

NSW EPA Proposed Climate Change Requirements – Information for agricultural licensees

The NSW EPA's proposed climate change requirements will apply to businesses that hold environment protection licenses under the NSW *Protection of the Environment Operations Act 1997* (POEO Act). The proposed requirements will help these businesses reduce their greenhouse-gas emissions and enhance their resilience to climate change, improve transparency for the community, and provide information that the EPA can use to develop targeted support and guidance for sectors. This guidance document provides additional information about how the proposed requirements apply to agricultural licensees.

Our proposed climate change requirements will only apply to facilities that already have an environment protection licence and emit over 25,000 tonnes per year of CO₂-e of scope 1 and scope 2 emissions. We estimate these requirements would apply to 15–20 existing agricultural processing and intensive livestock facilities.

Which proposed requirements apply to the agricultural industry?

Under the proposed requirements, agriculture licensees exceeding the 25,000 tonnes per year of CO₂-e of scope 1 and scope 2 emissions will need do the following two things.

- Submit an annual climate change report on their emissions to the EPA by 28 February each year. The first report is due by 28 February 2027.
- Publish a Climate Change Mitigation and Adaptation Plan (CCMAP) on their website and submit 10-year forward emissions projections to the EPA, by 31 October every three years. The first CCMAP and projections are due by 31 October 2027.

Further details on each requirement can be found in the EPA document, *Proposed Climate Change Requirements*.

Which agriculture facilities does the EPA regulate?

Agricultural emissions include methane, carbon dioxide and nitrous oxide from livestock, crops, horticulture and fish production, agricultural soils and the inputs related to these activities. The greatest source of greenhouse-gas emissions in agriculture is enteric methane emissions from ruminant animals. These animals are predominantly kept on grazing land, which is not regulated by the EPA.

The EPA licenses emissions from livestock-intensive activities (e.g. chicken, pig or cattle accommodation), livestock processing activities (such as slaughtering and meat manufacturing) and agricultural processing (such as dairies and grape processing). The definitions for these and other agricultural activities are set out in Schedule 1 of the POEO Act.

Greenhouse-gas emissions from the agricultural industry

The NSW EPA's proposed climate change requirements refer to scope 1, scope 2 and scope 3 greenhouse-gas emissions. These are defined in Australia's National Greenhouse Accounts Factors reports. How they apply to agriculture and livestock management is described below.

Scope 1: Direct emissions are those generated within the proponent's boundary. They include livestock emissions, manure and effluent management, emissions from the use of fuel, and emissions from on-farm feed production. The relevant scope 1 greenhouse-gas emissions sources associated with agricultural production are identified in Chapter 5 of the Australian National Greenhouse Gas Inventory and include enteric fermentation, manure management, rice cultivation, agricultural soils, prescribed burning of savannas, field burning of agricultural residues, liming, and urea application.¹ The results from these calculations are used to report Australia's greenhouse-gas emissions to the United Nations Framework Convention on Climate Change.

Scope 2: Indirect emissions are those generated outside the proponent's boundary e.g. outsourced energy use, including purchased electricity from the grid. Scope 2 greenhouse-gas emissions can be sourced from the most recent National Greenhouse Accounts Factors report.

Scope 3: Indirect upstream and downstream emissions. These should be sourced from suppliers or robust databases (e.g. the Australian Life Cycle Inventory database).

- Upstream emissions are those from third parties that directly relate to the proponent, such as purchased inputs including emissions from purchased livestock, the production of feed and supplements, fertiliser and chemicals, and the extraction of fossil fuel for electricity and fuel.
- Downstream emissions (post-farmgate) are those associated with the processing, consumption and disposal of the agricultural commodity. These are excluded for assessments of agricultural commodities in the proposed requirements.

What is a site?

A site is the premises to which the environment protection licence applies. This is usually defined in section A2 of the licence.

A licensed facility may be part of a corporation that has multiple licences or large complex sites in NSW. To provide greater flexibility, a single CCMAP may be used for multiple licensed premises

¹ Some of these activities are not regulated via an environment protection licence. For example, in situ burning of agricultural residues may be regulated via generic requirements or considerations specified in the Protection of the Environment (Clean Air) Regulation 2022. More information about agricultural premises the EPA regulates via a licence is available at <https://www.epa.nsw.gov.au/your-environment/climate-change/survey/results>.

within NSW. The licensee's emissions reduction goals in their CCMAP may cover multiple NSW premises with environment protection licences.

