabinet paper outlined that this reporting would include emissions from coal and electricity use in the first instance and directed the Ministry to investigate which other emissions sources could be collected and reported.
- 3 Cabinet agreed that the baseline reporting year for the state schooling sector is 2022/23, with the first emissions reduction plan due in December 2023 [CBC-21-MIN-0030].
- 4 After undertaking an investigation into emission sources in the state schooling sector the Ministry has, in consultation with the Ministry for the Environment, developed options and a recommended initial approach for emissions reporting for


the state schooling sector that supports the Government's environmental and educational objectives.


- 5 The two options analysed in the report back are:
 - a. Option A: Report on emissions sources that can be efficiently and effectively collected centrally.
 - b. Option B (Recommended): Report on emissions sources that can be efficiently and effectively collected centrally and model the remaining emissions sources.
- 6 Based on our investigation emissions from sources that can be efficiently and effectively collected centrally cover approximately 75% of emissions for the state schooling sector.
- 7 These options enable the Ministry to take advantage of the highest impact emissions reduction opportunities across the state schooling portfolio and demonstrate leadership through the CNGP. It also responds to schools' desire to be involved in our climate response, without placing an undue burden on them.
- 8 The Ministry did consider the feasibility of reporting on all material emissions sources in the state schooling sector on their behalf. However, we quickly identified that collecting some emissions data was not practical and that schools will not be able to provide the level of information necessary to enable this, even if mandated to.
- 9 By 1 July 2022, the Ministry will provide updated guidance to empower schools, staff and students to actively engage in operational carbon emissions reduction efforts and will have developed internal Ministry systems to enable the state schooling sector's reporting and emissions reduction contribution to the CNGP.
- 10 The Ministry will continue to work on ways to collect emissions sources not within the initial approach, remaining aware of the context-specific challenges we will face in reporting on behalf of the state schooling sector.

Recommended Actions

The Ministry of Education recommends you:

- a. **note** that the CNGP aims to make the government carbon neutral by 2025 [CAB-20-MIN-0491].


- b. **note** that Cabinet agreed that the Ministry of Education will report on 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 [CBC-21-MIN-0030].


- c. **note** that Cabinet directed the Ministry of Education, in consultation with the Ministry for the Environment, to report back to CNGP 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 [CBC-21-MIN-0030].

Noted

d. **agree** to either:

- a. **Option A:** Report on emissions sources that can be efficiently and effectively captured centrally, representing approximately 75% of total emissions across the state schooling sector.

Scope	Emissions included in Option A
Scope 1	Coal emissions Reticulated Natural Gas Emissions LPG Emissions
Scope 2	Electricity Emissions
Scope 3	Daily Bus Routes Electricity Losses Fuel Well-to-Tank

Agree / Disagree

OR

- b. **Option B (recommended):** Report on emissions that can be efficiently and effectively captured centrally and model the remaining emissions sources.

Agree / Disagree

- e. **note** that we investigated methods to accurately collect information to report on all emission sources in the state schooling sector, however several factors mean this is not practically possible at this stage.

Noted

- f. **note** that a package of guidance is being developed to support schools to reduce their operational carbon emissions, move towards more sustainable management of their assets, and model good energy efficiency practice.

Noted

- g. **agree** that the Ministry of Education will proactively release this briefing, subject to any redactions necessary under the Official Information Act 1982 and following final decisions by Carbon Neutral Government Programme Ministers.

Agree / Disagree



Scott Evans
Hautū, Te Puna Hanganga, Matihiko

17/1/2022



Hon Chris Hipkins
Minister of Education
Minister for Public Service

20/12/21

Hon Stuart Nash
Minister for Economic and
Regional Development

1/1/



Hon James Shaw
Minister of Climate Change

10/2/22

Hon Megan Woods
Minister of Energy and Resources

1/1/



Hon Grant Robertson
Minister of Finance

27/03/2022

other sources of Scope 1 and Scope 3 emissions can be collected and reported on for the state schooling sector [CBC-21-MIN-0030].

