# Calculating your carbon footprint

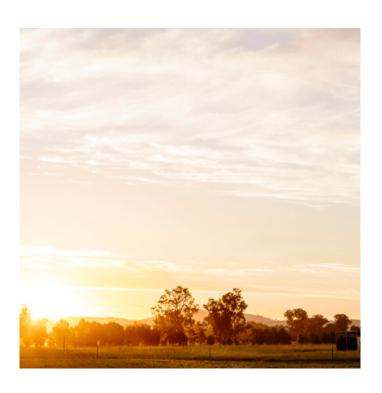


## Why use a carbon calculator?

Carbon accounting is fast becoming a requirement for many supply chains and retailers across Australia. With increasing pressures on large retailers and businesses in the pork supply chain to account for the carbon footprint of the products they are selling there will be an increasing pressure on producers to have up to date and accessible carbon footprint data

With a lack of consistency and accessibility of carbon calculators for pork producers in Australia, APL supported the development of the Agricultural Innovation Australia (AIA) Environmental Accounting Platform (EAP) to provide pork producers with a free, easy to use, cross-commodity enabled, carbon calculator.

Carbon accounting can be a confusing, often expensive, and time-consuming process for businesses to undertake. To make the process of carbon accounting easier, the EAP online carbon calculators have been created - providing a clear advantage to businesses wanting to understand their carbon footprint.



### What is the AIA EAP?

The AIA EAP is an online platform that brings together digitised carbon calculators specifically designed for each agricultural industry. The platform enables carbon footprint calculations for each commodity, enterprise, or for the whole agricultural business, setting it apart from other calculators. Through a standardised approach to carbon accounting across agricultural commodities, businesses can assess their carbon footprint and identify areas of high carbon emissions.

The carbon calculator provides pork specific calculations to enable pork businesses to easily calculate their carbon footprint. The calculator uses production measures and data to generate business specific carbon emissions estimates.











1. Understand emissions

2. Baseline, benchmark and set targets 3. Reduce emissions

4. Store carbon (generate offsets)

5. Report, monitor and market

# What data do I need for the calculator?

Most of the data that is required for input into the calculator are standard production measures. The EAP has been created to be easy to use and understand to enable use by businesses onsite without the need for expert support, simplifying and increasing the accessibility of carbon accounting for all pork producers.

#### Data required for EAP:

- Monthly herd data, including births, deaths, sales, and changes in stock across grow out stages
- Diet data and usage on farm
- Feed purchase data
- Grain purchase data
- Hay Purchase data
- Annual electricity usage
- Annual LPG usage
- Annual on-site diesel usage
- Annual on-site petrol usage



#### What will the Carbon Calculator tell me?

The EAP produces a point-in-time estimated carbon footprint based on the data that is put into the calculator. A major benefit of the EAP calculator is the ability to account for multiple different agricultural enterprises on the one site or as a part of the one business, the output can then display the footprint of each commodity, enterprise, or for the whole business. The footprint will be separated into Scope 1, Scope 2 and Scope 3 emissions and can be broken down into production areas.

Identifying areas of each enterprise which are responsible for the largest portions of carbon emissions allows clear guidance on where best to target a reduction in emissions. This will support and guide business decisions on areas to focus on for improving their carbon footprint, ensuring that financial decisions on sustainability investments will deliver a reduction in emissions from the business.

By comparing individual results from the EAP to industry benchmarks, such as the <u>APL Pork Industry Life Cycle Assessment</u>, businesses can understand where their footprint sits in the range across industry and look to set targets for improvement that suit their business and enterprise mix.

The key sources of emissions for a piggery (pre-farm, on-farm and post-farm), separated by scope, are shown in the figure below:

#### Upstream

Pre-farm emissions



#### On-farm

Piggery emissions



#### Downstream

Post-farm emissions



#### Scope 3 emissions

- Emissions from purchased pigs
- Emissions from the production of feed, including grain and supplements
- Emissions from the production of straw bedding

#### Scope 1 emissions

- · Piggery emissions
  - Enteric methane
  - Manure management emissions including nitrous oxide and methane
- Piggery services including diesel, petrol, gas

# • Emissions from tra

- Emissions from transport of pigs to meat processing
- Meat processing
- Retail
- Emissions from manure/sludge exported offsite

#### Scope 2 emissions

 Grid-supplied electricity emissions

#### What can I do with the results?

The results that are generated and the data used in the calculator is confidential and is only available to be accessed by the business or individual using the EAP. The individual or business can use the information generated in any manner that they require. The carbon footprint report that is generated by the calculator can be downloaded for ease of access, an excel document of the input data can also be downloaded for reference and checking of the input data.

The business may also choose to share the report with interested parties, such as businesses in the supply chain, or financial institutions. Businesses can also use the report and any associated plans to show their commitment to reducing the impact of greenhouse gas emissions on the environment, to government organisations, like the Environmental Protection Agency, who may require this as part of General Environmental Duties.

Access to the EAP carbon calculator is free for pork producers, the calculator can be accessed here:

## **Access the Environmental Accounting Platform**



# Acknowledgement

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#### More information

For help using the calculator, contact the APL Extension Team via extension@australianpork.com.au For technical information, contact Tim Morley-Sattler via tim.morley-sattler@australianpork.com.au

