

Housing livestock in barns could help lower methane emissions, commission chair says



Charlie Litchfield/APnone

Some New Zealand farmers already keep cows in barns through winter.

New Zealand needs to find solutions to reduce methane emissions associated with meat and milk protein production and barn systems like those used by European farmers could be something to consider, says the chair of He Pou a Rangi Climate Change Commission, Dr Rod Carr.

Carr said he had raised barn-feeding livestock as an example of a practice that leveraged technology being used in Europe, a market that was important for New Zealand farmers.

While the country's pastoral grazing practices were some of the most efficient practices of this type of protein production in the world, technologies that would enable lower-emissions farming were emerging. Some of these would be more or less difficult to adopt in different farming environments, he said.

“For some farmers that might mean changing aspects of their business model. Our farmers will need to assess the options available to them and should be incentivised for practices that work for their businesses.

READ MORE:

* [Can regenerative farming live up to the hype?](#)

* [Climate Change Commission chair makes lifestyle changes to reach zero carbon](#)

* [Get moving or pay the cost, says Climate Change Commission's advice to Government](#)

In an interview with Carbon News Carr said, that it was “increasingly obvious that you can create meat and milk protein with lower total emissions using different farming practices”.

“For example, the Europeans have approved feed supplements, which when fed on a regular basis to barn-raised cows and beef cattle reduces their biogenic methane emissions by in the order of 80%. Now, because they have a different farming practice – that is, animals in barns – they are going to have much lower emissions per kilo of meat and milk protein than New Zealand.”

He said it seemed likely that New Zealand would have a hybrid solution, with more animals spending more time in a barn, with their feed supplemented at certain times of the year.

“Even if you only have the animal in the barn for four months of the year with supplements that reduce their emissions by 80% during that period, that is still a 25% reduction in annual biogenic methane emissions.”

Once a day milking can be better for the farmer and cows

Robyn Edie/Stuffnone

Kelso dairy farmer Adam McCall says milking their cows once a day has many benefits.

In the commission's draft emissions reduction plan advice to Government, one recommendation was to accelerate the adoption of emissions-efficient practices, appropriate land-use diversification, and emerging technologies, to reduce gross emissions.

Tapanui dairy farmer Matt Hough said he built a wintering barn eight years ago and had milk cows in it permanently. He built the barn because he was "sick of making a mess" of his soil.

Soil on farms often gets destroyed by cows during wet winters.



Peter Meecham/Stuffnone

Dr Rod Carr, chairman of the Climate Change Commission, says he mentioned barning cows because New Zealand farmers had to consider how other countries used different farm practices to combat climate change.

It would be easy to feed methane-reducing feed additives in such a winter barn system, he said.

Hough would feed such additives if it was not too expensive and he was rewarded for lowering his emissions, he said. Methane-reducing additives are not yet approved for use in New Zealand.

He could also milk throughout the year in a barn system as he fed cows the same rations in a barn.

He had different herds in the barn at different times of the year, he said, with one in the barn during the day and another at night.

Cows produced more milk in a barn system because they walked less and spent less energy.

It cost between \$3000 to \$5000 per cow to set up a wintering barn, he said.

More winter barns were being built, but there was no way every farm in

New Zealand could afford one and barns did not suit every farm system, he said.

New systems and competitiveness general manager at DairyNZ Bridget Maclean said a few dairy farms, particularly in colder and wetter New Zealand regions, used off-paddock wintering systems, such as standoff pads or barns for housing cows over winter months.



*SUPPLIED*none

Overwintering cows has been a contentious issue in New Zealand.

She said most farms currently had pasture-based systems, where cows were fed grass and crops over the winter period, all across the country.

Off-paddock facilities could benefit some farms but were not an option that suits every farm.

Off-paddock infrastructure was costly to build, so farmers considering investing in off-paddock infrastructure were encouraged to thoroughly understand the advantages and disadvantages, she said.

New Zealand dairy farms were internationally regarded as producers of high-quality milk from grazed pastoral systems, she said.

"Being pasture-based milk producers is a competitive advantage and many regions across New Zealand would not gain value from adding off-paddock infrastructure or barns."