Major Electricity Users' Group

28 February 2020

Scott Gulliver
Principal Advisor, Emissions Trading
Ministry for the Environment
By email to etsconsultation@mfe.govt.nz

Dear Scott

Reforming the NZ Emissions Trading Scheme: Proposed settings

1. This is a submission by the Major Electricity Users' Group (MEUG) on the Ministry for the Environment (MfE) consultation document "Reforming the New Zealand Emissions Trading Scheme (ETS): Proposed settings" published 19th December 2020.[1] Since that date a report on marginal abatement cost curves (MACC) was published and subsequently the model released.[2]
2. MEUG members have been consulted in the preparation of this submission. This submission is not confidential. Some members may make separate submissions.
3. This submission focusses on matters directly affecting the electricity sector in relation to setting the provisional emissions budget for 2021-25 and our interest in ensuring policy decisions affecting the electricity sector are based on robust cost-benefit-analysis.
4. Outside this consultation but related to the topic of unit allocations to EITE businesses, is the review of the Electricity Allocation Factor (EAF). Estimating the EAF is a core topic within MEUG's remit.

A cautionary approach is best in setting the provisional emissions budget for 2021-25

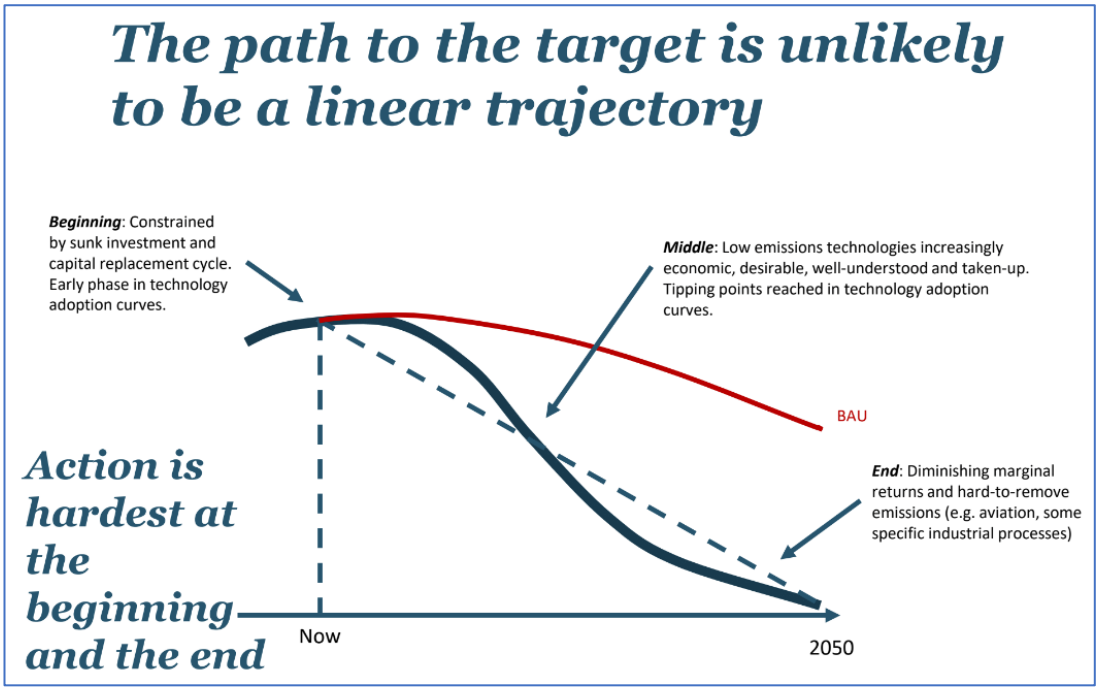
5. Some of the analysis in the ETS proposed settings relies in part on other work streams running in parallel. Those include Parliament's consideration of changes to the Climate Change Response Act and several different departmental work programmes. For the latter the most relevant for MEUG is the consultation on accelerating renewable generation and energy efficiency. No final decisions have been reached on changes to the Act or preferred policy changes from the MBIE work.

[1] document URL https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/reforming-the-ets-proposed-settings-consultation.pdf.
[2] document URL https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/marginal-abatement-cost-curves-analysis_0.pdf and model at https://www.mfe.govt.nz/publications/climate-change/marginal-abatement-cost-curves-analysis-new-zealand-potential-greenhouse.

6. Ideally the analysis of the provisional emissions budget for 2021-25 would have followed completion of changes to the Act and analysis of views by MBIE on their paper. However, given timing constraints, decisions will need to be made with less information than desirable. In that case MEUG recommends taking a cautionary approach to setting the provisional emissions budget, i.e. a slower ramp rate down than the proposed change to a straight-line ramp from 2023 to 2050.

7. The case for urgent and ambitious action is promoted in the consultation paper but not the downside risks. Those risks include unintended and unexpected detrimental effects on households and businesses from a budget that is too ambitious. The path to 2050 needs to start with high acceptance by the public to keep momentum building. Detriments that arise because decisions were rushed and overly ambitious may erode consumer confidence that further ETS policy resets and new policies have been well considered and designed.

