

Reference: 20150265

26 August 2015



Thank you for your Official Information Act request, received on 1 July 2015. You requested the following:

“I request all advice prepared by Treasury on electric cars”

On 6 July the time limit for this request was extended by 20 working days, because the staff that needed to be consulted were not available at the time.

Information Being Released

Please find enclosed the following documents:

Item	Date	Document Description	Decision
1.	10/2/2015	Climate Change: Presentation to Ministers Groser and Bridges	Release in part

I have decided to release the relevant parts of the documents listed above, subject to information being withheld under one or more of the following sections of the Official Information Act, as applicable:

- advice still under consideration, section 9(2)(f)(iv) – to maintain the current constitutional conventions protecting the confidentiality of advice tendered by Ministers and officials.

In making my decision, I have considered the public interest considerations in section 9(1) of the Official Information Act.

Please note that this letter (with your personal details removed) and enclosed documents may be published on the Treasury website.

This fully covers the information you requested. You have the right to ask the Ombudsman to investigate and review my decision.

Yours sincerely

Alastair Cameron
Acting Manager, Natural Resources



[Deleted - Not
Relevant to
Request]

- **Taking advantage of new technology to reduce NZ's emissions**

Presentation to the Minister for Climate Change Issues and the Minister of Transport

10 February 2015

Executive summary

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- New technology is **presenting opportunities** to reduce emissions in the energy and transport sector, but solutions for agricultural emissions remain a long way off.
- Advances in electric vehicles, biofuels and renewable energy offer the most potential and there might be a **role for government** to help speed-up adoption.
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Withheld as not relevant to request

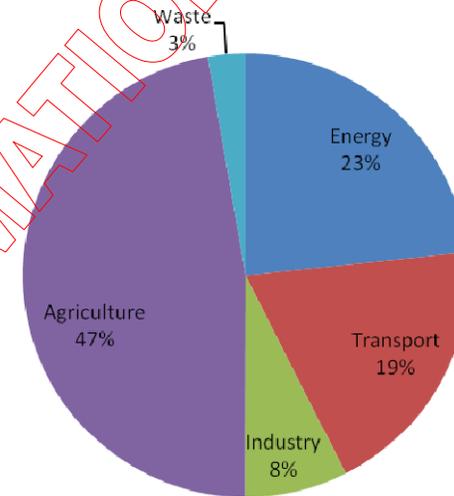
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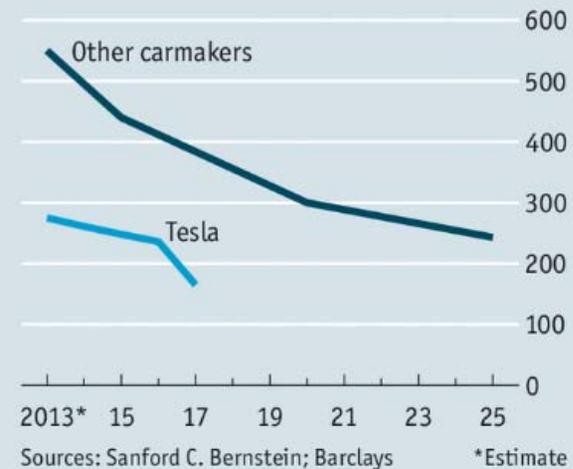
While there are limited abatement opportunities for agriculture, **new technology is emerging** that will help us reduce our energy and industrial emissions more cheaply

- **42%** of NZ's emissions are from the energy and transport sectors:
 - 23% from electricity generation and industrial heat
 - 19% from transport
 - 8% from direct industrial emissions
- Advances in **electric vehicles, renewable energy and biofuels** offer the most potential to contribute significantly to reducing NZ's emissions in the future.
- New Zealand is generally **well placed** to take up EVs. Over 80% of our electricity is renewably generated, and New Zealand uses high voltage power supply that can charge EVs quickly.
- There is already **enough electricity generation** capacity to meet the extra energy demand from changing the whole light vehicle fleet to EVs.
- New Zealand needs to ensure that we can **take advantage** of this technology as it develops.

New Zealand's Greenhouse Gas Emissions (2011)



Car battery-pack cost forecasts, \$ per kWh



We should consider **additional policies** to the ETS to encourage EVs, but only where they address barriers *other* than the cost of carbon emissions

- The **Emissions Trading Scheme** (ETS) incentivises consumers to switch to new technology when it becomes a cost-effective way of reducing carbon emissions.
- **Additional policies** may also be needed if there are other barriers to adoption.

Types of market failures that could justify additional policies

Information Barriers	Coordination Problems	Other Externalities
<p>Information may be under-provided by the market, if firms don't capture all the benefits of providing info.</p> <p>People may under-invest in learning about new technology if they are too focused on short-term costs.</p> <p>There could be learning effects, where there are public benefits from testing new technology in real NZ conditions.</p> <p>This may justify public information campaigns, or test cases.</p>	<p>Firms may not invest in infrastructure for EVs until there is sufficient uptake, but uptake of EVs might not happen until this infrastructure exists.</p> <p>These coordination problems may justify public support for EV charging infrastructure.</p>	<p>There may be other negative externalities from traditional vehicles, in addition to costs of carbon emissions.</p> <p>For instance, air pollution than can damage health. Policies to address these issues should target the specific regions with air quality problems, and incentivise more efficient <i>petrol</i> vehicles as well as EVs.</p> <p>Policies supporting innovation can also have externalities, justifying public support.</p> <p>However, because New Zealand is small, it is unlikely that research here would lead to significant developments in EV technology.</p>
<p>Ways to identify this problem:</p> <ul style="list-style-type: none"> - Is there are a lack of clear information available on EVs? 	<p>Ways to identify this problem:</p> <ul style="list-style-type: none"> - Is a lack of infrastructure identified as a key constraint? 	<p>Ways to identify this problem:</p> <ul style="list-style-type: none"> - Would an increase in EVs cause other significant benefits, e.g. in air quality?

There are **four types** of policies that could encourage or remove barriers to EVs

Information and Promotion



Financial Incentives



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[Withheld under s9(2)(f)(iv)]

There are **four** types of policies that could encourage or remove barriers to EVs

Infrastructure



Regulations



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[Withheld under s9(2)(f)(iv)]