

The NZ Productivity Commission's "Low-emissions economy: Issues paper".(released August 2017): Submission by Associate Professor (Planning and Environmental Management) Hamish G. Rennie

- 1) Thank you for the opportunity to comment on the Productivity Commission's *Low-emissions economy: Issues paper*.
- 2) My submission is in two parts, the first relates to an area that appears to have been overlooked in the issues paper; the second provides comment on a concern regarding the consideration of the Resource Management Act 1991 (RMA). It includes specific recommendations as to how the current RMA framework could be improved to incentivise a low-emissions economy becoming a reality.

Part 1

- 3) The Issues paper makes little to no reference to either ecosystem services or research that involves the impact of shelter belts and riparian plantings on reducing emissions. The Issues paper tends to consider trees for sequestration in the context of forest blocks only. In essence, more integrated environmental management approaches are largely not considered.
- 4) I have been involved in research and practice of riparian plantings of rivers, streams and drains that is targeted at reducing pollution of our freshwater systems – our green infrastructure. Over the last decade, an emphasis in such plantings has been placed on planting native species that provide ecosystem services in excess of those that might be provided by exotic species or simply fencing off waterways without planting. This biodiversity consideration could be extended to considering the benefits of riparian plantings to the reduction of green-house gases. However, without regulatory support such approaches seem reliant on social capital and networks (cf Torabi (2015) and Torabi et al., (2016) for recent Australian evidence of the role of social capital and networks in biodiverse carbon plantings relative to financial incentives).
- 5) In Canterbury, although many farmers and farming industries are now strongly supportive of riparian planting, conversations with farmers indicates that a key driver has been the regulatory framework that has required them to fence off their margins (e.g., through being required to obtain resource consents to continue to farm and to provide Farm Environment Plans as part of that process). Voluntarism and market incentives were insufficient.
- 6) Farm Environment Plans are focussed on addressing the adverse effects of farming on the environment, but the plan templates I have reviewed do not include attention to addressing emissions that might be adversely affecting the climate. This is not surprising given that the plans are driven by the current provisions in regional policy statements

and plans under the RMA, which do not require consideration of effects on climate change. I address this in Part 2.

- 7) Recent research on shelter belts and carbon (Welsch 2016, Welsch et al. 2016) indicate the importance of shelter belts, and the advantages of shelter belts on organic farms over those on non-organic, for carbon sequestration. Logically, such findings would extend to riparian plantings and also be relevant when considering plantings on the margins of motorways, urban areas, subdivisions, and other developments. At present these cannot be considered in obtaining consents for such activities except in circumstances where considering the potential benefits of renewable energy projects (see below).
- 8) I suggest the Productivity Commission give greater consideration to the potential role of shelter belts, riparian plantings etc and the advantages of regulatory based approaches to require their adoption where appropriate. The scale for assessing such regulatory approaches matters should be at the local level, not central.
- 9) This may require alteration of the Local Government Act 2002 to restore a sustainable development purpose to local plans as it is difficult to justify actions and expenditure in favour of facilitating a low emissions economy under the current purpose of long term plans and associated responsibilities.

Part 2

10) Here I specifically address the following questions raised in the Issues Paper:

Q19 What type of direct regulation would best help New Zealand transition to a low-emissions economy?

Q27 What approaches, such as regulatory frameworks or policy settings, would help embed wide support among New Zealanders for effective reduction of domestic greenhouse gas emissions?

Q28 Is New Zealand's current statutory framework to deal with climate change adequate? What other types of legislation might be needed to effectively transition towards a low-emissions economy?

11) I restrict my comments primarily to the RMA.

12) In this regard I note that there are only two references to the RMA in the Issues paper, the first is to draw attention to a National Policy Statement on renewable energy, the second is found in Box 5 on p.33

While domestic waste is commonly used in WtE plants internationally, public acceptance and consenting processes under the Resource Management Act make

this difficult in New Zealand (EFI, 2008). Incorporating the emissions reduction potential of an activity as part of the consenting process could help to address this issue.

