

**Agriculture and the Emissions Trading Scheme – how do we enable farmers to respond?**

**Friday 14<sup>th</sup> September 2018**

**Speech from Gareth Hughes  
Green Party**

Kia ora nga mihi nui kia koutou kia ora

Anecdote – Australian climate debate vs ours.

Current making decisions on Zero Carbon Act, creating Climate Commission which will be up and running next year - who will provide advice on if agriculture should enter the ETS.

Thanks for having me and Jim's presentation outlined the global problem.

Emissions from globally agriculture are not insignificant at 12%, and it's a sector most at risk from climate change and extreme weather.

In NZ agriculture makes up 49% of our emissions with a 12% growth since 1990. We've seen a per unit increase in efficiency but still an overall growth because of increased fertiliser use and increased livestock numbers.

I'm not here speaking on behalf of the Government, but as a Green MP and as someone who has worked on climate change for years I'm glad we've moved on from the denialism debate, that there should be a carbon price but the next sacred cow is the debate around emissions and agriculture.

We've often seen an argument made to ignore agricultural emissions – but as the developed country with such a unique emissions profile we can't ignore it – sure we don't have the coal-fired power stations or mega factories of other countries – but our farms, milk dehydrators and farming practises are our equivalent.

No country has it easy and it will be a challenge to reduce agricultural emissions to the scale needed – but the Greens view is if we do it well, if we do it fast we can lead and prosper.

Great to see the various recent reports enter the public discourse:

- We saw from the previous PM's Science Advisor Sir Peter Gluckman his report saying we can't ignore methane, that we need changing land use and farming practises and to get there we need a systems wide approach and whole-farm plans
- Earlier this year we saw the Productivity Commission report we need to move towards horticulture and cropping with greater uptake of low emission practises on farms. Relating to price, they suggested methane either under dual cap ETS or a quota.
- And we've seen two reports from the PCE, the latest saying no additional contribution to warming beyond current level reduce emissions 10-22% by 2050 and the previous PCE's report in 2016 found planting million hectares of marginal land offset 17% of agricultural emissions.

And then we are also seeing sectoral leadership

- Beef and Lamb are aiming for carbon neutrality and
- Landcorp committed to being carbon neutral by 2025

Speaking personally on the stabilisation or no new warming argument I'm concerned about current warming already driving extreme weather events and significant glacier retreat and ice melt and don't believe 2018 should be a base year.

Reducing agricultural emissions is definitely doable.

Denmark reduced its agricultural emissions 28% between 1990-2009 thanks to promoting organics, reduced nitrogen as manure or fertiliser, half the manure to produce biogas.

Ove the last 30 years in New Zealand we've already seen approximately a 1% reduction in methane per unit of production, and there's a wealth of solutions available.

In the short term:

- Modelling by BERG available farm management practise 2-10% without reducing profitability

- Reports have looked at diversification to other crops as a way
- Moving to organic systems increasing soil carbon
- Precision farming and use less fertiliser, increased used of nitrogen fixing pasture to reduce nitrogen fertiliser use
- Optimal pasture utilisation by grazing with appropriate number of animals (Stuff series on addiction to fertiliser)
- Farm management for example managing effluent– covering effluent ponds, solids separation, biofilters
- Stand off pads – reduce nitrous oxide emissions 30-50% from grazed pastures
- Stop imports of PKE as supplementary feed, has been can increase methane emissions per animal and comes with other associated emissions like transport
- Feed – forage rape and forage beet

Over the medium term

- Breeding – some sheep 50% less
- Inhibitors one reduces methane by 30% planned to be released next year

Breakthrough technologies

- Methane vaccines
- Use of seaweed as a feed – 2% feed found to reduce methane emissions by as much as 99 James Cook University.

So there's a big range of solutions available and alongside the research initiatives, best practise diffusion through PGP etc is a price signal plays an important role.

We have historically been critical of National who took agriculture out of the ETS in 2013 because effectively it was the rest of the country subsidising the emissions

Green Policy is for an early and measured phase-in of a levy on greenhouse gas emissions for the agriculture sector under appropriate obligations. The context for this is our preference for a carbon levy over an ETS but it still stands.

The policy detail is available online but relevant excerpts are

- Place the liability for any increased emissions over 1990 levels from the dairying and deer farming sectors with the large processing companies rather than with individual farmers.
- Promote organic agriculture to increase carbon sequestration, nutrient buffering, and healthy animal gut condition.
- Support ways of reducing methane and nitrous oxide production per hectare and per animal

Again I can't speak for James Shaw or the Climate Commission who will be making decisions but last election our Kiwi Climate Fund policy said we would start a charge on agricultural emissions in 2020 - \$6 Nitrous oxide and \$3 for methane

The thing I haven't mentioned to date yet is the truth is the fact that we have too many cows, something also publicly commented by the Environment Minister David Parker.

For decades we've crammed more cows on our paddocks, piling on the nitrogen, intensifying with PKE and now we are seeing the limits – both in terms of emissions but also our waterways.

Likewise the model in Tourism has been to cram more tourists into Queenstown and we're seeing the impacts there.

In contrast there's no limit to the export of solutions, premium, traceable, branded high-value products.

A key way to sell higher value agricultural products is to have an authentic sustainability story.

Comes with multiple co benefits – cleaner rivers, increased reputation and brand and economy

The Government's goal of net-zero economy is a key way to get there and the prime Minister has described it as her generation's nuclear free moment.

Across other sectors we are seeing the offshore oil and gas exploration ban, 100% renewable energy, billion trees to reduce emissions.

Thanks you for the opportunity to speak to you today.