Noted

d. **agree** to either:

- a. **Option A:** Report on emissions sources that can be efficiently and effectively captured centrally, representing approximately 75% of total emissions across the state schooling sector.

Scope	Emissions included in Option A
Scope 1	Coal emissions Reticulated Natural Gas Emissions LPG Emissions
Scope 2	Electricity Emissions
Scope 3	Daily Bus Routes Electricity Losses Fuel Well-to-Tank

Agree / Disagree

OR

- b. **Option B (recommended):** Report on emissions that can be efficiently and effectively captured centrally and model the remaining emissions sources.

Agree / Disagree

- e. **note** that we investigated methods to accurately collect information to report on all emission sources in the state schooling sector, however several factors mean this is not practically possible at this stage.

Noted

- f. **note** that a package of guidance is being developed to support schools to reduce their operational carbon emissions, move towards more sustainable management of their assets, and model good energy efficiency practice.

Noted

- g. **agree** that the Ministry of Education will proactively release this briefing, subject to any redactions necessary under the Official Information Act 1982 and following final decisions by Carbon Neutral Government Programme Ministers.

Agree / Disagree



Scott Evans
Hautū, Te Puna Hanganga, Matihiko

17/1/2022



Hon Chris Hipkins
Minister of Education
Minister for Public Service

20/12/21



Hon Stuart Nash
Minister for Economic and
Regional Development

 / /

Hon James Shaw
Minister of Climate Change

 / /

Hon Megan Woods
Minister of Energy and Resources

 / /

Hon Grant Robertson
Minister of Finance

 / /

other sources of Scope 1 and Scope 3 emissions can be collected and reported on for the state schooling sector [CBC-21-MIN-0030].

Noted

d. **agree** to either:

- a. **Option A:** Report on emissions sources that can be efficiently and effectively captured centrally, representing approximately 75% of total emissions across the state schooling sector.

Scope	Emissions included in Option A
Scope 1	Coal emissions Reticulated Natural Gas Emissions LPG Emissions
Scope 2	Electricity Emissions
Scope 3	Daily Bus Routes Electricity Losses Fuel Well-to-Tank

Agree / Disagree

OR

- b. **Option B (recommended):** Report on emissions that can be efficiently and effectively captured centrally and model the remaining emissions sources.

Agree / Disagree

- e. **note** that we investigated methods to accurately collect information to report on all emission sources in the state schooling sector, however several factors mean this is not practically possible at this stage.

Noted

- f. **note** that a package of guidance is being developed to support schools to reduce their operational carbon emissions, move towards more sustainable management of their assets, and model good energy efficiency practice.

Noted

- g. **agree** that the Ministry of Education will proactively release this briefing, subject to any redactions necessary under the Official Information Act 1982 and following final decisions by Carbon Neutral Government Programme Ministers.

