Action on agricultural emissions

Technical appendix

Defining the entity for the point of obligation

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1. Purpose

This paper discusses which entity should be held responsible for agricultural emissions if the recommendations in the Committee's report on agricultural emissions are enacted.

2. What is point of obligation?

Point of obligation is the term used to define the entity responsible for any obligations imposed by the Climate Change Response Act 2002. These obligations could include reporting emissions, surrendering units or paying a levy.

Point of obligation can be used as a term to cover both:

- 1. the point in the emissions cycle where the obligation applies (e.g upstream, the point of emissions or downstream); and
- 2. the legal entity that should be responsible (e.g land owner, stock owner or business owner).

The first issue is discussed in Chapter 7 of the agriculture report, while this paper focuses primarily on the second issue.

3. Background

The primary climate change legislation in New Zealand is the Climate Change Response Act 2002 (the Act). Among other things, the Act established the New Zealand Emissions Trading Scheme (NZ ETS), which was originally set up on an 'all sectors – all gases' basis.

Agricultural emissions were included in the NZ ETS with mandatory reporting requirements for processors from 2012 and obligations to surrender units from 2015. The Act was amended in 2012 to defer the obligation to surrender units indefinitely. Agricultural processors must still comply with the NZ ETS mandatory emissions reporting requirements. The Act also contains the ability to move the NZ ETS point of obligation to the farmer through Order in Council.

Schedule 3 the Act defines the activities which have mandatory obligations to report emissions and surrender units. For agricultural emissions, these activities are contained in Part 5 of Schedule 3 and defined in Table 1 below.

	Farm level	Processor level
Nitrogen fertiliser	Purchasing, other than for on-selling, synthetic fertiliser containing nitrogen for application to land	Importing or manufacturing synthetic fertilisers containing nitrogen.
Animal emissions	Farming, raising, growing, or keeping ruminant animals, pigs, horses, or poultry for— (a) reward; or (b) the purpose of trade in those animals, or in animal material or animal products taken or derived from those animals.	 Slaughtering ruminant animals, pigs, horses, or poultry by a person who is the operator of a risk management programme registered under the <u>Animal Products Act 1999</u> for the slaughter of animals. Dairy processing of milk or colostrum. Exporting from New Zealand live cattle, sheep, or pigs in accordance with an animal welfare export certificate.

Section 54 of the Act provides direction on who should be treated as the 'participant'; that is the entity carrying out the activity. Section 213 further elaborates that for farming animals (see table above), at the farm level the landowner is the participant unless the EPA is satisfied that there is an arrangement in place with a third party for the farming activity. In which case, the point of obligation can be transferred to a third party (e.g to a business owner). Note, this agreement needs to be for at least three years.

4. The Interim Climate Change Committee's report on agricultural emissions

The report on agricultural emissions concludes that the Government should:

- Establish a farm level levy/rebate scheme by 2025;
- Price methane and nitrous oxide emissions from livestock at processor level in the NZ ETS as soon as practicable, and until the farm level levy/rebate scheme is established; and
- Price nitrogen fertiliser emissions at the manufacturer and importer level in the NZ ETS as soon as practicable.

A processor level point of obligation means firms processing farm output, meat and milk, are the participants and are liable for emissions produced on the farms of their suppliers.

A farm level point of obligation means that farmers are the participants, they collect data to determine their emissions, submit a return, and are liable for any emissions they produce.

The Committee's recommendations specify the point of obligation in the emissions cycle but not the entity that should be held responsible. Below is the Committee's analysis on this point.

5. Which entity should be responsible for agricultural emissions?

The best place for the point of obligation is where emissions can be monitored at reasonable cost, compliance can be enforced, and regulated entities have some ability to influence emissions, either directly or by passing through costs.

Below is the analysis of which entity should be responsible for different categories of agricultural emissions at the processor, and farm level.

Livestock – processor level

Ruminant animals (cattle, sheep and deer) are the largest source of agricultural emissions. Methane is produced during digestion by these livestock, and nitrous oxide is emitted from their urine and dung.

Processors currently participate in the NZ ETS for the purposes of reporting emissions for their activities. Although these entities are not the direct decision makers about activities that create emissions on farms, they can pass on any emissions costs to farmers through meat or milk payouts to indirectly send a signal to reduce emissions on farm.

The activity definitions in Schedule 3 to the Act make it clear that for slaughtering animals, the participant is the entity that holds the risk management programme under the Animal Products Act 1999. There is a public database of these entities, which can be found on MPIs <u>website</u>, making identification of them relatively straightforward. Similarly, milk or colostrum are 'animal products' and are also required to have a registered risk management programme. Firms carrying out these activities can be identified in the same way.

Exporters of live animals must have a certificate from MPI to do so, and so there is information available on firms carrying out that activity also.

As noted above, firms that process meat or milk already report emissions in the NZ ETS. These firms are relatively straightforward to identify though information government holds already. The Committee has recommended that processors participate fully in the NZ ETS from 2020 or as soon as practicable providing for reasonable notice. The current provisions of the Act should apply to the surrender obligation.

A point worth noting is that emissions from non-ruminant livestock such as pigs, poultry and horses are also included in the definition of slaughtering, and so processors would also be liable for these emissions. Regulating these emissions at processor level would be relatively straight forward and low cost. However, the emissions are relatively small, and Government may wish to consider if there are some participants who would be unduly impacted by these provisions.

Fertiliser emissions – processor level

Processors of fertiliser already report emissions in the NZ ETS. The activity is defined as importing or manufacturing synthetic fertilisers containing nitrogen. The EPA's annual report for 2017 under section 89 lists 11 participants for the activity. Regulating these emissions at processor level would be relatively straightforward. The cost-pass through is similar to the provisions applying to transport fuel.

