

Responsibility for a Feasible Climate Ambition

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Written by: Betsan Martin and Grace Leung

This article works with the research paper on pathways to achieve abatement, or reductions in carbon emissions and on national responsibility levels as an approach of equity, as identified in a research paper commissioned by Kennedy Graham, NZ Green Party MP. The significance of this approach is the commitment to climate responsibility, in contrast to the focus on the cost of addressing climate change, which has been the focus of the New Zealand government, and is part of a very weak policy approach to climate.

The paper reviews the developments of the COP conferences and how they have prepared the way for the Paris Agreement, December 2015. With a case study of the research on the feasibility of abatement and national responsibility, it outlines interdependence and responsibility as organizing themes for climate policy platforms beyond 2015.

COPs

The Paris Agreement brings an unprecedented platform for all nations to proceed with climate responsibility policies. The statement in the Paris agreement text that 'deep reductions in global emissions will be required' and that 'climate change is a common concern of humankind' heralds a new era of recognition of climate responsibility and interdependencies of humankind, and with the biosphere. The means for achieving a 2 degree or 1.5 degree ambition is not prescribed in the Paris Agreement, although indications of systems for implementation, metrics, capacity building, financial support are in preparation.

The Paris Agreement for co-operation is a remarkable achievement wrought from the endeavours to achieve a legally binding agreement through the Kyoto Protocol, and then, in the face of the failure of Kyoto to achieve universal buy-in, an attempt to correct this through recognition of 'common but differentiated responsibilities and respective capabilities' Parties were invited to submit their 'Nationally Determined Contributions' to carbon reduction.

In preparation for COP21, Professors of Law Alain Supiot and Mireille Delmas-Martyⁱ of the Collège de France, and Pierre Calame, former Director of the Foundation for the Progress of Humankind, Paris, ¹ collaborated for the development of law for climate responsibility². Delmas-Marty identified that tackling climate change needs to shift from focusing on the actions of individual sovereign states to one that recognises global ecological, social and economic interdependence. Delmas-Marty proposed 'solidarity sovereignty' as a sign of the dimensions of change that are envisaged, and are being mobilized. Recognition of interdependence is integral to establishing sense of global citizenship which would then exert more pressure on states, or Parties to reach a global, binding climate change agreement.

¹ Pierre Calame, Foundation for the Progress of Humankind (FPH) <http://www.fph.ch/?lang=en>

² *Twelve Propositions*: in French [version française](#) and English [version anglaise](#) on the site of Collège de France.

Three principles are at work in the negotiating process: ambition, participation and compliance, and the pathway to Paris has seen different constellations of these points of references. In Paris all of these have been brought into play only to begin the hard work of the commitment process ahead. With an ambition to limit global warming to 2 degrees above preindustrial levels and 1.5 degrees agreed as a possibility, comparable measures, monitoring, review, increased Nationally Determined Contributions to achieve the target are all in front of us. Subsequent COPs will have the task of building on the platform for ambition (responsibility), universal engagement (participation) and accountability (compliance).

By way of review of the COP process since, the Conference of Parties (COP-16) to the UN Framework Convention on Climate Change at that time concluded that 2°C above pre-industrial global temperatures is the warming threshold for dangerous climate change. Based on this 2°C threshold, a Global Carbon Budget has been devised for the period 1750 – 2100.. A global carbon budget has been calculated as 270 billion tonnes of Carbon (270 Gt C) or 1000 billion tonnes of CO₂. Currently we have used 90 Gt C.

The question becomes how will the carbon budget to be allocated amongst United Nations member states based on the principles in the UNFCCC. The Intergovernmental Panel on Climate Change's (IPCC) Fifth Assessment Report (2014)³ projects that based on current global carbon emissions, the remainder of the Global Carbon Budget (1,010 gigatons) will be used up by 2035. Based on current emission rates, the IPCC projects a warming of 4.5°C by 2100. The project warming based on what countries have currently pledged to reduce its emissions by, is 3°C. This range of temperature increase is authoritatively determined to be in the range of catastrophic climate change.

COP15 in Copenhagen in 2009, world leaders reached the agreement that all major economies must make explicit emissions pledges towards abating climate change⁴. However, in the subsequent five conference of the parties, there is still no clear path towards reaching a binding agreement for all nations to reach the emissions reductions required to prevent catastrophic climate change. The inability thus far of world leaders to reach a treaty on climate change with binding commitments is a sign that, although the political rhetoric exists, parties are not yet prepared to fulfil their responsibilities to prevent climate change in the absence of international laws which recognise the global interdependence of nation states.

Leading up to COP21 in December 2015 in Paris, all parties were asked to submit an “Intended Nationally-Determined Contribution” (INDC) with the intention that the resulting Paris Agreement will make these INDCs binding. However, the exact level of emissions reductions will not be set in stone, rather it will be subject to ongoing peer review as information on carbon emissions and impacts of climate change unfolds. The current draft of the Paris Agreement states that “the global nature and urgency of climate change calls for widest participation, cooperation and ambitions action by all Parties.” and the UN Secretary General has called on parties to “raise the ambition level” in submitting their INDC.

