

## CLIMATE CHANGE CONTRIBUTION CONSULTATION

Derek Broadmore—Currently a certified organic farmer, formerly a lawyer, past Chair of Organics Aotearoa NZ (OANZ) , The Biological Producers and Consumers Society (BioGro) and the Quota Appeal Authority.

[REDACTED]  
email; [REDACTED]

Thank you for the opportunity to be involved in the discussion on New Zealand's contribution to reducing global emissions of greenhouse gasses (GHGs).

I was disappointed that the discussion document chose to couch NZ's position on this global issue in narrow economic terms and chose to neglect the moral imperative we have to clean up the planet to ensure it is habitable for future generations. The approach suggested in the discussion document is - what is the least we can do to be seen to be doing our bit to ameliorate the problem without affecting our economy or lifestyle.

President Obama has recently stated that climate change is the most urgent and serious problem that we face as a species. In a world ravaged by war, poverty, inequality and genocide that suggests that he, at least, has a sense of the significance of the problem. Nowhere, in the discussion document, is that sense of overwhelming importance and urgency conveyed and we have to assume that our Government does not place the same importance on the issue.

As the discussion document notes our GHG emissions have increased by 21% since 1990. Our Kyoto commitment was to reduce our emissions by 5% *below* 1990 levels, by 2020. Clearly we cannot achieve that target. To suggest that "we are on track" to meet it is semantic and misleading. If we meet it technically (which is most unlikely), it will be through devices such as purchasing cheap carbon credits offshore and not through any actual reduction in emissions.

The document similarly spins the cause of our rapid increase in emissions as economic and population growth suggesting that the leading cause is increased road transport. The truth is that it is the intensification of agriculture and particularly dairy, that is the overwhelming contributor to our GHG emissions. If we cannot even correctly identify the source of our problem then what hope have we of constructively addressing it?

To make a contribution to the global problem NZ has to tackle it's emissions from agriculture. While there is some acknowledgement of this in the discussion document it seems that the only vision we have is that "technological innovation and adopting these technologies on the farm" will provide a way for us to meet our commitments.

The problem is that the technologies that are hinted at, do not yet exist, and are unlikely to exist in the near future. Further they are technologies that are designed to perpetuate a system of agriculture that is itself unsustainable for reasons quite apart from GHG emissions.

To specifically address the questions posed in the discussion document:

### **Question 1**

I don't believe that objectives 1 and 2 correctly guide our response to the problem.

We need to work backwards from the agreed international position of restricting warming to 2 degrees this century. The science tells us how much GHG we can release and still meet that cap. We must contribute a fair share of emissions reductions that will, with the rest of the international community, achieve that outcome.

How we manage the costs of that target will depend on the strategies we put in place.

The obvious area for GHG reduction in NZ is in the agriculture sector. We need to flag to the agriculture sector that farming as we currently do it is unsustainable and incompatible with our GHG goals.

Regenerative organic agriculture already provides us with the farming methods that will achieve the emissions reductions we need.

We also need to indicate that we need a new approach to our transport infrastructure. We must pursue a goal of electrically powered public transport with investment in rail, light rail and electric buses rather than new roads.

### **Question 2**

Because the majority of our GHG emissions come from agriculture NZ has a unique opportunity to make a very significant contribution. This is because we

now know through research carried out by the Rodale Institute in Pennsylvania over the last 30 years (amongst others), that by switching our agriculture system to a regenerative organic model we could in fact be a net zero producer of GHG emissions and that is the contribution we should be aiming for.

### **Question 3.**

Again the discussion document reflects a blinkered vision of how our economy could work in a low carbon scenario. For example an assumption is made that electricity costs will increase. However if part of our response is to encourage, or even require, the installation of solar power (or even just solar hot water) to all new houses and assist installation in existing houses, the cost of electricity per household may actually reduce. Similarly, providing reliable fast and efficient electrically powered public transport may reduce fuel costs.

In other words GHG targets have to be set in the context of an overall plan for how we run our society. We cannot make GHG cuts in a policy vacuum.

What we know is that the technologies are already available to support a switch to a low carbon economy and we need to integrate them into our society sooner rather than later.

### **Question 4.**

Clearly all those opportunities are available and will be important for NZ. They are self evident. Of particular importance to NZ as an agricultural trading Nation is the need for our agricultural system to meet international norms for sustainable, low GHG, low environmental impact production. Our current system of agricultural production is unlikely to meet those requirements.

Accordingly the “new opportunity” missing from the list in the discussion document is the opportunity to move our agriculture to a low impact, sustainable, regenerative model. Not only does that actually reduce our net emissions as stated above, it also moves our agricultural produce up the value chain from commodity to premium markets.

### **Question 5.**

As mentioned we already have the technology to reduce our net GHG emissions to zero or near zero by reforming our agricultural production systems. Future

technologies will potentially enhance that ability further but we do not need to rely on them eventuating.

In more general terms though, it is likely that future technologies will, based on past experience, reduce rather than increase costs. What we need to do is focus research into new technologies that support the overall plan for how we run our society.

## **Summary**

New Zealand actually sits in a very privileged position in relation to GHG emissions should we choose to acknowledge it. Our use of fossil fuels for energy production is relatively low and we can transition much of our transport infrastructure to renewable energy sourced electricity. Most importantly however we can transition our greatest GHG source, agriculture, to methods that will enable us to sequester sufficient carbon to more than meet our contribution to required emissions reductions.

The discussion document does not ask how we can meet how emissions target so I have not I have not detailed how regenerative organic agriculture works. I have, however, referred to some of the research that supports that proposition. I am happy to provide much more detail if required.

Derek Broadmore