Agree / Disagree



Scott Evans
Hautū, Te Puna Hanganga, Matihiko

17/1/2022

Hon Chris Hipkins
Minister of Education
Minister for Public Service

___/___/___

Hon Stuart Nash
Minister for Economic and
Regional Development

___/___/___

Hon James Shaw
Minister of Climate Change

___/___/___



Hon Megan Woods
Minister of Energy and Resources

31 /03/ 2022

Hon Grant Robertson
Minister of Finance

___/___/___

Background

1. On 30 November 2020 Cabinet agreed to establish the Carbon Neutral Government Programme (CNGP) which aims to make the government carbon neutral by 2025 [CAB-20-MIN-0491].
2. The CNGP is a long-term work programme for CNGP organisations to:
 - a. measure, verify and report emissions annually;
 - b. set gross emissions reductions targets and longer-term reduction plans for the next decade;
 - c. introduce a phased work programme to reduce organisations' emissions; and
 - d. offset after gross emissions reductions are made to achieve carbon neutrality.
3. As the second largest social property portfolio in New Zealand, with over 2100 schools and over 16,000 buildings, the state schooling sector can significantly impact public sector carbon emissions across the country and contribute to the Government's carbon goals.
4. In March 2021, the Cabinet Business Committee agreed that the Ministry would undertake emissions reporting for Scope 1 emissions from fuel use and Scope 2 emissions from imported energy, on behalf of the state schooling sector [CBC-21-MIN-0030]. It was outlined that this included emissions from coal and electricity use, as processes were already underway.
5. Cabinet noted that the Ministry of Education, in consultation with the Ministry for the Environment, would undertake further work to establish what additional emissions sources could be collected and reported on for the state schooling sector [CBC-21-MIN-0030].
6. The decision to centralise emissions reporting for the schooling sector aligns with the direction set by the Government's Reform of the Tomorrow's Schools System. As part of this system reset, the Government is seeking to reduce the burden on schools by simplifying or removing some responsibilities from schools. A key aspect of our proposal is minimising undue administrative burden on state school boards.
7. In March 2021, the Cabinet Business Committee was informed that the centralised approach and different ownership arrangements meant that state-integrated school Proprietors and their Boards were out of scope for CNGP reporting. However, this will not prevent these schools, their Boards or their Proprietors from measuring and reporting their emissions and seeking to make reductions.
8. The purpose of emissions reporting for the state schooling sector is to highlight sources of significant emissions to focus emissions reduction strategies on, and to demonstrate progress in reducing those emissions. This supports the findings of our investigation, which suggests that Government can achieve the greatest impact by focussing reduction efforts at the portfolio or programme level, such as the current Ministry-led Coal Boiler Replacement Programme, funded through the Clean Powered Public Service Fund.

Approach to developing a centrally-led emissions reporting model

9. In response to Cabinet's directive, the Ministry of Education is developing a centrally-led emissions reporting model to take effect from the 2022/23 baseline reporting year. Our centrally-led model is grounded in six key principles that align closely with the objectives of CNGP. We are trying to achieve a reporting regime for the schooling sector that:
 - a. has broad coverage across the state schooling sector and sufficient coverage to demonstrate Government leadership;
 - b. has a low compliance cost on schools;
 - c. focuses on the most significant emissions sources that can be reduced centrally;
 - d. delivers accurate data across emissions sources;
 - e. has a clear reporting boundary that reflects the Ministry's organisational reach; and
 - f. leverages the unique opportunities available through the Education system.
10. The approach also needs to support the aims of the CNGP to accelerate emissions reduction and for the public sector to show leadership in reducing emissions.
11. To this end the Ministry has undertaken an investigation into operational carbon emissions at a subset of 56 schools across the portfolio. The investigation provided advice on:
 - a. the quantity of greenhouse gas emissions that are produced as a result of the activities and operations of schools;
 - b. the relative contribution of individual emissions sources to schools' overall emissions profiles;
 - c. what is required from suppliers and/or schools to source this information, including the process by which data is collected for each emission source and the associated compliance costs for schools; and
 - d. the levers available to the Ministry to efficiently and effectively centrally collect emissions data.

Results of investigation into emissions sources

12. The Ministry undertook an operational carbon baseline assessment for the 2019 calendar year. This year was chosen because it is more representative of actual emissions across the portfolio, when compared to the 2020 school year which was disrupted by COVID-19.
13. The investigation aimed to undertake 100% emissions reporting at 56 schools that had previously taken part in energy efficiency trials conducted by the Ministry in 2020.
14. Fifty-two of the 56 schools provided data for the carbon footprint assessment. Four schools were either unable or unwilling to participate. Based on the operational

emissions across the 52 schools and wider data available, extrapolated figures for the entire state schooling sector are broken down in Table 1 below.