³ <http://unfccc.int/resource/docs/2015/cop21/eng/07.pdf>

⁴ <http://www.c2es.org/international/history-international-negotiations>

Nationally Determined Contributions

Each INDC is essentially comprised of two components:

- the Domestic Abatement Target i.e. proposed domestic reduction of net greenhouse gas emissions and
- the National Responsibility Level i.e. a country's proportionate share of the Global Carbon Budget in order to remain under the 2°C threshold.

The Domestic Abatement Target may be supplemented with the purchase of available carbon credits in order to make up the difference with the National Responsibility Level

As of late November 2015, 149 countries submitted their INDCs and a synthesis report was published on the projected impact of those INDCs being implemented. Based on the INDCs submitted, it is projected that the global emission levels will be as follows:

52 – 56.9 Gt CO₂ eq in 2025

53.1 – 58.6 Gt CO₂ eq in 2030⁵

These rates are higher than the UNFCCC's least cost 2°C by 10-29% in 2025 and 11.1 – 21.7% in 2030. Although the report shows an increasing trend towards national policies for lower emissions and climate resilient development, the current INDCs submitted still put the planet on an, albeit slower, trajectory to catastrophic climate change.

The Greenhouse Development Rights: Climate Equity Reference Project encapsulates the INDC process as follows:

...when a country submits its INDC, it is implicitly choosing a temperature target, the one that would be realised if all other countries were to act in a comparable manner, relative to their share of the global effort required. If a country proposes a contribution that amounts to less than its fair share of the global effort required to keep temperature rise well below 2°C, then that country is, in effect, proposing an overall global temperature increase that exceeds 2°C.

A Case Study of Responsibility and INDC with an Alternative for New Zealand

The New Zealand INDC was framed in terms of an adverse financial and economic scenario⁶. No account was given of economic benefits of transitions to low carbon, and the New Zealand proposed Contribution of 5% reduction in emissions by 2020, 11% reduction by 2030, and 50% reduction by 2950, only one fifth will be met through abatement, or reduction in emissions: four fifths will be met through emissions trading.

In contrast to this approach the research⁷ commissioned by the Dr Kennedy Graham, Party MP gives priority to national Responsibility and Equity as the key references for climate commitments,

⁵ <http://unfccc.int/resource/docs/2015/cop21/eng/07.pdf>

⁶ Ministry for Environment [Discussion Document](#) New Zealand Government

⁷ Graham, K. (2015) *Climate Goals for New Zealand in 2030*. Background research Paper.

and then works with financial analysis in accordance with responsibility targets and equity – the fair share of emission reductions.

The Paris agreement states:

estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and also notes that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2 C above pre-industrial levels by reducing emissions to 40 gigatonnes or to 1.5 C above pre-industrial levels ⁸

In line with the need for Parties to bring INDC's into alignment with the 2 degree / 1.5 degree warming scenario, the Graham research paper proposes an ambitious INDC and Domestic Abatement Targets for the New Zealand government to submit to the UNFCCC leading up to the Paris Agreement ⁹, and to amend it in the period beyond 2015.

Based on current emissions levels, New Zealand's net domestic emissions are projected to rise to 100Mt in 2030, from 66Mt in 1990. The official National Responsibility Target indicates a target of 53Mt in 2030. The current, National Party-led New Zealand government has proposed a set of measures to reduce New Zealand's emissions by 2030, namely the modelled impacts of the NZ Emissions Trading Scheme (ETS) official afforestation scheme and the National Environmental Standard for landfills. Official projections based on these measures being taken, amount to 0.4% reductions in gross emissions by 2030. If all other countries were to achieve this target in emissions reductions, it would result in a global temperature increase of over 4.3°C, an indubitable path to catastrophic climate change.

Insufficient action by the New Zealand government to address climate change are based on assumptions such as New Zealand being a small nation, therefore unable to have impact on climate change, our unique geopolitical position absolving us of domestic abatement obligations, the economic cost of the New Zealand consumer being too high, and the cost of ambitious action being too high for the national economy.

In designing their climate change targets, the Graham research takes on a responsibility-based approach, whereby New Zealand's responsibility is proportionate to our size and capacity, the opportunity cost of inaction must be taken into account and an economic transition should be seen as an opportunity and not a burden. In this model projections take into account that, the later adequate action is taken, the greater the level of reduction will be required and the higher the cost of preventing catastrophic climate change. The Graham research paper works with the concepts of responsibility, capacity, equity and cost into devising scenarios for New Zealand's Domestic Abatement Target and National Responsibility Level.

⁸ Paris Agreement, 12 December 2015. UNFCCC/CP/2015/L.9. P. 3.

