



Call for evidence: response form

Contact details

Name and/or organisation	Todd Corporation
Postal Address	1000
Telephone number	...
Email address	...

Submissions on similar topics

<i>Please indicate any other submissions you have made on relevant topics, noting the particular material or information you think we should be aware of.</i>
Answer: Todd has made submissions on the Climate Change Response (Zero Carbon Amendment) Bill (to the Select Committee), on the Hydrogen Green Paper (to MBIE) and on the Minerals and Petroleum Resource Strategy (to MBIE) that are related to the transition to a low emissions economy and the role of natural gas in that economy.

Commercially sensitive information

<i>Do you have any objection to the release of any information contained in your response, including commercially sensitive information?</i> <i>If yes, which part(s) do you consider should be withheld, together with the reason(s) for withholding this information.</i>
Answer: We have no objection to this submission being released if required in response to an Official Information Act request. We request that personal contact details of Todd staff not be published.

Questions for consideration:

Question 1:

In your area of expertise or experience, what are the specific proven and emerging options to reduce emissions to 2035? What are the likely costs, benefits and wider impacts of these options? Please provide evidence and/or data to support your assessment.

Answer:

Todd works in and is particularly interested in the following areas, and will keep the Commission apprised of any developments that we consider material to emissions budgets:

1. **Conversion of coal fired process heat to lower-emissions fuels.** This is acknowledged to be one of the focus areas for the Commission, working with EECA/PHiNZ. As an energy supplier, Todd (through Nova Energy) is continually working with suppliers to assess the best options for their process heat requirements, whether it be natural gas, LPG or electricity (including from solar installations). Todd would welcome the opportunity to contribute to the process heat sector working group that is being established.
2. **Increased solar generation.** Through Sunergise NZ, a Todd Generation subsidiary, we are seeking to increase the installed capacity of commercial and industrial scale roof top solar power. While Transpower's modelling indicates the potential size of the market, at this stage we do not have quantitative estimates of uptake; we will advise in the event of any material developments or opportunities for policy development in this sector.
3. **Natural gas peaker plant efficiency improvements.** Todd considers that natural gas power plants are the ideal partner to enable operation of a highly renewable electricity system. We continually seek to improve the efficiency of our operations, with the aim of lowering the emissions per unit of output, through process improvements. Investment in the installation of waste heat recovery technology is being considered by Todd; this would reduce the emissions intensity of natural gas peaking electricity. We will keep ICCC informed on progress if this proceeds.
4. **Tidal power.** Through Crest Energy, a fully owned subsidiary, Todd holds consents for 200 1MW turbines at the entrance to Kaipara Harbour. At this stage, the technology is not economically viable, however we will advise if and when this position changes.

Question 2:

In your areas of expertise or experience, what actions or interventions may be required by 2035 to prepare for meeting the 2050 target set out in the Bill? Please provide evidence and/or data to support your assessment.

Answer:

Question 3:

In your areas of expertise or experience, what potential is there for changes in consumer, individual or household behaviour to deliver emissions reductions to 2035? Please provide evidence and/or data to support your assessment.

Answer:

Incentives for individuals to reduce electricity use as well as to spread demand (to reduce peak demand) will likely form part of future actions to drive behaviour change. Todd has experience with electricity pricing structures and consumer behaviour through Nova Energy.

Most relevant to this discussion is the implementation of Nova's Smart Energy Plan, which incorporates "time of day" electricity pricing (using smart meters). Nova currently has around 2000 customers (80 GWh, the majority commercial users) on this plan, and is increasingly offering it to residential customers. Nova's initial customer trial of "time of day" pricing started in September 2017. In a survey of over 200 customers that were involved in the initial trial, over 30% of respondents indicated that they had made a change to their consumption behaviour based on the time of day pricing. Customers that modified their usage were mostly residential; the common response from commercial customers was that their normal business activities did not enable them to change their usage pattern at all. Data on the extent of the change is difficult to quantify, given the lack of historical time of day usage data.

Other energy providers will have similar information that may be of interest to the Commission.

Question 4:

When advising on the first three emissions budgets and how to achieve the 2050 target, what do you think the proposed Commission should take into account when considering the balance between reducing greenhouse gas emissions and removing carbon dioxide from the atmosphere (including via forestry)?

Answer:

Question 5:

What circumstances and/or reasons do you think would justify permitting the use of offshore mitigation for meeting each of the first three emissions budgets? And if so, how could the proposed Commission determine an appropriate limit on their use?

Answer:

As set out in our submission on the Zero Carbon Amendment Bill, Todd considers that international emissions reductions that are of high integrity should be considered a valid alternative to domestic actions that reduce emissions, not just as a last resort. Todd recommended that the constraint on use of international units be removed (from the Zero Carbon Amendments), but in fact they were strengthened.

Notwithstanding this, Todd considers that circumstances that would particularly justify the use of offshore mitigation are those where the action taken not only reduces GHG emissions but also reduces supply chain dependency and costs, thus increasing security of supply for the recipient. A good example of this would be the installation of renewable energy supplies (such as solar and wind) in the Pacific Islands, in place of imported fuel oil/diesel.

Section B Emissions reduction policies and interventions

Question 6:

What sector-specific policies do you think the proposed Commission should consider to help meet the first emissions budgets from 2022-35? What evidence is there to suggest they would be effective?

Answer:

As set out in our submissions to date, Todd favours policies that target emissions/demand side pricing, including pricing carbon (via the ETS) and imposing energy efficiency standards (for buildings/appliances/lighting/vehicles). Sector-specific policies in the energy sector could include:

- Imposing a sinking lid on the emissions intensity of process heat plant (i.e. any changes to plant must reduce emissions intensity)
- Streamline energy approval processes, for renewables (as recommended by the Productivity Commission), but also for peaking energy, to ensure security of supply.