# **FACT SHEET**

# Feeding nitrates to beef cattle

An abatement method under the Emissions Reduction Fund



The Emissions Reduction Fund (ERF) allows producers to generate extra income by storing carbon in vegetation and soils, or reducing greenhouse gas emissions from their operations.

Participants can earn carbon credits by setting up a project using an approved ERF abatement method, which specifies the rules for the activity.

This fact sheet provides an outline of the ERF method for <u>Reducing greenhouse gas emissions</u> <u>by feeding nitrates to beef cattle</u>.

### What is the method about?

Many cattle producers, particularly in northern Australia, feed non-protein nitrogen to cattle in the form of urea during the dry season to improve animal productivity.

Urea increases the amount of nitrogen available to bacteria in the cattle's digestive system, enabling them to improve the utilisation of pasture consumed. Because the pasture is easier to digest, cattle tend to consume more of it, thereby improving productivity.

It has been shown that substituting nitrate for urea can reduce the amount of methane emitted by cattle for the same feed intake while still providing required nitrogen to assist digestion.

This method is about rewarding producers who replace urea supplements with nitrate supplements in the form of lick-blocks to pasture-fed cattle.

#### How does it work?

A condition of this method is that it only applies to land that has been used to feed urea to cattle at least once in the last five years. Once a history of urea use has been demonstrated, the next step involves establishing a baseline of emissions from that land. The baseline is what would happen if the project did not occur and cattle continued feeding on urea rather than nitrate. The Nitrates Calculator (see below for link) must be used to determine the baseline.

The method outlines the conditions under which nitrates must be fed. This includes the safe amount of nitrate to feed to cattle and the time when the lick-blocks are made available. It also outlines other factors to consider, such as the existing sources of nitrate that cattle may be exposed to.

Carbon credits are awarded for a reduction in emissions from the herd as a result of substituting urea with nitrate over the reporting period. The Nitrates Calculator automatically calculates the net abatement of emissions.

## Who is eligible?

This method is available to Australian producers of pasture-fed cattle that have fed urea supplements to their herd at least once in the last five years. It does not apply to herds managed in feedlots.

Producers that decide to implement a project under this method must first register their project with the Clean Energy Regulator:

 $\underline{\text{http://www.cleanenergyregulator.gov.au/ERF/Want-to-participate-in-the-Emissions-Reduction-Fund}$ 

#### For more information:

Visit the Department of the Environment website for more information about the method, including the Nitrates Calculator:

http://www.environment.gov.au/climate-change/emissions-reduction-fund/cfi/methodologies/determinations/reducing-greenhouse-gas-emissions-beef-cattle-nitrate-supplements

Visit the Clean Energy Regulator website for guidelines about this method, and for more information about how to participate in the Emissions Reduction Fund:

http://www.cleanenergyregulator.gov.au/DocumentAssets/Pages/A-guide-to-the-feeding-Nitrates-to-Beef-Cattle-method.aspx

http://www.cleanenergyregulator.gov.au/ERF/About-the-Emissions-Reduction-Fund





This fact sheet was developed by the National Livestock Methane Program (NLMP). The NLMP aims to provide Australian livestock producers with practical strategies and tools to help them increase productivity and profitability and at the same time lower methane emissions. It is managed by MLA and supported by funding from the Australian Government.

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