⁹ Graham, Kennedy, MP, Sept 2015, Climate Goals for New Zealand in 2030: An Ambitious Domestic Emissions Target within an Appropriate Share of the Global Budget, Background Research Paper, Green Party of Aotearoa New Zealand

Based on the Climate Equity Reference Framework's Responsibility and Capacity Index (RCI),¹⁰ which calculates current and historic emissions levels, income distribution, and economic capacity (based on market exchange rate terms and purchasing power parity), the New Zealand share of the global greenhouse gas budget should be 0.256%. Therefore,, a 2°C pathway needs to be as follows:

	Current 2030 projections	Required 2030 emissions (based on RCI)
Global (gross)	68.3Gt	35.7Gt
Global (net)	71.4Gt	37.7Gt
NZ (gross)	95.4Mt	18.0Mt
NZ (gross)	65.0Mt	5.4Mt

Based on these indices and moderate and high ambition targets in the sectors of energy, transport, industry, agriculture, waste, land use, land use change and forestry, the following ranges have been devised for New Zealand's domestic abatement target and National Responsibility Levels for net emissions by 2030:

Domestic abatement potential range: 14.9 – 51.9Mt
 Recommended level: 17.2Mt
 National Responsibility Level: 5.4 – 23.4Mt
 Recommended level i.e. INDC: 5.4Mt

The Greens have an ambitious net zero emissions by 2050 target. This scenario includes becoming coal-free by 2020, reaching 100% renewal energy by 2030, reduction of the dairy, beef and sheep herd significantly, Many of these targets may seem anathema to the current neoliberal economic and political context. However, given the robust economic, biophysical and social analysis by used to generate these targets, they are not only the responsible approach to leaving a liveable planet for future generations, they are also entirely feasible, a notion supported by growing community-based NGOs such as Generation Zero Aotearoa.¹¹

Global Transformation for Interdependence and Responsibility

As per the proposed Declaration of Interdependence and Responsibility¹², the reality of global interdependence requires international laws to enforce systems of accountability and liability for transgressions against the viability of the life-supporting functions of the planet. However, it also requires that sovereign states assume responsibility for their impacts on this interdependent planet. Given the diversity of levels of contribution to climate change, historical 'ecological debt' and current national capacities, Delmas-Marty postulates a hybrid model of universalist and sovereign approach to combating climate change where states have “common, but differentiated responsibilities”.

¹⁰ http://calculator.climateequityreference.org/glossary.php#gloss_rci

¹¹ http://www.generationzero.org/our_vision

¹² Declaration of Interdependence and Responsibility, l’Alliance pour des Sociétés Responsables et Durables (draft 24/11/15)

It is entirely feasible for every nation state to take a responsibility-based approach to climate change abatement and mitigation. COP21 has achieved a crucial binding agreement to ensure that each nation is held accountable to its responsibilities, although the tone of the Agreement is of encouragement, support and facilitation rather than of stridency in setting in place consistency and comparability of measures for the accountability of emissions abatements. As postulated by Pierre Calame of the Foundation for the Progress of Humankind, this 'will necessarily be central to the recomposition of the global legal system in the twenty first century, not only because accountability for one's actions is a value inherent to any organised community, but also because this obligation is all the greater that the members of this community are interdependent.'¹³

Nowhere and at no other time is this truer than at this pivotal time for climate change on our planet. As stated in the Manifesto from Lima to Paris¹⁴ and the suggested adoption of a Universal Declaration of Human Responsibilities, this responsibility is inalienable when the damage is irreversible. If each nation were to adopt an approach of responsibility, we can not only reverse the tragedy of the commons, but create an ecologically, culturally and socially richer planet for future generations.

Many practical steps to ensure implementation will occupy the Conference of Parties in the years following COP21. The intellectual, scientific and political opportunities will be paralleled by challenges to follow through on the stated intentions. New institutional systems will most likely be required to respond to the global scale of ambition and responsibility. One proposal is for a World Environment Organisation mandated with a trusteeship function over global public goals and common goods, and that can provide the necessary oversight and coordination?¹⁵ In the economic sphere the intense focus on transitions from fossil fuels to renewable energy at COP21 signalled business facing climate realities, although not with universal acclaim for the accord. With the priority of certainty, there was not a system for a global tax on carbon prescribed in the Agreement. Ford announced investment of \$ 4.5 billion into electric vehicles, and there is a surge in low carbon technology. Further cause for hope comes with World Bank President Mr Kim saying the Paris agreement represents 'the biggest shift we have ever seen on this global crisis'¹⁶ That being said, the hard work begins.

¹³ Calame, Pierre, Taking Responsibility Seriously, Foundation for the Progress of Humankind – Collège de France Joint Research Project 2013-15

¹⁴ http://www.ethica-respons.net/IMG/pdf/manifest_of_lima_to_paris_cop21_2015_en.pdf

¹⁵ Bosselmann, Mackey & Brown *RECIEL* 21 (1) 2012. ISSN 0962 8797)

¹⁶ New York Times 15th December 2015. P. 6

