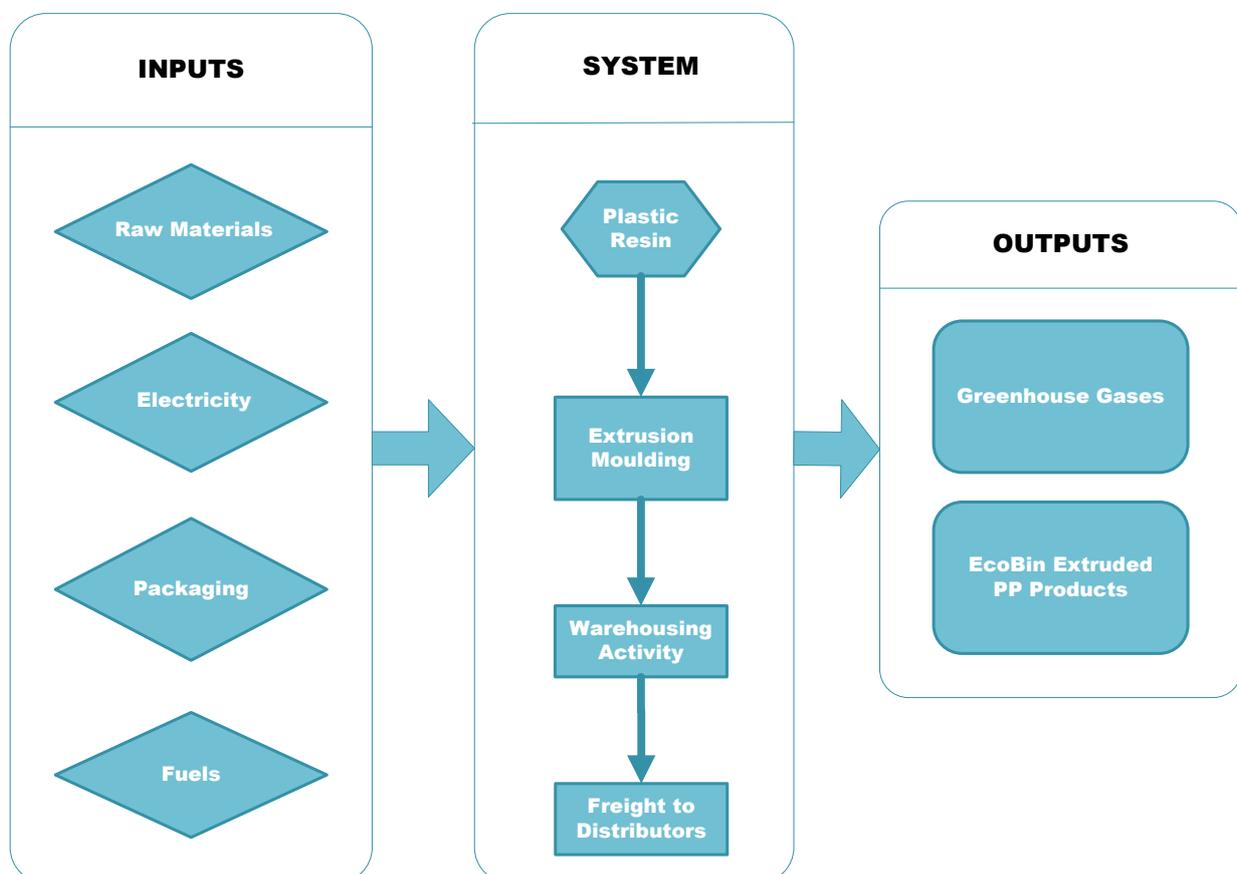


Human induced climate change is caused by the release of greenhouse gases (GHGs). GHGs trapped in the earth's atmosphere reflect infrared radiation back down to earth. This is the concept of global warming which results in sea level rises and temperature changes. While these impacts are of concern to Eco Bin, the specific results are beyond the LCA conducted. Nonetheless, it can be assumed that a smaller release of GHGs will have a lesser impact on global warming.

The amount of reflected radiation resulting from the lifecycle stages of the Eco Bins and solid Injection Moulded Bins depends on the net GHG impacts from these lifecycle stages. The GHG impact of Eco Bin's lifecycle is expressed in the quantity of carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons and sulphur hexafluoride that is emitted. These GHGs are summarised to a single impact unit called a kilogram of Carbon Dioxide equivalent (kgCO₂e).

A Life Cycle Assessment (LCA) verifies the environmental impact of a product. A 'Cradle-to-Gate' LCA examines the environmental impact across all stages from the production of raw materials to the point of sale for the customer. These boundaries cover the stages for which Eco Bin has direct control over its products and the resulting environmental impacts. GHG emissions produced from the use and disposal of Eco Bin products are excluded from this study.