- 13) The EFI source is: EFI (Energy for Industry). (2008). Solid waste to energy opportunities; theory and experience with the beneficial use of burnable wastes as fuel in NZ. Presentation by David Reid to the WasteMINZ Conference 2008: Energy for Industry". David Reid was a Solutions Development Manager at EFI (which was part of Meridian Energy).
- 14) Mr Reid also notes that issues of social responsibility and tighter regulations were making other WtE approaches more financially viable as people move away from worse polluting alternatives (e.g., coal fired systems). A major concern he noted was with the stability of central government policies around emissions trading schemes.
- 15) I agree with the Commission that incorporating potential emissions reduction of an activity into considerations during the consenting process may well address some of the problems faced by the WtE industry.
- 16) Through its effects-based approach, and an essential adherence by central and local government to 'polluter pays/internalising the externalities' principles, the RMA has created incentives for developers to adopt innovative technologies, practices and management approaches to reduce their emissions (in terms of pollutants, noise and light) to their local environments.
- 17) Unfortunately, the advances facilitated and incentivised in these areas, have not occurred for Green House Gases that contribute to climate change. This represents a significant regulatory failure created by the Labour Government when it amended the RMA in 2004, and of which the National –led Government of 2014-2017 was fully aware, but which it failed to rectify despite opportunities created by the Opposition during the enacting of the Resource Legislation Amendment Bill in 2017. The incoming Government may well be more inclined to make the necessary changes to the RMA and consequently I consider the Productivity Commission should seek the changes I recommend here.
- 18) As it currently stands, the RMA has two particular provisions that are clearly contrary to the spirit of the Paris Agreement, and which also are contrary to incentivising a shift to a low emissions economy.
- 19) Section 70A of the RMA states:

Application to climate change of rules relating to discharge of greenhouse gases

Despite section 68(3), when making a rule to control the discharge into air of

greenhouse gases under its functions under section 30(1)(d)(iv) or (f), a regional council must not have regard to the effects of such a discharge on climate change, except to the extent that the use and development of renewable energy enables a reduction in the discharge into air of greenhouse gases, either—

(a) in absolute terms; or

(b) relative to the use and development of non-renewable energy.

20) Furthermore, with regard to considering applications for consents, section 104E states:

Applications relating to discharge of greenhouse gases

When considering an application for a discharge permit or coastal permit to do something that would otherwise contravene section 15 or section 15B relating to the discharge into air of greenhouse gases, a consent authority must not have regard to the effects of such a discharge on climate change, except to the extent that the use and development of renewable energy enables a reduction in the discharge into air of greenhouse gases, either—

(a) in absolute terms; or

(b) relative to the use and development of non-renewable energy.

21) It is worth noting that under *Section 70B Implementation of national environmental standards*, if a national environmental standard is made to control the effects on climate change of the discharge into air of greenhouse gases, a regional council may make rules that are necessary to implement the standard, provided the rules are no more or less restrictive than the standard.

22) Sections 70A and 104E effectively would nullify any national policy statement that might be made requiring local authorities to consider the effects of activities on climate change, just as they currently prevent Decision-makers from considering such effects. For example hearing commissioners and the Environment Court cannot consider the adverse effects of coal fired power systems currently (e.g., the recent Studholme milk processing facilities extension).

23) Reliance is currently placed on a centralised regulatory approach of a National Environmental Standard (s70B). No such standard has been produced in the decade since these provisions were introduced to the RMA in 2004 and it seems that such a regulatory approach would be difficult, costly, and not allow sufficient flexibility for local authorities who wish, and are able, to move quickly on such matters.

24) The RMA needs to be amended to enable local authorities to 'act locally' while 'thinking globally'. This would considerably facilitate a rebalancing of the costs of alternatives such as that sought by EFl.

25) **Recommendation 1:** Sections 70A and s104E of the RMA be repealed as they do not allow consideration of the effect of the emissions of greenhouse gases to be regulated or controlled at the local authority level.

