

Road-map for interested parties of LCANZI's submissions and evidence in *Lawyers for Climate Action New Zealand v Climate Change Commission*

This judicial review relates to two aspects of the Climate Change Commission's advice to the Minister for Climate Change under the Climate Change Response Act (**Act**):

- (a) The Commission's advice under section 5ZA of the Act on the first three Budgets under the Act for the periods from 2022-25, 2026-30 and 2031-35; and
- (b) The Commission's advice in response to a request from the Minister under section 5K of the Act on whether Aotearoa New Zealand's then current nationally determined contribution (**NDC**) under the Paris Agreement to reduce 2030 net emissions to 30% below 2005 gross emissions (**2016 NDC**) was consistent with limiting global warming to 1.5°C.

The Commission published its draft advice on both the NDC and the Budgets for consultation on 31 January 2021 (**Draft Advice**). The Commission then provided its final advice to the Minister on 31 May 2021 and published that advice on 9 June 2021 (**Advice**).

LCANZI is challenging the Advice because LCANZI says the carbon accounting process engaged in by the Commission has several flaws which render the Advice inaccurate (and as a result will not allow Aotearoa New Zealand to meet its Paris Agreement obligations). LCANZI seeks orders that declare the Advice to be unlawful due those flaws.

Ground 1: Error of logic in applying the 2018 Special Report pathways

In assessing whether the 2016 NDC was consistent with limiting global warming to 1.5°C, LCANZI says the Commission misapplied the modelling and conclusions of the IPCC's 2018 Special Report on Global Warming of 1.5°C.

The 2018 Special Report concluded that, to have a 50-66% chance of limiting global warming to 1.5°C by 2100 with no or limited overshoot, global net CO₂ emissions needed to reduce by 40-58% from 2010 levels by 2030 and by 94-107% by 2050. The Commission sought to apply this to New Zealand's emissions to establish a "starting point, based on scientific modelling" for what our NDC would need to be to be consistent with the 1.5°C goal. However, the Commission did so by applying the necessary global rate of reduction of net CO₂ emissions to our 2010 level of gross CO₂ emissions (35.0 Mt) instead of our 2010 level of net CO₂ emissions (5.0 Mt).

LCANZI's experts, who include world-leading climate scientists, are unanimous that a mathematical error has been made.

Dr Stephen Gale, an economist and former Telecommunications Commissioner at the Commerce Commission, says in his evidence “it is an error of mathematical logic to apply the percentage reductions to our 2010 level of gross carbon dioxide. Mathematically, the 40% to 58% reduction range should have been applied to the 2010 level of net carbon dioxide emissions.”¹

Professor Piers Forster (an IPCC coordinating lead author and a lead author of the relevant chapter of the 2018 Special Report, chapter 2) agrees “that an error is made when a value of 35,031 kt is used for the baseline “net” carbon dioxide emissions in 2010 (see Table 13.2 of the Commission's advice), as this is the gross emission number from the Greenhouse Gas Inventory.”² He concludes that “[a]dopting the Commission's proposed framework and their proposed emission reduction target would give New Zealand an unambitious 2030 target that does not align to meeting global ambitions of holding global temperature rise to 1.5C.”³

Dr Joeri Rogelj (a coordinating lead author on the mitigation pathways chapter of the 2018 Special Report and a lead author for the IPCC's AR6) agrees that “the Commission has made the mathematical error described in the Gale affidavit”⁴ and that the Commission's approach “results in the emissions reductions percentages being incomparable with”⁵ the 2018 Special Report pathways.

Dr William Taylor (an economist and Associate Director of NERA Economic Consulting) states that the Commission “has made a simple mathematical error”.⁶ He explains that on the Commission's approach net CO₂ could increase by over 250%, which “is clearly not consistent with the global average reductions set out in [the 2018 Special Report]”.⁷ Dr Taylor notes that Stats NZ also applies the 2018 Special Report reductions to net, not gross, CO₂ in 2010.⁸ He also sets out how the error has flow on effects to various other calculations conducted and reported by the Commission.

LCANZI's other experts, Professor Donald Wuebbles (a Professor in the Department of Atmospheric Sciences at the University of Illinois, and former White House expert on climate science under President Obama), Dr Geoff Bertram (an economist and Senior Associate at the Institute for Governance and Policy Studies at Victoria University of Wellington who conducts research and consultancy work on climate change policy and co-authored a book on New Zealand's emissions trading scheme), and Professor Ralph Sims

¹ Affidavit of Dr Stephen Gale, paragraph 14.

