

19-D-00957

s9(2)(a)

Dear

Thank you for your tweet of 10 May 2019 requesting the following under the Official Information Act 1982 (the Act):

...by how much will the zero carbon bill, if it succeeds, slow global warming by 2050 and 2100?

The Ministry for the Environment has not estimated the impact of the proposed Zero Carbon Bill targets on global temperatures in 2050 and 2100. However, the targets are firmly grounded in the latest science, as reported by the Intergovernmental Panel on Climate Change (IPCC). Uncertainties about actual future temperatures and the mitigation actions of larger emitting countries make modelling the impacts of such globally small emission reductions extremely difficult, but using the best available science to inform New Zealand's targets ensures they align with ambitious global efforts to mitigate climate change.

For example, although the warming impact of long-lived gases (such as carbon dioxide) can be calculated relatively easily, the warming effect of short-lived gases (methane) is very difficult to estimate. Methane's warming effect is highly dependent on global climate change mitigation pathways. Specifically, stronger global action would lead to lower atmospheric methane concentrations, and therefore a greater warming effect from one additional unit of methane emissions. Therefore, the amount by which global warming will be slowed ultimately depends on the ambition of climate action across the world. This effect is described in detail in a report released by the Parliamentary Commissioner for the Environment titled *The contribution of methane emissions from New Zealand livestock to global warming*, and available at the following link: <https://www.pce.parliament.nz/media/196482/contribution-of-methane-emissions-from-nz-livestock-to-global-warming.pdf>

As a signatory to the 2015 Paris Agreement, New Zealand committed to pursuing efforts to limit global temperature increase to 1.5°C above pre-industrial levels. In October 2018, the IPCC published a Special Report on Global Warming of 1.5°C. The target in the proposed Zero Carbon Bill is consistent with the global emissions pathways in that report that limit global warming to 1.5°C. By using this to inform our emissions reduction targets we are ensuring that New Zealand is playing its part in the global effort to mitigate climate change.

As the information you have requested does not exist, your request is refused under section 18(e) of the Act.

You have the right to seek an investigation and review by the Office of the Ombudsman of this response, in accordance with section 28(3) of the Act. The relevant details can be found on their website at: www.ombudsman.parliament.nz.

Please note that due to the public interest in our work, the Ministry for the Environment publishes responses to requests for official information on our website on our OIA responses page.

If you have any queries about this, please feel free to contact our Executive Relations team by email at ministerials@mfe.govt.nz.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Janine Smith', with a stylized, cursive script.

Janine Smith
Director, Climate Change

Released under the provision of
the Official Information Act 1982