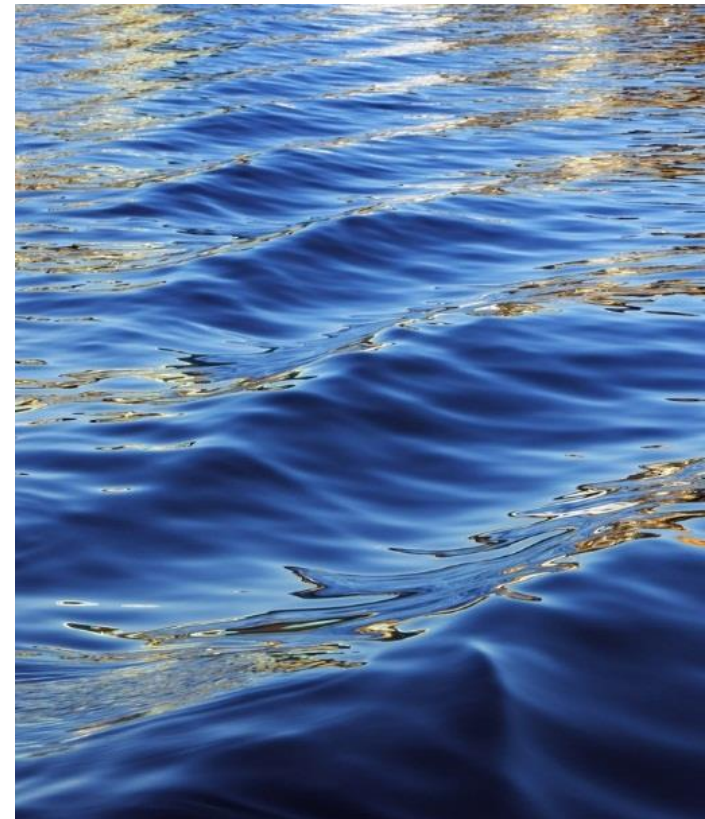




# Ammonia and Agriculture



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## About Ammonia

Ammonia (NH<sub>3</sub>) is a reactive, soluble gas. Excessive levels can be harmful to human and animal health and toxic to plants.

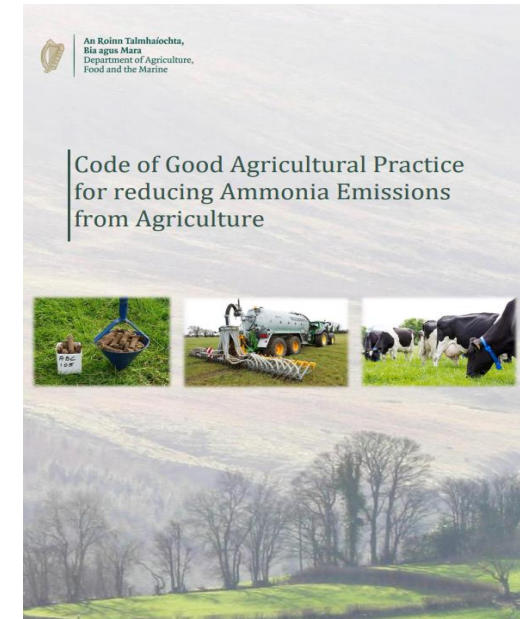
Ammonia is an air pollutant and not a greenhouse gas. However, Ammonia can contribute indirectly to greenhouse gas emissions and therefore climate change. When atmospheric ammonia dissolves in rain, it is re-deposited elsewhere, where it can facilitate the emission of potent nitrous oxide, a GHG.

## Sources

Agriculture is responsible for 99% of ammonia emissions in Ireland. The main source of these emissions is from animal manures, particularly how they are managed i.e., stored and applied. Artificial fertilisers also contribute to ammonia emissions.



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DAFM's Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture explores in detail the strategies to reduce ammonia emissions. Click on the image above to find out more.

# Targets

As a member state of the European Union and under the National Emissions Ceiling Directive (NECD), Ireland must reduce ammonia emissions to 5% below 2005 levels by 2030. Failing to do so could have repercussions for Ireland's image as a producer of sustainable green food.

## Simple Solutions, Big difference

Meeting reduction targets will depend on action at farm level. Some alterations to farm practices have been shown to make a huge difference, some effective measures of which are:

- ❖ Low Emission Slurry Systems (LESS) like injection and trailing shoe opposed to conventional splash plate
- ❖ Fertiliser types – replacing urea and other nitrogen products with protected urea
- ❖ Implementation of appropriate Nutrient Management Plans
- ❖ Extended grazing seasons
- ❖ Covered manure stores
- ❖ Clover incorporation



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### Further Information

DAFM - [gov.ie](http://www.gov.ie) - [Code of Good Agricultural Practice for reducing Ammonia Emissions from Agriculture \(www.gov.ie\)](http://www.gov.ie)

Teagasc - <https://www.teagasc.ie/environment/climate-change--air-quality/ammonia/>

The Teagasc MACC - [NH<sub>3</sub>-Ammonia-MACC.pdf \(teagasc.ie\)](http://www.teagasc.ie)