Following the reasoning above, the provisions of the Act as they are now should apply to the surrender obligations for importing or manufacturing synthetic fertilisers containing nitrogen.

Livestock emissions – farm level

A farm level levy/rebate scheme is recommended as the best course of action to regulate livestock emissions as this approach can recognise and encourage the full range of mitigation options.

There are often several entities involved in the farming operation. Some examples are the

- Landowner the entity listed on the land title
- Business owner the business farming the land. The business owner will generally lease the land from the farmer, and so have more authority over activities causing emissions
- Stockowner the entity who purchased and owns the stock

Accountability for livestock emissions at the farm level needs to be aligned with who can be held legally responsible for the emitting activities occurring on the land.

The existing provisions in the Act for a farm-level point of obligation in the NZ ETS are useful to illustrate how the point of obligation could be defined for the levy/rebate scheme.

Section 213 of the Act anticipates that if the point of obligation shifts to the farm level, the landowner will be responsible unless there is an agreement that a third party will farm the land.

Landowner

The landowner is the most logical starting point for the point of obligation, as they have the most authority over the use of the land they own. While the landowner may not always be in control of management practices that affect emissions on their land, particularly if the land is leased, they are the ultimate decision-maker about land use change. The landowner can be determined easily through LINZ and so compliance in terms of who needs to participate is relatively straightforward.

Business owner

In some cases, the landowner will lease their land to the business owner (leaseholder) for the activity of farming. The business owner/leaseholder would then be the entity making the day to day decisions about management of the farm operations. There is a lot of variation in the way that arrangements between a landowner and business owner could work, for example through sharemilking arrangements, and for some farming operations the landowner and business owner are the same entity. The Committee's view is that the landowner should be the default point of obligation for the farm-level levy/rebate scheme, as anticipated by the Act, with the ability to transfer the obligation to another entity where there is an agreement in place.

Stockowner

During engagement on the proposals, the Committee heard an alternative proposal that the entity responsible could be the stockowner. A complicating factor of farming is that stock often move between farms. The challenge with this is the additional amount of information the stockowner would need to obtain to report emissions. A stockowner would need to have information available for their stock plus information on all of the farms that his/her animals were kept on during a year. Contrast this with a landowner who might graze additional stock. The landowner would need to know the details of stock coming and going from the farm, but this is simpler than needing to know the land characteristics of other farms. Having the stockowner as the point of obligation would increase the transaction cost for the stockowner and put them at risk if relevant information was hard to obtain from landowners of farms their stock were grazed on.

The Committee is of the view the provisions of the Act as they are should apply to the farm level levy/rebate scheme, in that the point of obligation should default to the landowner but be transferable where there is an agreement for a third party to carry out farming activities. In this way, the operational provisions would be similar to those for forestry where the ability to claim units for sequestration can be transferred to a leaseholder or forestry right holder in certain circumstances.

There are likely to be complications for Māori owned land with multiple landowners and diverse governance arrangements which the Government will need to consider and allow for during registration.

As noted in the section above relating to livestock emissions at the processor level, emissions from non-ruminant livestock such as pigs, poultry and horses are currently included at the processor level in the NZ ETS. The Government, in collaboration with interested parties such as the relevant industry organisations, would need to investigate the feasibility and desirability of including these emissions in any farm-level policy.

Carbon dioxide emissions from liming

Another area the Government will need to consider is the application of lime to soils. This results in carbon dioxide emissions of about 0.5Mt per year, or 1.2% of New Zealand's agricultural emissions (0.58% of total gross emissions) in 2017. Like nitrogen fertiliser, the only recognised way to reduce these emissions is to use less lime on soils. In contrast, however, lime is not solely used in agriculture but used for a number of other applications (such as road construction) which do not result in emissions.

This relatively small source of emissions could be regulated at the supplier level, but a difficulty would be distinguishing lime sold for use on soils from lime used for other purposes. If there is a policy to regulate emissions from ruminant livestock at farm level, it may be relatively low cost to incorporate regulation of emissions from liming into that system and cover the majority of emissions from agricultural lime. This is because 90% of liming occurs in the ruminant livestock sector.

6. Thresholds

The Committee has not considered the application of thresholds. A report by BECA (2018) estimated there are 24,000 farms in New Zealand. It may be appropriate for Government to consider whether a threshold for participation is warranted to exclude smaller operations such as small hobby farms or lifestyle blocks. Including such entities may involve costs that are excessive both for them and the government and have little impact on emissions coverage given their small size. Thresholds can, however, create competitive distortions for entities on either side of the threshold.

7. Conclusion

In conclusion, the current provisions of the Climate Change Response Act 2002 should apply to the Committee's recommendations.

For processor level ETS for nitrogen fertiliser and livestock, those entities already reporting emissions are the appropriate point of obligation when surrender obligations are introduced.

For farm level levy/rebate system, the landowner should be the participant with the option to transfer participation to a third party where an agreement exists – in the same way as currently outlined in section 213 of the Act for the NZ ETS.

References:

The Committee considered the following key sources of information to prepare this paper, all which were prepared for the Ministry for Primary Industries.

Agricultural Technical Advisory Group (2009) Point of obligation designs and allocation methodologies for agriculture and the New Zealand Emissions Trading Scheme

BECA (2018) Assessment of the administration costs and barriers of scenarios to mitigate biological emissions from agriculture

KPMG (2012): Reporting agricultural emissions at farm level