

LIFE CYCLE ASSESSMENT FAQs

What’s a life cycle assessment (LCA)?

A product life cycle assessment (LCA) is a systematic analysis of the environmental impact of a product throughout its entire life cycle, where the life cycle stages are defined as follows: raw material extraction; product manufacturing; transportation, distribution and packaging; usage; and end-of-life disposal or recycling.

Watch this video for more insight on LCA:
<https://www.youtube.com/watch?v=EuqjWQrHe50>



Why are LCAs important for PPE products?

LCAs help to identify the environmental impact of PPE products at different stages of the life cycle. By understanding which stages generate the most carbon emissions, we can target our sustainability efforts on these stages to make the biggest environmental improvements to our PPE's overall sustainability.

How does Ansell conduct product LCAs?

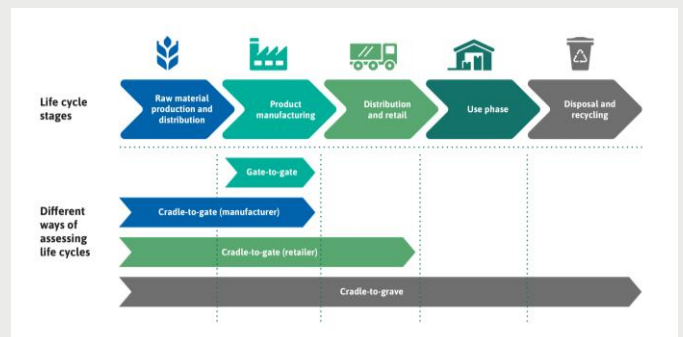
At Ansell, we analyse the life cycle from extraction of natural resources right through to the product’s end-of-life stage, otherwise known as a cradle-to-grave assessment, which is the most rigorous and comprehensive form of LCA.

Why does Ansell calculate LCAs from cradle-to-grave but only communicate cradle-to-gate information?

We calculate our LCAs from cradle-to-grave to gain a complete understanding of the environmental impact of our products throughout their entire life cycle from raw material extraction to disposal. This holistic approach helps us identify opportunities to reduce the environmental impact of our PPE at all stages of a product’s life cycle, including usage and end-of-life.

However, we only share cradle-to-gate information, which covers a product’s environmental impact up to the point where the products leave our warehouses, because cradle-to-gate is where Ansell has the most control over a product and can demonstrate clear sustainability improvements. The different ways products are used and disposed of affects their overall environmental impact but use and disposal methods vary according to our customers, so we can’t always account for these factors.

Additionally, cradle-to-gate results are often more relevant to stakeholders, such as customers and suppliers, who are primarily concerned with purchasing products whose production and supply stages have the lowest environmental impact.



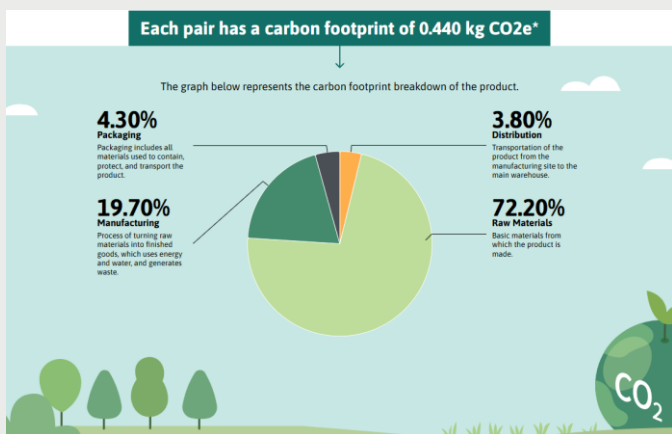
CARBON FOOTPRINT FAQs

What does carbon footprint mean in the context of PPE?

PPE's carbon footprint refers to the total greenhouse gas emissions produced throughout the life cycle of a product, expressed as carbon dioxide equivalent (CO₂e).

How does Ansell calculate carbon footprints for products?

Carbon footprints are calculated by analysing each stage of a product's life cycle using life cycle assessments (LCAs), which measure the energy consumed and quantifying the greenhouse gases emitted. This process typically involves data collection, modelling and validation using recognized standards. Our product carbon footprint assessments are carried out in accordance with ISO 14040:2006 and ISO 14044:2006 and are critically reviewed by an external party.



Are all LCAs and carbon footprint values the same and comparable?

No, not all LCA analyses are the same or directly comparable. Differences in goal, scope, functional unit, system boundaries, data sources and methodologies can lead to varying results. These variations mean you must carefully align and standardize these parameters for any meaningful comparison. Without this alignment, comparisons between LCAs can result in misleading conclusions.

Which key factors influence PPE's carbon footprint?

Key factors include:

- ✓ Materials used e.g. virgin or recycled plastic, fabric, composites, compostable materials
- ✓ Energy consumption and type during manufacturing e.g. green electricity renewable energy has a lower environmental impact than energy from fossil fuels
- ✓ Transportation methods and distances
- ✓ Packaging e.g. recyclable, plastic-free, responsible sourced
- ✓ Usage patterns e.g. single-use, reusable, washable
- ✓ End-of-life disposal e.g. recycling, incineration, landfill



What steps does Ansell take to reduce PPE's carbon footprint?

While safety is always our priority, we're committed to reducing the environmental impact of our PPE through a range of sustainable practices, including:

- ✓ Incorporating recycled materials: Utilizing recycled materials in selected product ranges to reduce resource depletion and waste
- ✓ Optimizing energy use in production: Streamlining manufacturing processes to consume less energy and improve efficiency
- ✓ Designing sustainable PPE: Creating products with recyclability, durability and launderability in mind to support a circular economy
- ✓ Sustainable packaging: Transitioning to recyclable and/or plastic-free packaging materials and reducing packaging volume to decrease waste and transportation emissions
- ✓ Implementing waste management systems: Employing efficient waste reduction and recycling systems to minimize the amount of waste going to landfill.

How can carbon footprint information help with my sustainability decisions?

Although you can use carbon footprint information to choose products which have lower carbon emissions, it's important to balance this with other factors like safety, durability and waste management.

For example, a product with a slightly higher carbon footprint may still be the more sustainable choice if it's more durable, reusable or recyclable, because reusable PPE often has a smaller per-use carbon footprint over its lifetime.

Beyond the obvious environmental impact, carbon footprint data can also help you choose more sustainable suppliers, inform your procurement policies, and support your efforts to reduce Scope 3 emissions.

Are reusable PPE products more sustainable than single-use ones?

Reusable PPE products can have a lower carbon footprint when used multiple times. However, reusable PPE is not suitable for situations where hygiene and sterility take precedence, such as healthcare.

What should I look for when choosing sustainable PPE?

Unfortunately greenwashing is common in the PPE industry so choose PPE that's genuinely sustainable by looking for:

- ✓ Standards: Recognized standards such as ISO 14001 or ISO 50001 are best
- ✓ Material composition: Prioritize PPE made from recycled or renewable materials
- ✓ Reusability: Opt for reusable PPE wherever safe and practical
- ✓ End-of-life solutions: Check for recycling and/or repurposing programs
- ✓ Supply chain transparency: Ensure the manufacturer adheres to ethical and sustainable practices within their supply chain.

