



ZERO CARBON BILL

Advice for farmer submissions

Our Climate Change goal: Farmers continue reducing carbon emissions, moving towards a carbon neutral sheep and beef sector by 2050

B+LNZ is working on a submission on the Carbon Zero Bill, which we will submit near the end of the process.

We thought it may be helpful to share some of our preliminary thoughts that farmers may wish to draw on as they consider making their submissions, which are largely focused on the on-farm aspects of the carbon zero consultation document.

Earlier this year, B+LNZ set an aspirational goal of achieving net carbon neutrality by 2050. We believe that this is achievable because of the reductions in sheep and beef farming emissions that have already taken place on the back of productivity gains, and also because of New Zealand's unique and diverse farming landscape.

Sheep and beef farmers need to engage closely with the government over the coming years to make sure that New Zealand's international commitments are met in a way that works for you.

We have a strategy with a full range of initiatives to measure and reduce (mitigate) emissions and maximize off-sets (sequestration). Details are set out in our Environment Strategy Implementation Plan: www.beeflambnz.com/environment-strategy

We want feedback from farmers on each of the draft positions set out below to feed into the development of our own submission: Please write to: enquiries@beeflambnz.com

The Ministry for the Environment is keen to get feedback from as many stakeholders as possible and we would encourage you to make your own submission.

Please see the advice we sent out recently about how to do this: www.beeflambnz.com/zerocarbonbill

B+LNZ strongly supports a “split gas” approach

New Zealand is at the forefront of global research on the ways to mitigate emissions from sheep and cattle. This science is evolving, but it is already clear that methane, while causing significant warming in the short term, breaks down more quickly than carbon dioxide and nitrous oxide.

Climate impact goals require a focus on reducing long-lived gases to net zero, and stabilising short-lived gases at current or lower levels.

New Zealand sheep and beef farmers have already reduced their absolute carbon emissions by 30 percent on 1990 levels. This is the result of a significant reduction in stock numbers coupled with productivity improvements. This shows that it is possible to reduce emissions while increasing output. While sheep numbers have fallen by 50 percent since 1990, almost the same amount of sheepmeat is being produced.

Recent research¹, has confirmed that because methane breaks down over a relatively short period of time, absolute reductions in methane emissions, such as those achieved by the sheep and beef sector, will make a significant contribution towards achieving the net zero carbon goal.

That is not to say that our sector does not have further work to do, but it is important to acknowledge the progress that has already been made in reducing emissions and to attribute impacts in a way that reflects the most up-to-date science.

¹ *A solution to the misrepresentation of CO₂-equivalent emissions of short-lived climate pollutants under ambitious mitigation.* Allen et al, Nature—Climate and Atmospheric Science (2018).

B+LNZ supports a fairer approach to counting carbon sinks

Many sheep and beef farms already have considerable native or other forestry blocks on their properties, and we see scope for further planting of trees in the appropriate places.

Research by Canterbury University and AUT released this week indicates there is 1.4 million hectares of native forestry on sheep and beef properties. Further work is being undertaken to understand the sequestration potential of this and other planting.

A lot of the native and other forestry on sheep and beef farms is sequestering carbon, but is not recognised under the existing regulatory frameworks.

Native forest that existed on a farm pre-1990 is a good example—it may continue to sequester carbon for centuries, but it is not recognised under ETS rules as an offset to other economic activity undertaken on farms.

Similarly, plantings that don't meet thresholds around size, canopy cover and tree height are not counted. Through the use of modern technology, these rules can be made more precise in terms of area of coverage, and more precise around the height that trees can be expected to reach in different climatic and geographic regions of New Zealand.

If the government is to go beyond its current Paris commitments, we encourage the government to also take a more flexible approach to measuring emissions offsets, that are genuinely sequestering carbon. The international rules do allow alternative metrics.

B+LNZ is also interested in working with the government on opportunities for further planting of trees on sheep and beef properties, where appropriate. Many sheep and beef properties are quite extensive and have areas where planting trees may be the best economic and environmental decision.

There are also opportunities for dual environmental benefits from increased planting to prevent erosion, provide shade and shelter, improve water quality and enhance biodiversity.

B+LNZ welcomes the government's plans to undertake further research into the potential sequestration of carbon soil

The issue of soil carbon, and pasture sequestration, and their potential to be included as a mitigation or carbon sink is one that is often raised by farmers.

At present the science around both soil carbon is sparse and complex. Because of the lack of detailed science on the movement of carbon into and out of soils, it is not possible to credibly include estimates of carbon stored in soils at this moment in time.

Soil carbon is volatile and moves into and out of soils very quickly, often for reasons beyond a farmer's control. For example, a drought will result in a significant loss of carbon over a short period of time. Any carbon accounting system that includes soil carbon storage as a mitigation would also record soil carbon losses. This could just as easily result in a significant financial liability for the farmer, rather than a credit.

There is significant gap in soil carbon science, which needs to be filled. As a sector significantly affected by soil carbon processes, we want to see a greater effort to fill this gap.

We understand that the Interim Climate Change Committee and MPI are intending to contract work into soil carbon research and B+LNZ will collaborate on this issue.

B+LNZ encourages a refresh of the government's economic modelling

The sheep and beef sector is concerned about some of the underlying economic modelling being used to assess the impact of options and the conclusions drawn

We understand that the modelling is based on the assumption that sheep numbers will continue to decrease at the same rate as they have done previously out to 2030 and by extension to 2050, and that sheep farming will be 'marginally economic' by 2030, and sheep numbers will be zero by 2050.

The modelling assumptions used are incorrect, and are based on a continuation of a trend that was just a reflection of the removal of economic subsidies that encouraged the wrong sort of production – numbers of sheep, rather than market pull.

Sheep numbers are plateauing and stabilising, and the economics of sheep farming are currently financially very sound, with very good returns being experienced internationally and prospects for this to continue remaining strong.

Any regulatory framework must be designed to provide the right incentives to reduce agricultural emissions

An effective regulatory framework has to focus on encouraging behavioural change. It must encourage people to do things that reduce or offset agricultural emissions.

For example, a simplistic application of a charge at the meat processor would see the same charge being imposed on each kilogram of product, with no recognition that a farmer may be already net carbon neutral or have offsets.

To effectively reduce net emissions, a regulatory scheme must incentivise absolute emissions reductions as well as fairly recognise the offsetting (or sequestering) of emissions.

On that basis, emissions should be measured at the farm level to support farmer change.

All of the positions discussed above lead to this point. A regulatory system, such as the ETS, has to:

- Recognise current science on the relative contribution of different gases to climate change;
- Fairly account for carbon sequestration; and
- Place both incentives and disincentives directly onto the people whose decisions will contribute to, or mitigate, climate change. Collecting carbon charges at a processor level is a tax, not an incentive.