Premises-specific information will still be required on the:

- current sources and quantities of emissions
- current and planned mitigation measures
- future emission estimates for the next ten years.

Is my facility over the 25,000 t CO₂-e threshold?

Whether an intensive livestock licensee emits more than 25,000 tonnes per year of CO₂-e of scope 1 and scope 2 emissions will depend on many factors, including:

- the type of animal and the feed
- the nature of the business – for example, whether the animals are housed at the premises for most of their life (e.g. dairy cattle), or for shorter periods (e.g. feedlots)
- electricity use and the source of that energy
- fuel usage
- mitigation measures already in place
- manure and effluent management practices.

The following types of intensive livestock premises are likely to be approaching or exceeding the 25,000 tonnes per year of CO₂-e at the following stocking capacities:

- cattle feedlots – 20,000 head of cattle
- dairy facilities – 5,500 head of dairy cattle
- piggeries – 40,000 standard pig units or 4,000 sows
- chickens – 5,500,000 birds (per batch) for chicken meat farms or 2,500,000 birds for egg layer farms.

Some operations may trigger the threshold at lower stocking rates or, conversely, at higher stocking rates, depending on energy and fuel use, mitigation measures in place, and the design of the facility and operating practices. Where these rates are approached or exceeded, licensees are advised to estimate their emissions to work out if the requirements apply.

The EPA also licenses agricultural processing activities, including general agricultural and animal processing. The main emission sources from processing facilities are from:

- stack emissions from industrial processes
- wastewater treatment
- electricity use and the source of that energy

- fuel usage for stationary and mobile equipment, and transport.

Resources for estimating emissions are listed below.

Where can I get help or advice on reducing my emissions and developing a CCMAP?

As part of developing their Climate Change Mitigation and Adaptation Plan (CCMAP), license holders will be asked to explain how they are reducing their greenhouse-gas emissions.

For the agricultural industry, this may include reducing emissions from livestock production as well as fuel, fertiliser and electricity use and manure management. Guidance about opportunities to reduce emissions is available on the DPIRD website and in the resources listed at the end of this guide.

The EPA acknowledges that there may be limited options for mitigating greenhouse-gas emissions from ruminant enteric fermentation in cattle and sheep, while maintaining or growing food and fibre production.

Licence holders should consider speaking to their environmental consultants. DPIRD can provide assistance, guidance and tools to assist agricultural licensees in developing emissions management strategies for their emissions.

The proposed climate change requirements are reporting and planning requirements and will not impact on agriculture licensees' ability to participate in the Australian Carbon Credit Unit (ACCU) scheme.

Grants scheme

The EPA understands that transitioning to new climate-related requirements will involve a learning curve and varying levels of capacity building across industries. To support this transition, the EPA is working with the NSW DCCEEW to develop a \$5M grants scheme as part of the High Emitting Industries grants to support eligible licence holders in preparing their CCMAP.

The grants will be available to environment protection licence holders whose facilities are not coal mines, are outside the Safeguard Mechanism, and which emit over 25,000 tonnes per year of CO₂-e of scope 1 and scope 2 emissions.

Each eligible licensee will be able to apply for up to \$100,000, or 50% of the project cost, whichever is less. The grant program will open from late 2025 and will close prior to the CCMAP requirements taking effect.

This initiative is designed to ensure that both large and small licensees can meaningfully participate in the CCMAP process, regardless of their starting point.

Resources

NSW Government - Guidance on estimating greenhouse-gas emissions is available on the Department of Primary Industries and Regional Development (DPIRD) website and tools for calculating emissions. - Guidance on reducing greenhouse-gas emissions is available on the DPIRD website, Abatement Opportunities in Agriculture, and at tools for calculating emissions. - The EPA website has information about NSW government projects and support for the agricultural sector.	
University of Melbourne – Primary Industries Climate Challenges Centre Greenhouse Accounting Framework (GAF) for Australian Primary Industries	
Agriculture Innovation Australia Environmental Accounting Platform	Meat and Livestock Full Carbon Calculator with MyMLA Quick Carbon Calculator
Dairy Australia Australian Dairy Carbon Calculator	Australian Pork PigBal tool

These tools reflect the calculations contained in the National Greenhouse Gas Inventory, consistent with the calculations the EPA will accept for its licensees' greenhouse-gas emission estimates.