² Affidavit of Professor Piers Forster, paragraph 8.

³ Affidavit of Professor Piers Forster, paragraph 16.

⁴ Affidavit of Dr Joeri Rogelj, paragraph 11.

⁵ Affidavit of Dr Joeri Rogelj, paragraph 10.

⁶ First Affidavit of Dr William Taylor, exhibit A, paragraph 8.

⁷ First Affidavit of Dr William Taylor, exhibit A, paragraph 13.

⁸ First Affidavit of Dr William Taylor, exhibit A, paragraph 95.

(Professor Emeritus, Sustainable Energy and Climate Mitigation at Massey University, a lead author for five IPCC reports and a review editor for the Sixth Assessment Report, Mitigation) all agree that a fundamental error has occurred.

LCANZI says that the use of net emissions rather than gross emissions in this calculation has resulted in the Commission adopting the wrong starting point for its analysis that led to Aotearoa New Zealand's NDC. We say that this error invalidates the Commission's NDC advice and the Minister and Cabinet's decision on the Amended NDC, which relied on the Commission's incorrect advice.

LCANZI's submissions on this ground of review are summarised from paragraph 26 of its submissions, and more detailed arguments are found from paragraph 194.

Ground 2: Misinterpretation of the statutory purpose in relation to emissions budgets

LCANZI says that in preparing its Budgets Advice, the Commission made several errors relating to the nature and purpose of its task under the Act.

First, it wrongly assumed that its task was only or primarily to recommend Budgets consistent with reaching the 2050 Targets. It did not treat contributing to the global 1.5°C goal as a free-standing purpose. It used the IPCC pathways for contributing to the global 1.5°C goal as a secondary cross-check only. As a result of this misunderstanding, the Commission failed to grapple with the extent of reductions in net emissions required in this decade to 2030 for Aotearoa New Zealand to contribute to the global effort to limit warming to 1.5°C. This decade is critical to the global effort; if not enough is done, the global carbon budget will be exhausted well before 2050, even if net zero in 2050 is later achieved.

Secondly, when assessing whether the recommended Budgets are compatible with what 1.5°C requires (which appears to have been done as an after-thought) the Commission has repeated the same mathematical error it made in relation to the NDC Advice, using gross emissions rather than net emissions as the baseline, and has only accounted for forestry emissions and removals from post 1990 commercial forests, using the Commission's "modified activity based" approach (**MAB**).

As discussed in Dr Taylor's evidence, the Commission did not carry out any form of cost benefit or multi criteria analysis.⁹ The Commission's evidence was that analysis was not performed, but was not required to be performed. In his reply evidence, Dr Taylor explains that the point is not that the Commission should have adopted a particular method of analysis but that

⁹ First Affidavit of Dr William Taylor, exhibit A, paragraph 135.

they did not make any real assessment of whether the Budgets could be more ambitious despite this being the obligation under the Paris Agreement which the Act is intended to implement.¹⁰

As a result of this error, although the budgeted emissions to 2030 appear to show a reduction in emissions as compared with the previous decade, - if all forestry emissions and removals are accounted for, emissions actually increase.

As a result of these errors, LCANZI says the Commission has asked the wrong question, failed to carry out its statutory role as required by the Act, and has recommended budgets lacking in ambition and that are inconsistent with contributing to limiting the global average temperature increase to 1.5°C.

LCANZI's submissions on this ground of review are summarised from paragraph 31 of its submissions, and more detailed arguments are found from paragraph 269.

Ground 3: Misinterpretation of the statutory provisions relating to the measurement of emissions

LCANZI says that the Commission has also misinterpreted the statutory provisions around the measurement of emissions for the purposes of setting and meeting the Budgets.

The Commission considers that “the selection of an appropriate accounting measure is a matter of expert judgement vested in the Commission under the Act” in which it has a free hand. In the Advice it undertook a “first principles” analysis and chose to adopt MAB, which is a modified version of the accounting rules adopted by New Zealand under the Kyoto Protocol and the approach which the Government has indicated it intends to use to account for the first NDC. This approach, the full details of which are yet to be finalised, is also referred to by the Commission and the Ministry for the Environment as “target accounting” or “NDC accounting”.