Additions to the RMA

26) If sections 70A and 104E are repealed it opens the door for consideration of effects of activities on climate change, but does not give sufficient guidance as to the importance of such issues. This guidance could be given in a number of places, but as New Zealand has committed itself to the Paris Agreement, then it appears clear where that guidance should be placed in the RMA to demonstrate New Zealand's commitment to the Paris Agreement and to facilitate the transformation to a low emissions economy: amendments to Section 6 and Section 32.

Amend section 6: Matters of National Importance

27) The effects **of** climate change (on our activities) are identified in Section 7 as an 'Other Matter' in the RMA. The effects of our activities **on** climate change are not considered in Part 2 of the RMA at all. This means, for example, that decision makers must have 'particular regard to' such effects as sea level rise caused by climate change when making decisions on subdivisions, but, as noted above, cannot consider the effects of coal fired power stations on climate change.

28) New Zealand's commitment through the Paris Agreement to reduce adverse effects of activities that help **cause** global warming and associated climate change indicates that addressing such adverse effects is a matter of national importance. This should be reflected in the RMA to provide clear guidance to decision makers under this legislation and to facilitate integrated and effective approaches to addressing the **causes** of climate change.

- 29) **Recommendation 2:** I recommend that the Government amend Section 6: 'Matters of National Importance' by adding to the list of matters that must be 'recognised and provided for': '(i) the need for a significant reduction in New Zealand's contribution to greenhouse gas emissions'.
- 30) This would provide clear direction for any National Policy Statement as well as any local authority. Moreover, this change would guide any National Environmental Standard, and so remains necessary even should the repeals requested above not occur.

Amend s32: Evaluation of proposals

- 31) Section 32 currently requires decision makers to evaluate and examine the appropriateness, effectiveness and efficiency of any proposed policies or rules when making policy statements or plans. It also requires specific consideration of 'the opportunities for' 'economic growth' and 'employment' to be 'provided or reduced' by any proposal (plan, policy, rule, etc.) being evaluated under s32.
- 32) Given the global and domestic significance of climate change and its implications for the social and economic wellbeing, and health and safety of people and communities in New Zealand, recognised by the Government's adoption of the Paris Agreement, it is appropriate to recognise this specifically in s32.
- 33) **Recommendation 3:** I recommend that s32 be amended to include a new s32(2)(a)(iii): 'the effects on climate change that are anticipated to be exacerbated or reduced'

34) Summary of Recommendations:

- a. **Recommendation 1:** Sections 70A and s104E of the RMA be repealed as they do not allow consideration of the effect of the emissions of greenhouse gases to be regulated or controlled at the local authority level.
- b. **Recommendation 2:** Amend Section 6 of the RMA: 'Matters of National Importance' by adding to the list of matters that must be 'recognised and provided for': '(i) the need for a significant reduction in New Zealand's contribution to greenhouse gas emissions'.
- c. **Recommendation 3:** Amend s32 to include a new s32(2)(a)(iii): 'the effects on climate change that are anticipated to be exacerbated or reduced'.

I am happy to discuss any of these matters.

Hamish G. Rennie
Associate Professor (Planning and Environmental Management)
Department of Environmental Management
Faculty of Environment, Society and Design
Lincoln University
Lincoln
Email: hamish.rennie@lincoln.ac.nz

References cited:

Torabi, Nooshin 2015. "Understanding landholder participation in biodiverse carbon plantings" Doctoral Thesis: RMIT

Torabi, N. 2016 "The money or the trees: What drives landholders' participation in biodiverse carbon plantings?" *Global Ecology and Conservation* 7:1-11. <https://doi.org/10.1016/j.gecco.2016.03.008>

Welsch, J. (2016) "Multi-scale analysis of carbon stocks and process indicators in the agro-ecosystem of Canterbury, New Zealand" Doctoral Thesis, Lincoln University, NZ. <https://hdl.handle.net/10182/7784>

Johannes Welsch, Roddy J. Hale, Hannah L. Buckley, Bradley S. Case 2016 "Quantification and comparison of shelterbelt carbon stocks within and between an organic mixed-cropping farm and a conventional dairy farm" *NZ Natural Sciences Journal* 41:14-28