

## Executive Summary

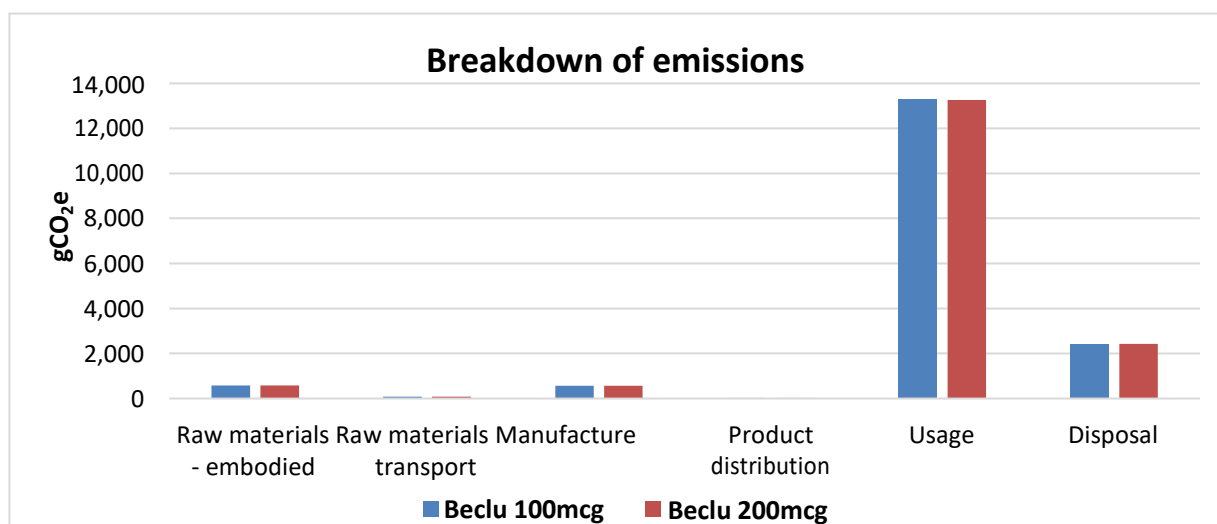
This executive summary provides an overview analysis of the greenhouse gas (GHG) emissions associated with Lupin Healthcare (UK) Limited's Beclu 100mcg & 200mcg inhalers. This 'Cradle to Grave' assessment focuses on the embodied GHG emissions of raw materials, the transport of these materials, the manufacture/processing, distribution, the use of the inhaler and disposal of each product.

Lupin's Beclu inhalers deliver beclometasone dipropionate, the Active Pharmaceutical Ingredient (API) to patients, and contain an aerosol propellant. Within this assessment both strengths of Beclu, 100mcg and 200mcg are included. Both strengths of the Beclu pMDIs are currently manufactured in Indore, India. The finished product is then shipped to the UK for final delivery to customers.

The breakdown of the life cycle carbon emissions for each Beclu strength is shown in the following table:

Lifecycle stage	Beclu 100mcg (gCO <sub>2</sub> e)	Beclu 200mcg (gCO <sub>2</sub> e)
Raw materials – embodied	582.86	580.39
Raw materials transport	81.35	81.51
Manufacture	570.26	570.26
Product distribution	10.64	10.64
Usage	13,295.17	13,268.68
Disposal	2,435.68	2,430.95
<b>Total gCO<sub>2</sub>e</b>	<b>16,975.96</b>	<b>16,942.43</b>
<b>gCO<sub>2</sub>e per actuation<sup>1</sup></b>	<b>84.46</b>	<b>84.29</b>

The highest emissions arise from the Beclu 100mcg pMDI, as it contains slightly more propellant than the 200mcg. For both products, the use phase is the highest emitting lifecycle stage, due to the high global warming potential of the propellant (HFA-134a) that is released during each actuation.



<sup>1</sup>Based on 201 actuations.

Lupin Healthcare (UK) Limited, in conjunction with Carbon Footprint Ltd, has assessed the **Cradle to Grave** carbon emissions associated with the Beclu pMDI (100mcg and 200mcg strength inhalers). By achieving this, Lupin Healthcare (UK) Limited has qualified to use the Carbon Footprint Standard branding.

