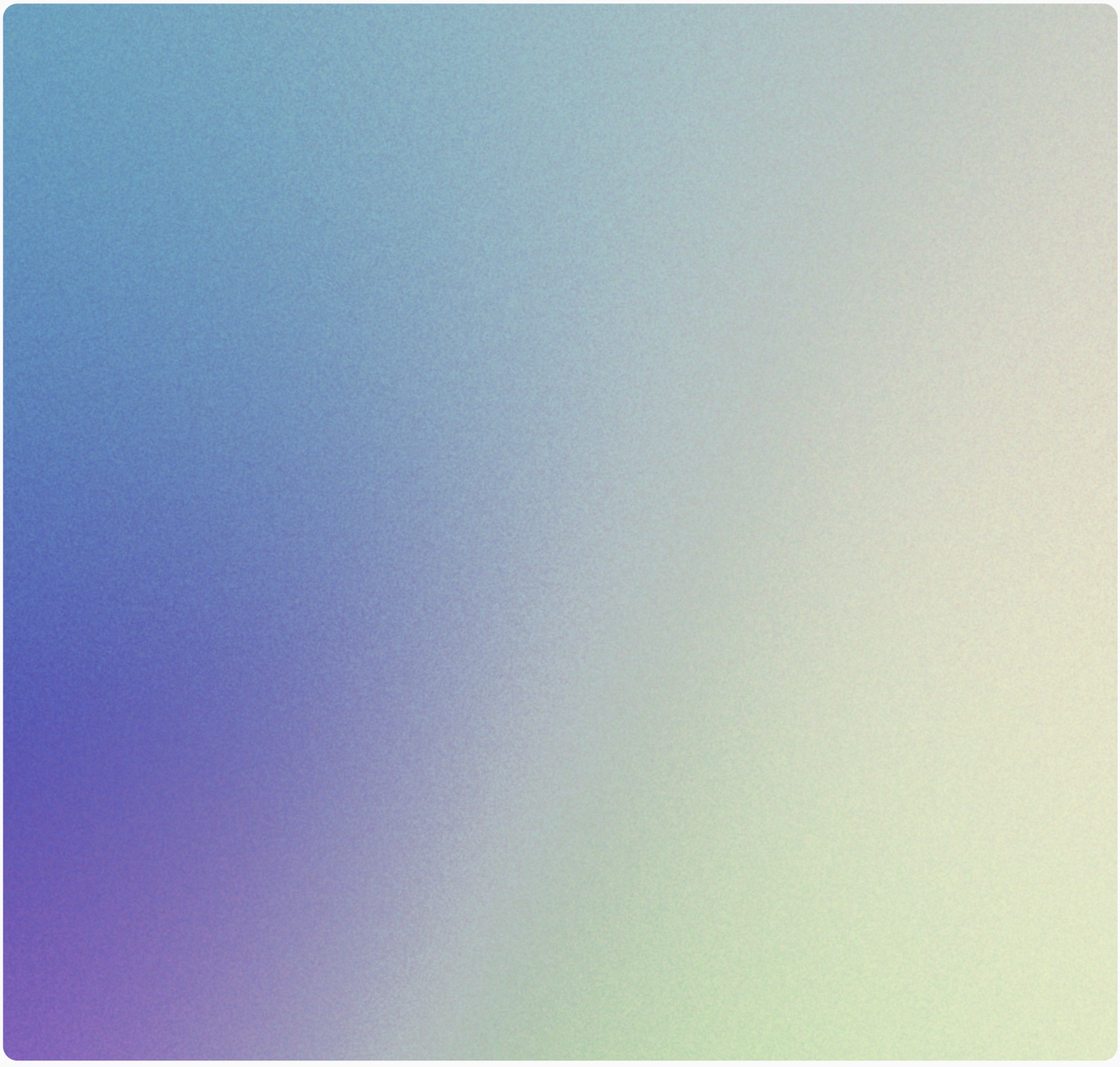
HASA OPTIX
Belgium

CO2 Report + Price Study



Executive Summary

In a 2024 study[1], a team of ophthalmic surgeons, with the assistance of an independent consultant, analysed the costs and CO_2 footprint of hospitals that used RUIs vs SUIs.