Table 1: Breakdown of extrapolated operational carbon emission across the state schooling sector per annum¹

Scope	Direct/indirect emissions	Annual Emissions
Scope 1 (mandatory)	Direct greenhouse gas emissions and removals	21,360 tCO ₂ e
Scope 2 (mandatory)	Indirect greenhouse gas emissions from imported energy	13,320 tCO ₂ e
Scope 3 (mandatory) <i>Note there are Scope 3 non-mandatory sources such as staff commuting</i>	Indirect greenhouse gas emissions from transportation & indirect greenhouse gas emissions from products an organisation uses	44,340 tCO ₂ e
Total		79,020 tCO₂e

15. Two steps were used to extrapolate the data to estimate emissions for the state schooling sector.
 - a. Use real portfolio level activity data where available (e.g. Ministry contracted bus routes).
 - b. Create emissions factors for emissions sources where no portfolio level data was available.
 - i. These factors were based on the information obtained in developing the full emissions reporting. These factors were then applied to the sector based on the characteristics of the schools in the sample (school type, location and roll) versus the characteristics of the sector.
16. A detailed breakdown of the various emissions sources is available in Appendix 1.

Data collection: opportunities and challenges

17. The investigation showed that collecting data on all emissions sources requires input from schools and will incur costs for the Ministry and schools. It also showed that a level of technical expertise is required to collect data on most emissions sources.
18. The data broadly falls in to two categories:
 - a. Data that can be centralised with little direct input from schools.
 - b. Data that requires consistent collation, tracking and updating by schools.

¹ The methodology for quantification and emission factors come from the Ministry for the Environment's *Measuring Emissions: A Guide for Organisations* (2020).

19. Opportunities to centralise data collection largely fall in Scope 1 and 2, with emission sources in Scope 3 consistently requiring significant data collection work for schools.

School level collection

20. The Ministry's investigation into emissions reporting for schools found that there are capability and capacity issues in data collection at a school level. This variance in capability and capacity is in line with information gathered in other work and engagement with the sector, i.e. Tomorrow's Schools Review. Together these support Cabinet's earlier decision to centralise emissions reporting.
21. The investigation also showed that there is variability in the quantity and quality of data gathered from schools, and that this is a more significant problem for Scope 3 emission sources.
22. It highlighted that the ability to provide information differs depending on school size. For example, some smaller schools found it simpler to provide information as one person was normally across it all.
23. The investigation also showed that not all schools will provide information. In this case four schools did not provide any information despite repeated phone calls with the schools and offers to visit schools. This was due to the schools having insufficient time or resources to collect the data. All schools involved in this trial had previously been involved in energy efficiency trials run by the Ministry, so engagement was expected to be high, given these schools were effectively self-selecting. It is likely that non-response and other issues will be more prevalent across the sector.

Centralised collection

24. The investigation showed several opportunities to centralise data collection with minimal input required from schools, and therefore less chance for data error. This was generally limited to emissions within Scope 1 and 2, where there are opportunities to source data directly from suppliers.
25. We were already able to commit to reporting on electricity emissions because there exists an effective process to gather electricity consumption information direct from retailers. This process is enforced by the Electricity Authority as part of the Electricity Industry Participation Code.
26. This process allows school's electricity consumption information to be requested from retailers with school's explicit authorisation. Since first introduced in 2017 this has given the Ministry access to approximately half of state schools electricity consumption information. We are working to accelerate take-up for CNGP reporting purposes.
27. Given the overlap between electricity and gas retailers we have been working to create a similar process for collecting gas consumption information. The absence of a regulator in the gas market means that conversations must be had directly with each gas retailer.

Possible options for emissions reporting for the state schooling sector

28. The possible options for emissions reporting for the state schooling sector are targeted at achieving the intent of the CNGP, while also achieving the principles outlined in paragraph 9 of this report. These options have been developed in consultation with the Ministry for the Environment.