8. A more stringent budget early on will impose additional cost as early uptake of newly developing technologies such as electric vehicles will be at higher cost now than when the market supply has increased and costs per unit have fallen. We also question why a linear budget reduction is being proposed when the slide 19 in the MfE consultation workshops held 3rd to 13th February 2020 clearly shows an expectation that abatement will not be linear:[3]



[3] Refer : https://mfe-inhouse.cmail20.com/t/r-l-jhtlkyg-olhntjlud-r/

9. Other aspects to consider in support of our view a cautionary approach should be taken include:

   a) The modelling work supporting the consultation document comprises the MACC and Treasury estimates of the effect on households. The MACC analysis is an inaugural estimate of possible emission reductions across the economy. Separately in our submission to MBIE on accelerating renewable generation and energy efficiency we and MEUG members will provide feedback on how those estimates might be improved. This is not a trivial exercise.

      We acknowledge and appreciate that the Ministry and other government departments are aware of the limitations of MACC as a tool.[4] The problem is some politicians, media and those with pre-conceived view may use MACCs results out of context. The Climate Change Committee will also rely, in part, on MACC analysis. Even then the compressed time frame they are working to will result in a MACC analysis with a wide level of uncertainty.

      MEUG is concerned that the MACC analysis published for this consultation and the parallel MBIE consultation on accelerating renewable energy and energy efficiency is overambitious and, in some cases, clearly erroneous. The lack of any step taken to verify these with the industry participants is a major oversight. We recommend that no reliance should be placed on the attributed emissions abatements until validation with industry is completed. Individual MEUG members are likely to make specific feedback on aspects of shortcomings in the MACC analysis. Examples of those provided by members include:

      i) For petroleum refining the MACC report states (p36) “The total abatement potential identified for these negative and low cost options is around 0.4 Mt CO2e/yr, or around half the refinery’s emission excluding hydrogen production.”

         It appears that no consideration of whether the abatement opportunities identified by Dr Atkins are already implemented has been made.

         For example, for “fouling mitigation”, Refining NZ already has a dedicated team on site and spend between $1-$2M per annum on cleaning of heat exchangers and a further $2-3M is spent in every turnaround on maintenance of heat exchangers. Similarly, other abatements identified are already in place.

         Refining NZ would welcome engagement with the Ministry for the Environment to develop a MACC for the Marsden Point refinery that truly represents the remaining abatement potential.

[4] Refer section titled “Limitations of MAC curve analysis in the MACC report (p95).

ii) For NZ Steel the MACC report lists "blast furnace optimisation" in Table 3, Abatement options included for industry (pp 27- 28). In the detailed sector discussion on metals the report states (p37) "Dr Atkins suggests that abatement of up to 0.3 Mt CO2-e/yr could be achieved through blast furnace optimisation. This option is not detailed in his report."

The latter sentence is pertinent and should have been a warning to the authors of the MACC analysis to double check with Dr Atkins as to why his report did not detail that option. Dr Atkins no doubt would have noted NZ Steel does not have a blast furnace as his work was, we believe, a broader literature search and would need validation for specific plant in New Zealand.

b) The Treasury analysis of the effects on the economy are an area where we think more analysis is warranted. The CBA for the zero-carbon bill was difficult because deciding and forecasting a suite of scenarios 30 years into the future that captured the likely plausible range of possible outcomes stretches available modelling tools such as Computable General Equilibrium (CGE) models. However, when setting provisional emissions budget for 2021-25 the range of scenarios and plausible outcomes for this near-term timeframe will be narrower and tractable. We think there would be a benefit in using CGE modelling and reporting the full suite of results, such as the effects on exports and employment, to supplement the analysis in section 5 of the consultation document on the direct impact of emissions pricing on households.

To put this into perspective at a carbon price of $50/t the effect, per table 12, on quintile 1 households is $2/week or $104/year or $416 over the 4-years of the term of the provisional emissions budget for 2021-25. That's a material sum of money. What the consultation document doesn't consider is evidence on how many households in the quintile 1 income bracket will be employed or not under that carbon price scenario over 2021-25 compared to other carbon price scenarios.

c) Another benefit of using CGE modelling for the near-term timeframe of 2021-25 is to test the narrative in section 5 of the paper under the headings "Longer-term impact of rising emissions prices on households", " Impacts on businesses" and "Impacts on land use change and forestry." Evidence should be tabled to support those arguments. CGE modelling in conjunction with an estimate of the distributional and time weighted effects across income classes and regions may shed light on what effects are expected in the near-term of 2021-25 and in the longer-term beyond that.

For example, will lowest quintile income households in south Auckland benefit or not from higher taxes in the near-term to support government interventions for EV's to facilitate possible longer-term benefits to those households?

MEUG's suggestion of the need for further quantitative analysis on the effects on the economy and households in this and the preceding bullet point aligns with the Treasury Living Standards Framework (a.k.a. "well-being") for policy analysis.

Next years' advice from the Climate Change Committee allows time to test more ambitious options and integrate with complimentary measures from other portfolios

10. The advice of the Climate Change Commission will be available in a year from now and feedback to departments on complimentary options will have been received and analysed. The consultation paper is a prelude to ever increasingly complex analysis and consultations the Climate Change Commission will be undertaking. To that end it has served a useful purpose and many of the proposed ETS settings will be non-controversial and bedded in. But there are other issues that require much more analysis than has been possible in preparing the consultation paper. Hence our recommendation a cautious approach is best in setting the provisional emissions budget for 2021-25 and a slower ramp rate down is used than the proposed change to a straight-line ramp from 2023 to 2050.

Yours sincerely

Ralph Matthes
Executive Director