

Lalan Rubbers (Pvt) Ltd – ZeroCarbon® Gloves

What is a Product Carbon Footprint?

A product carbon footprint quantifies the total greenhouse gases produced over the total life cycle of the product, and quantifies all six Kyoto Protocol Greenhouse Gases (Carbon Dioxide, Methane, Nitrous Oxide, Hydrofluorocarbons, Sulphur Hexafluoride and Perfluorocarbons) where applicable, and is measured in units of Carbon Dioxide Equivalence (CO₂e). This is a distinct measure that describes how much global warming a given type and amount of greenhouse gas may cause per unit of a certain product, using the functionally equivalent amount or concentration of carbon dioxide CO₂ as the reference. It can be carried out from “Cradle to Grave” – from the point of raw material extraction to disposal or from “Cradle to Gate” – from the point of raw material extraction to the point of distribution. This type of assessment is an important tool for understanding and managing a specific product’s impact on climate change.

For this study, consultants of CCC calculated the product footprint from “Cradle to Gate” according to the **PAS 2050 Standard**. The product footprints were calculated using activity data of Lalan Rubbers during the production lifecycle of the identified gloves from its cultivation stage to the production stage, using embodied, material consumption and transportation data for elements such as fertilisers, pesticides, packing materials, fuel, energy, business travel, and waste, to name a few.

BSI/Defra/CT Publicly Available Specification (PAS) 2050

Developed by the British Standards Institution, the Carbon Trust and the Department for Environment, Food and Rural Affairs (Defra) of the UK, the **Publicly Available Specification 2050 (PAS 2050)** is currently the most widely used and globally accepted standard for product carbon footprinting. It measures the GHG emissions in goods and services throughout their entire life cycle, from sourcing raw materials, through to manufacture, distribution, use and finally, disposal. PAS 2050 is a supply-chain oriented approach to carbon accounting by providing a robust and consistent method for product GHG assessments. It is based on the **Life Cycle Assessment (LCA)** process, an approach which is commonly used in supply chain analysis to identify opportunities to reduce waste and increase efficiencies across an entire product’s system. This is broader than simply focusing on improvements within a single company, and requires an understanding of the processes involved in the production, distribution, use and disposal of a given product.

Chart 3 Typical stages in a product's life cycle



Chart 2 Five steps to calculating product carbon footprint



Carbon Labelling

Once the footprint calculations were done, Lalan Rubbers was provided with Carbon Labels by CCC for the identified products that they can now use to communicate the individual product footprints to their buyers.



ZeroCarbon® Certification

Once the carbon footprint of a specific business entity has been calculated by CCC, the results independently verified by a third-party and the threshold limit is reached through mitigation, CCC can facilitate the purchase of carbon credits to offset the carbon footprint of that particular entity in order to award it the **ZeroCarbon® Certification**.

ZeroCarbon® is a certification developed locally by CCC following the **PAS 2060** global standard produced and published by the British Standards Institution for carbon neutrality. This specification defines a consistent set of measures and requirements for entities (e.g. organisations, governments, communities, families, individuals) to demonstrate carbon neutrality for a product, service, organisation, community, event or building. The carbon footprint measurements should include 100% of Scope 1 and Scope 2 emissions, plus all Scope 3 emissions that contribute more than 1% of the total footprint.

Lalan Rubbers now has the unique opportunity to purchase the required amount of credits through CCC to offset selected orders of the identified rubber gloves, following which, those batches of gloves can be termed ZeroCarbon®. The offsets will be registered VCS/CDM credits, and CCC awards the right to use the ZeroCarbon® logo on all pre-agreed communication.