29. The Ministry initially identified three options:
- Option A: Report on emissions sources that can be efficiently and effectively collected centrally.
 - Option B: Report on emissions sources that can be efficiently and effectively collected centrally, and model the remaining emissions sources.
 - Option C: Report on all emissions sources.
30. The Ministry did consider the feasibility of reporting on all material emissions sources in the state schooling sector on their behalf (Option C). However, we quickly identified that collecting some emissions data was not practical e.g. wastewater, waste-to-landfill, refrigerant losses. We also identified that schools will not be able to provide the level of information necessary to enable this, even if mandated to.
31. The emission sources that currently cannot be efficiently and effectively, or in some cases practically, collected centrally include those that would either place an undue burden on schools to collect and/or sources that individually are small contributors to overall emissions in the state schooling sector. These are detailed in Table 2.
32. Some schools would be able to provide data for full emissions reporting if asked or mandated to. However, our experience in similar endeavours highlights challenges we will face in obtaining data that can be technical or require consistent reporting. For example, since 2017 the Ministry has run a process to collect school's electricity consumption information, which requires two simple actions from schools. Every state school has been contacted at least once, many multiple times, with the response rate only reaching 50% this year.
33. Therefore, only Option A and Option B were analysed.

Table 2: Emission sources from investigation that cannot be efficiently and effectively collected centrally

Scope	Emissions not in scope	Details	Estimated Percentage Contribution
Scope 1	Refrigerant Losses	This is mainly related to heat pumps. Methods to capture refrigerant leakage require a certain level of technical knowledge that most schools will not have.	2%
	Fleet Vehicles	Fuel use from vehicles owned by schools. Investigation found that schools likely record dollars spent on fuel not quantities of fuel.	3%
	Diesel	Diesel used in heating provision. Investigation found that schools likely record dollars spent on fuel not quantities of fuel.	1%

	Wood	Wood used in heating provision. Investigation found that schools likely record dollars spent on wood, if any, not quantity.	>1%
Scope 3	Road Travel	This would include all road travel related to school trips and by staff related to work. Typically schools will only have invoices from contracted bus company. This will not have quantity of fuel used, and may not even have distance travelled.	1%
	Air Travel	This includes all air travel related to school trips and by staff related to work. This alone is a significant source of emissions which will need to be addressed in future, but requires the development of a system to enable data input by schools.	9%
	Accommodation (School Trips)	This would include all accommodation related to school trips and for staff related to work. Difficult for larger schools as they are typically organised by different staff.	1%
	Waste to Landfill	Often required an estimate based on the number of bins and approx. volume and would require the type of landfill used as well.	3%
	Wastewater	There is no nationwide consistency on the tracking of water sent to treatment by specific users, so the information is not available.	4%
	Water Supply	Investigation found that this was typically unknown. Nationwide, there is no consistency on the tracking of water usage by specific users, so the information is not available.	>1%
Total			25%

Option A: Report on emissions sources that can be efficiently and effectively collected centrally

34. Cabinet has already agreed that the Ministry will report on Scope 1 emissions from fuel use and Scope 2 emissions from imported energy [CBC-21-MIN-0030]. The Cabinet paper outlined that this included emissions from coal and electricity use, as processes were already underway.

35. Modelling for the whole portfolio based on the 52 schools investigated suggests this approach would cover only 30% of emissions across the state schooling sector.²
36. From the 2022/23 baseline reporting year, the Ministry recommends going beyond this and that emissions sources outlined in Table 3 are collected centrally and reported on by the Ministry. Modelling for the whole portfolio suggests that this would cover approximately 75% of emissions in the state schooling sector without placing an undue burden on schools.³

Table 3: Emissions sources that can be efficiently and effectively collected centrally

