

# EcoPass Product Carbon Footprint Tool

Critical Review Statement

PREPARED FOR



DATE

24 April 2025

REFERENCE

0739143



DOCUMENT DETAILS

DOCUMENT TITLE	EcoPass Product Carbon Footprint Tool
DOCUMENT SUBTITLE	Critical Review Statement
PROJECT NUMBER	0739143
Date	24 April 2025
Version	01
Author	Peter Shonfield, Chris Pouloupoulos
Client name	Ajinomoto OmnicheM

SIGNATURE PAGE

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## CRITICAL REVIEW STATEMENT

### ECOPASS PRODUCT CARBON FOOTPRINT TOOL FOR AJINOMOTO OMNICHEM

#### BACKGROUND

Ajinomoto OmnicheM (AOC) has developed an in-house carbon footprinting tool called EcoPass, that the company uses to determine the climate change impact of batch chemical processes used to manufacture active pharmaceutical ingredients (APIs) and intermediates.

Results from the tool are used for internal awareness and knowledge building within AOC and to respond to customer requests regarding the climate change hot spots in the cradle-to-gate life cycle of these products and to support actions to improve environmental performance.

ERM was commissioned to undertake a review of the EcoPass tool to assess its alignment with the requirements of the international standard for product carbon footprint assessments, ISO 14067.

#### CRITICAL REVIEW PROCESS

The study was critically reviewed by Dr Peter Shonfield, Global Product Sustainability Director at ERM and Mr. Chris Pouloupoulos, Contingent Sustainability Consultant at ERM. The reviewers are independent of any party with a commercial or any other interest in the tool.

The aims of the critical review process were to ensure that:

- The methods used are consistent with the requirements of ISO 14067;
- The methods used are scientifically and technically valid;
- The calculation procedures are implemented correctly in the tool;
- The background data used are appropriate and reasonable in relation to the goals of the EcoPass tool; and
- The tool documentation is transparent and comprehensive.

The critical review process involved the following:

- An introductory call where AOC technical experts explained to the reviewers the scope of the tool, sources of data and methods used;
- A review of three draft versions of the EcoPass tool (7 June 2024, 10 January 2025 and 7 March 2025) and accompanying documentation including:
  - Excel file with example data from the emission factors database used for the tool calculations: *Emission factors - DEMO JAN 2025*;
  - Description of the calculation logic underpinning the EcoPass tool: *AOC-M-ENV-0006-EN Set-up of EcoPass Product Carbon Footprint Assessment*.
- Assessment of the provided draft tool and documents according to the criteria listed above and recommendations made for improvements to the tool and documentation;
- Web-conferences and email exchanges to clarify some of the points raised during the review; and

- A review of the fourth and final version of the EcoPass tool (called *Template-AOC-EcoPass-01* dated 1 April 2025).

## CONCLUSION OF THE CRITICAL REVIEW

Based on the considerations noted above, the reviewers confirm that the EcoPass PCF tool follows the guidance of, and is consistent with, the international standard for product carbon footprints (ISO 14067:2018) with regards to the following aspects:

- The methods used are scientifically and technically valid given the goal of the EcoPass tool;
- The calculation procedures are implemented correctly in the EcoPass tool;
- The background data used are appropriate and reasonable in relation to the goals of the EcoPass tool; and
- The EcoPass documentation is transparent and comprehensive.

This critical review statement is only valid for the final version of the EcoPass tool assessed (*Template-AOC-EcoPass-01* dated 1 April 2025) and the accompanying documentation (*AOC-M-ENV-0006-EN Set-up of EcoPass Product Carbon Footprint Assessment*).

Please note, this critical review statement does not cover the results of specific assessments made using the EcoPass tool, which would require review of the input data and results for each assessment and was outside the scope of the review.

## FUTURE USE OF THE ECOPASS TOOL

AOC has defined a protocol for reviewing and updating the background emission factors data used in the tool, which will be important to ensure the continued robustness and reliability of the tool in future years.

The PCF results generated by the EcoPass tool are dependent upon correct data input by tool users. As PCF calculations require a significant amount of information to be input, AOC should ensure that users are appropriately trained and that internal quality control procedures are in place to review and confirm the input data.



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Peter Shonfield

24 April 2025



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Chris Pouloupoulos

24 April 2025