LCANZI says that the Commission has no power to determine an appropriate accounting measure as the Act prescribes the use of “net accounting emissions” and that “net accounting emissions” is defined to refer to all our emissions and removals as reported in our UNFCCC annual accounts (referred to as Greenhouse Gas Inventory accounting (**GHGI net**)) and does not refer to or permit the subset and averaged approach of MAB.

The issue is what measure the Act requires, not which measure is “better”. However, LCANZI's experts observe that the effect of MAB when compared with GHGI net is to make Aotearoa New Zealand's historic net emissions look worse (by factoring out pre-1990 forests) and near future net emissions look

¹⁰ Reply Affidavit of Dr William Taylor, from paragraph 44.

better (by averaging avoiding a steep decline in forestry removals). Accordingly, using MAB as a measure of net emissions risks portraying a false sense of ambition.

Dr Taylor and Dr Bertram both provide evidence on the differences between the GHGI net and MAB measures. Dr Taylor's evidence on this point is contained in exhibit A of his first affidavit, from page 21, and Dr Bertram's is from paragraphs 21 and 92 of his first affidavit. Their evidence includes observations about the consequences of the adoption of each measure for reporting of New Zealand's historic and projected emissions and the risk of misinterpretation of the technical MAB construct by a lay reader. The complexity of the constructs that Aotearoa New Zealand uses to set targets and measure progress makes it very opaque what exactly our level of ambition is or whether our emissions are improving or worsening over time. However, this is not true in terms of what the atmosphere sees. Rather, it is the result of using the MAB approach which makes historic emissions look worse than they actually were (by disregarding removals from pre-1990 forests) and then factors out removals associated with harvesting from 2021-30.

The GHGI net estimates the emission and removals the atmosphere sees in any given year as the result of all human activities in Aotearoa New Zealand. This includes emissions and removals from all sectors of the economy, including the land use, land use change and forestry sector. "By attempting to include all emissions and removals in the year which they occur, it gives a truer representation of 'what the atmosphere sees.'" MAB similarly includes all of our gross emissions, but "only a subset of emissions and removals in the land use, land use change and forestry sector". Instead of attempting to be comprehensive, MAB focusses on additional human caused activities conducted after 1990 and factors out pre-1990 forestry. In this sense, it follows the accounting methods developed under the Kyoto Protocol.

LCANZI's submissions on this ground of review are summarised from paragraph 36 of its submissions, and more detailed arguments are found from paragraph 346.

Ground 4: The proposed Budgets are irrational, unreasonable and inconsistent with the purpose of the Act

The first three grounds raise foundational issues as to the proper approach that should have been taken by the Commission in terms of how to apply the reduction pathways from the 2018 Special Report to Aotearoa New Zealand, the purpose of the Budgets, and the measurement of emissions. The fourth ground directly challenges the Budgets recommended by the Commission on the basis that no reasonable body could have recommended Budgets which

will see GHGI net emissions increasing over the next decade when the scientific evidence and the Act require reductions.

The fourth ground of review is that the Commission has recommended Budgets that are nonsensical and legally unreasonable. They are on their face clearly inconsistent with contributing to 1.5oC degrees and therefore also with the purpose of the Act.

LCANZI's submissions on this ground of review are summarised from paragraph 40 of its submissions, and more detailed arguments are found from paragraph 386.

Relief sought

LCANZI is seeking declarations that the Commission's Advice on the NDC and Budgets, and the Minister's decision on the NDC, were unlawful due to the alleged errors. In its statement of claim it also seeks orders quashing the NDC and Budgets Advice and the NDC decision and requiring these to be reconsidered. However, LCANZI recognises that this would raise practical issues and may not be the most efficient approach. Accordingly, it now proposes a two-step process in which the Court is asked to determine whether the Commission's Advice was unlawful and the parties then have the opportunity to seek further orders as to next steps on the basis of the Court's decision.

Process from today

Today, the High Court will commence hearing 5 days of arguments in relation to the Judicial Review from Counsel for LCANZI, the Commission and the Minister. It is standard practice for the Judge to then reserve their decision and issue a judgment in due course.

All documents filed in the Court by LCANZI in relation to this judicial review can be found at <https://www.lawyersforclimateaction.nz/our-projects> (subject to any Court orders made at the hearing).

All media enquiries regarding this judicial review can be directed to Michael sSharp (phone 0275542322) or Cassandra Kenworthy (phone 027 344 9406).