Scope	Emissions to be reported for schooling sector	Details	Estimated Percentage Contribution
Scope 1	Coal emissions	Based on coal consumption used in boilers, gathered from schools.	12%
	Reticulated Natural Gas Emissions	Emissions from piped natural gas consumption, collected with assistance from schools through a process agreed with gas retailers.	8%
	LPG Emissions	Emissions from bottled gas consumption provided by reticulated gas retailers, collected with assistance from schools through a process agreed with gas retailers.	<1%
Scope 2	Electricity Emissions	Emissions from purchased electricity, collected with assistance from schools through the prescribed Electricity Authority process.	17%
Scope 3	Daily Bus Routes	Travel emissions associated with key categories of Ministry procured school bus routes. This will be calculated through information available through the contract from providers. It will cover approximately 94% of transport funded directly by the Ministry. The remaining 6% are funded differently meaning that there is a wide range of means used to achieve the desired outcome. This makes data collection incredibly difficult.	31%
	Electricity Losses	Transmission and distribution losses calculated from information collected in Scope 2 using published MfE emission factors.	1%

² Based on the findings of the Ministry's investigation

³ Ibid.

	Fuel Well-to-Tank (Related to energy emissions being reported in scope 1)	All the GHG emissions released into the atmosphere from the production, processing and delivery of fuel calculated from the information collected in Scope 1 using published MfE emission factors	5%
Total			75%

37. The Ministry is currently developing systems to gather this data. This includes leveraging existing processes especially in the electricity space. As much as possible, we intend to get information on Scope 1 and 2 sources directly from energy retailers. This will involve setting up processes similar to the existing process for capturing electricity consumption information. We are engaging with energy retailers to set this up without the regulatory foundation that exists in the electricity market.

38. 9(2)(f)(iv)

Option B (Recommended): Report on emissions sources that can be efficiently and effectively collected centrally, and model the remaining emissions sources

39. Our modelling suggests that the emissions sources that currently cannot be efficiently and effectively collected equal approximately 25% of emissions for the state schooling sector, as explained in Table XX above. This is a significant proportion of total emissions – 19,250 tCO₂e which equates to close to 80,000 Wellington to Auckland return flights. This risk needs to be accounted for and mitigated in future reporting for the schooling sector.

40. We currently do not have established systems to capture data on these emissions. To have an understanding over time of reductions in these emissions sources the Ministry could model these emissions in the same way that our initial investigation did. We would use the 2019 carbon profiling as a baseline, with periodic reviews to understand actual carbon reduction in the sector. We would endeavour to undertake the first review after the 2022/23 financial year, subject to Budget processes. At this stage we envisage reviews every three years.

41. 9(2)(f)(iv)

42. 9(2)(f)(iv)

43. Under Option B, the Ministry's reporting on behalf of the state schooling sector would be comprised of two parts:
- a. Emissions from sources that can be collected centrally (75%); and
 - b. Emissions from sources that are being modelled (25%).
44. We will work to wrap more emissions sources into central reporting as systems are established to do this accurately. However, in the interim, Option B provides a balance that accounts for the issues.