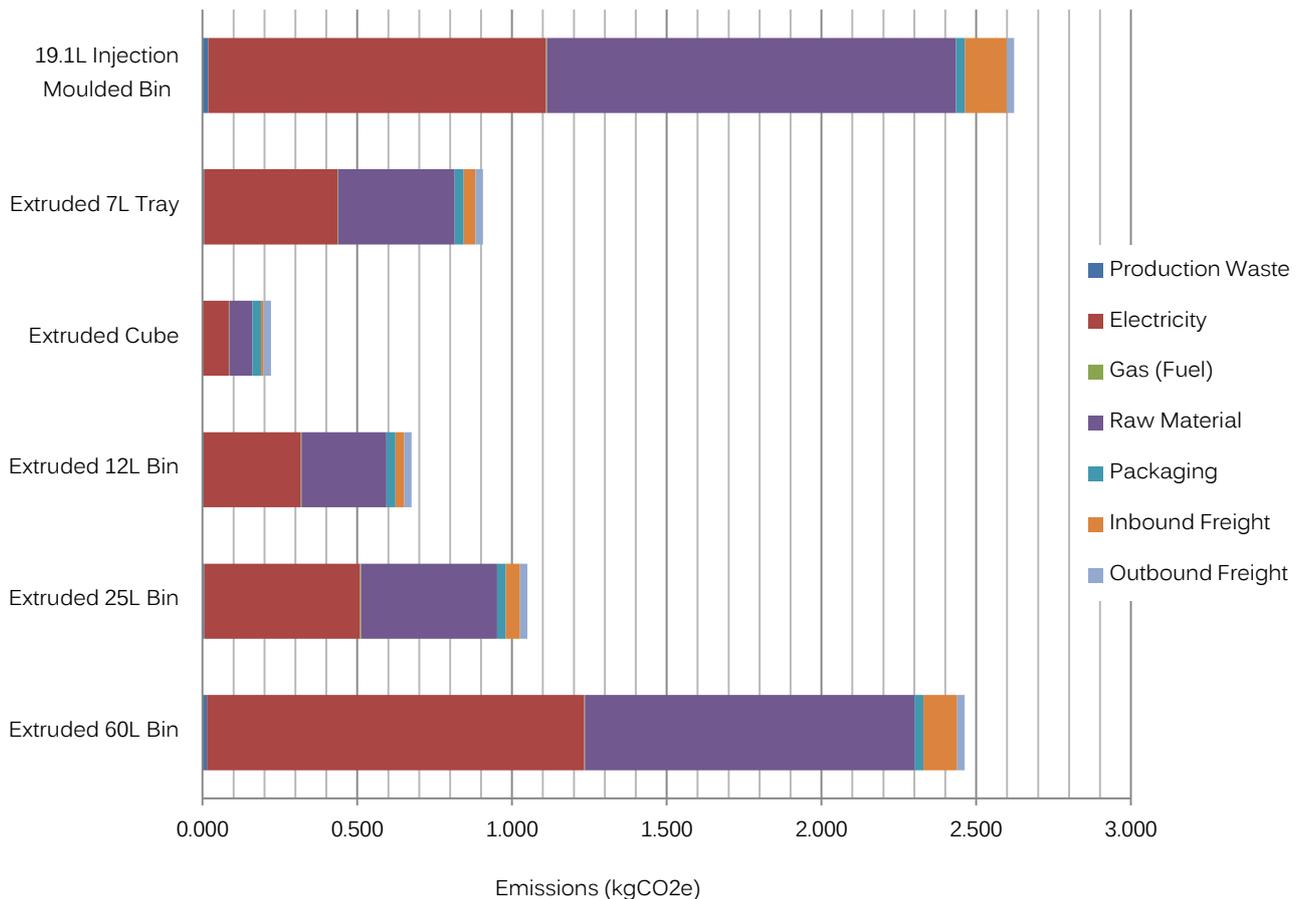
An independent study was conducted by the Carbon Reduction Institute. Their role was to determine and compare the carbon footprint of the Eco Bins to an equivalent product made by the process of plastic Injection Moulding. The scope and system considered in the Cradle-to-Gate LCA is illustrated below:



The GHG emissions impacts of the Eco Bins are affected by the production of each Eco Bin component and the GHGs emitted from electricity and fuel combustion for processing and transportation. The following scopes of the Eco Bin's lifecycle were included in the analysis:

- Inbound freight of purchased materials including plastic resins and packaging materials
- Embodied emissions from purchased materials
- Embodied emissions from packaging materials that accompany the product
- Fuel & electricity use from processed materials
- Fuel & electricity use from warehousing activities
- Outbound freight of the Eco Bin to distributors within Australia

The chart below shows the Greenhouse Gases (GHGs) emitted for the Injection Moulded bin as compared to each Eco Bin model including: 12L; 25L; 60L; 7L tray and mini waste cube.



The LCA study found that a standard 19.1L Injection Moulded bin is responsible for the generation of 2.463kgCO2e. In comparison, the 25L Eco Bin is responsible for 1.050kgCO2e, less than half the global warming impact of an Injection Moulded bin of similar size.

Note: This document is a summary of the full Life Cycle Assessment report. For simplicity it does not present the comparison between each product in terms of the functional unit, nor does it explain the calculation methods used by CRI.