Empowering schools to take their own action

45. Beyond centrally-led data collection and reporting, the Ministry is working with the Ministry for the Environment and the Energy Efficiency and Conservation Authority to produce guidance to empower schools, staff and students to actively engage in operational carbon emissions reduction efforts. This school guidance package contributes to the Government's CNGP aims.
46. This guidance will equip all state and state-integrated schools with comprehensive evidence-based strategies to enhance energy efficiency and reduce carbon emissions in schools from all sources. This includes targeting emission sources that the Ministry has less ability to influence centrally i.e. air travel, waste-to-landfill. It will provide schools with generalised reduction initiatives and recommendations such as quick win energy management opportunities and behavioural changes. It will also illustrate cases where schools have effectively monitored and reduced their carbon footprint.
47. The Ministry encourages schools to incorporate emission reduction activities into their school curriculum and encourage students to engage in positive, solutions-focused climate learning and action. This guidance package will serve as an educational resource for schools and highlight opportunities for schools to link educational outcomes with climate initiatives.
48. The Ministry will continue to identify opportunities for schools to do this. As the national curriculum is refreshed over the next five years, learning relevant to climate change and emissions reduction will be strengthened in the curriculum documents for schooling and in teaching and learning resources provided by Te Poutāhū (*Curriculum Centre*) along the early learning and schooling pathways. Empowering students to take action is a central part of teaching and learning, which is reflected in existing climate change resources.
49. The Ministry supports early learning services, schools and kura to integrate learning about climate change into their local curriculum and marau ā-kura (METIS 1272054 refers). This includes learning which helps ākonga grow their understanding of climate change, as well as knowledge, skills and capabilities to respond to climate change and take action to reduce emissions. A range of supports are already available, including sustainability having prominence in the national curriculum, and a range of teaching and learning resources on the Ministry's Te Whāriki Online, Te Kete Ipurangi (TKI) and Kauwhata Reo websites (e.g. Climate Change: Prepare today, live well tomorrow and Pūtātara: A call to action).
50. The Ministry is already active in reducing emissions in the state schooling sector including through programmes to replace up to 90 coal boilers and the replacement of lights with much more efficient LED lights. The Ministry expects to continue to centrally manage programmes to reduce emissions in the state schooling sector.

Assessment of options against principles

Option A: Report on emissions sources that can be efficiently and effectively collected centrally

Principles of reporting framework	Assessment
1. <i>Broad coverage across the state schooling sector to demonstrate leadership</i>	<p>Option A includes emission sources that are found across all state schools and covers approximately 75% of emissions in the sector. This enables data collection and emission reductions at more than 2,100 schools, and for the state schooling sector to lead change in the public sector.</p> <p>However, it does not include an estimated 25% of emissions that currently cannot be efficiently or effectively collected centrally.</p>
2. <i>Low compliance cost on schools</i>	<p>In line with the direction set by the Government's Reform of the Tomorrow's Schools System, Option A does not place an undue burden on schools. It does this by, where possible, collecting information directly from the source and focusing on the most significant sources that can be collected centrally.</p>
3. <i>Focuses on the most significant emissions sources that can be reduced centrally</i>	<p>Option A includes the most significant emission sources in the state schooling sector and covers approximately 75% of all emissions.</p> <p>The focus on reporting on the most significant emissions sources will enable the Ministry to target investment towards the most efficient and effective carbon reduction opportunities, and therefore support the Government's CNGP aims.</p>
4. <i>Delivers accurate data across emissions sources</i>	<p>Cabinet noted that some exemptions or a different approach to individual reporting may need to be made for entities such as the 2,416 School Boards of Trustees [CAB-20-MIN-0491]. This recognised that many School Boards were unlikely to have the capacity or capability to undertake comprehensive emissions reporting as part of the CNGP which would lead to inconsistent and incomplete data. By centralising emissions reporting and aiming, where possible, to collect information directly from providers, Option A will deliver the most accurate data possible.</p>
5. <i>Clear reporting boundary that reflects the Ministry's organisational reach</i>	<p>Option A maximises the reach the Ministry currently has to collect information, especially the Ministry's ability to engage with the energy market directly on behalf of schools.</p> <p>By confirming a centrally-led approach, we will be able to give schools certainty about where responsibilities sit for CNGP reporting.</p>
6. <i>Leverages the unique opportunities available through the Education system.</i>	<p>Among the CNGP participants, the state schooling sector is uniquely placed to empower learners and influence communities across the country. The broad coverage of both the sector and emissions sources, in Option A, maximises this opportunity. It will enable more localised curricula by providing schools the opportunity to utilise information about their schools in teaching and learning. It will also enable the Ministry to provide better guidance to schools on how to reduce emissions.</p>

51. Option A not only supports the principles designed for the context of the education system, but also key principles of the CNGP.

CNGP Principles	Assessment
<i>Accelerated emissions reduction</i>	Option A enables accelerated emissions reductions compared to the decentralised approach of requiring schools to individually report on emissions in the same way as other organisations in the CNGP. It enables the Ministry to focus on the most efficient and effective reductions that it can directly influence and best direct guidance to schools on emissions they influence.
<i>Public sector leadership in reducing emissions</i>	Option A not only enables accelerated emissions reductions but also enables the inclusion of the whole state schooling sector in the CNGP. This means that the public sector, through the state schooling sector, can lead emissions reductions in communities across the country.

Option B: Report on emissions sources that can be efficiently and effectively collected centrally, and model the remaining emissions sources

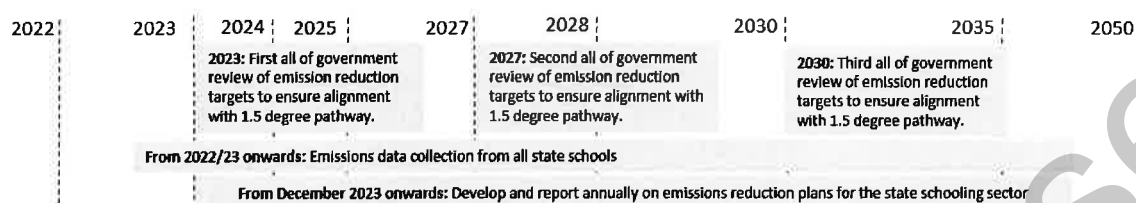
52. Option B provides the benefits listed in Option A, such as enabling accelerated emissions reductions, reducing the burden on schools, and leveraging the unique opportunities available through the Education system.
53. However, by modelling the 25% of emissions that cannot currently be efficiently and effectively collected centrally, Option B can provide insight on all material emissions sources in the state schooling sector. This will provide a better understanding of the impact of emissions reductions guidance produced for schools, and the overall impact of reduction efforts. In turn this will enable the Ministry to produce clear carbon reduction plans for the state schooling sector. It will also assist in developing processes and systems to centrally collect more emissions sources.
54. There are some risks to this approach, relating to sample selection, moving beyond the Ministry's current organisational reach for collecting information from sample schools, and misuse or misinterpretation of the modelled emissions data. However, these risks can be managed given the benefits of this option.

Recommended approach

55. Given the aims of the CNGP, capability and capacity in the state schooling sector, and systems and processes currently available, the Ministry's recommended approach is Option B.

Next Steps

56. The timeframe for state school sector reporting and ongoing engagement with CNGP is as follows.



57. We will continue work to establish processes and methods to collect data on behalf of the state schooling sector. This includes continuing to engage with energy suppliers to set up processes to collect consumption information for non-electricity energy sources. We will also continue to investigate improvements to the electricity data collection process.
58. We will continue to work on ways to include further emission sources in the centrally-led reporting approach.
59. Pending approval of the proposals in this paper, we will develop clear messaging for schools about their role in the CNGP and what we will need from them to enable us to report on their behalf. We are available to work with the Minister's office on communications about the CNGP and other work in this space in the education sector.
60. We will continue to work with the Ministry for the Environment to develop guidance for schools to enable schools to take proactive steps to identify and reduce operational carbon emissions.

Appendix 1: Breakdown of extrapolated operational emissions sources across the portfolio

Scope	Emission Source	Annual Emissions (tCO ₂ e)	Percentage of Total
Scope 1	Coal Boilers	9,520	12%
	Natural Gas	6,570	8%
	Fleet Vehicles	2,760	3%
	Refrigerant losses	1,210	2%
	Diesel	1,160	1%
	LPG	90	<1%
	Wood	50	<1%
Scope 2	Electricity	13,320	17%
Scope 3	Bus Routes	24,790	31%
	Air Travel	7250	9%
	Well-to-Tank	4070	5%
	Wastewater	3080	4%
	Waste to Landfill	2330	3%
	Electricity Losses	1140	1%
	Road Travel (School Trips)	900	1%
	Accommodation (School Trips)	600	1%
	Water Supply	180	<1%
Total		79,020	