They found the following:

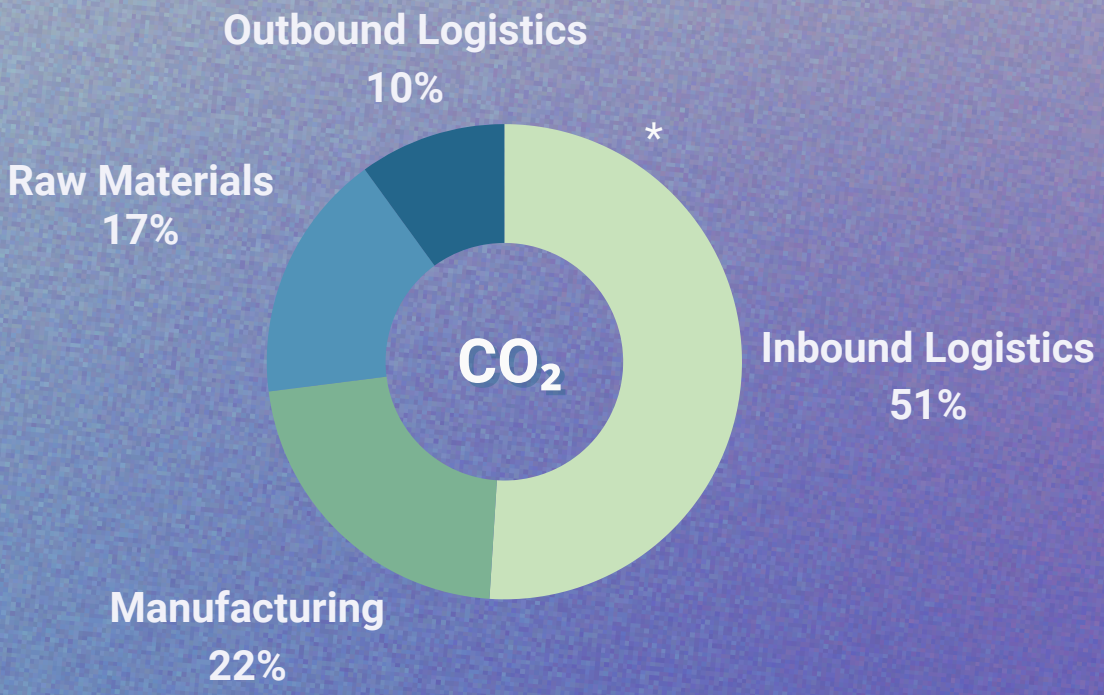
6 centers were analysed (3 in the EU, 3 in the US) to calculate costs associated with cataract surgery. The study also included a brief CO_2 analysis of SUIs.

The annual costs of using SUIs were **lower or equivalent** compared to RUIs in 4 of the 6 centres analysed. SUIs were also more cost-effective in centres with high sterilisation costs, such as ones with external sterilisation centres or large medical centers.

The study concludes that SUIs can be a good option, especially in *high sterilisation cost* centres, when effectively recycled and when *green energy* is used. The conclusion also pointed out that *less frequent deliveries* could contribute to the carbon efficiency of using SUIs. **All of this ties into our Product Carbon Footprint Report - completed by independent consultant CLIMACT.**

[1]Qin, Vincent, et al. (2024). Estimation of the economic and environmental impact of Single-Use instruments in routine cataract surgery. Clinical Ophthalmology, Volume 18, 2481–2485. https://doi.org/10.2147/opth.s467872

PCF Report



Accounting for each step in the supply and logistics chain of operations, they confirmed the following:

The average set of 5 cataract instruments accounts for 1.89kg of CO_2eq. For reference, one cataract surgery emits around 85kg of CO_2eq!

Most of the emissions come from the manufacturing and inbound logistics steps, such as shipping by plane.

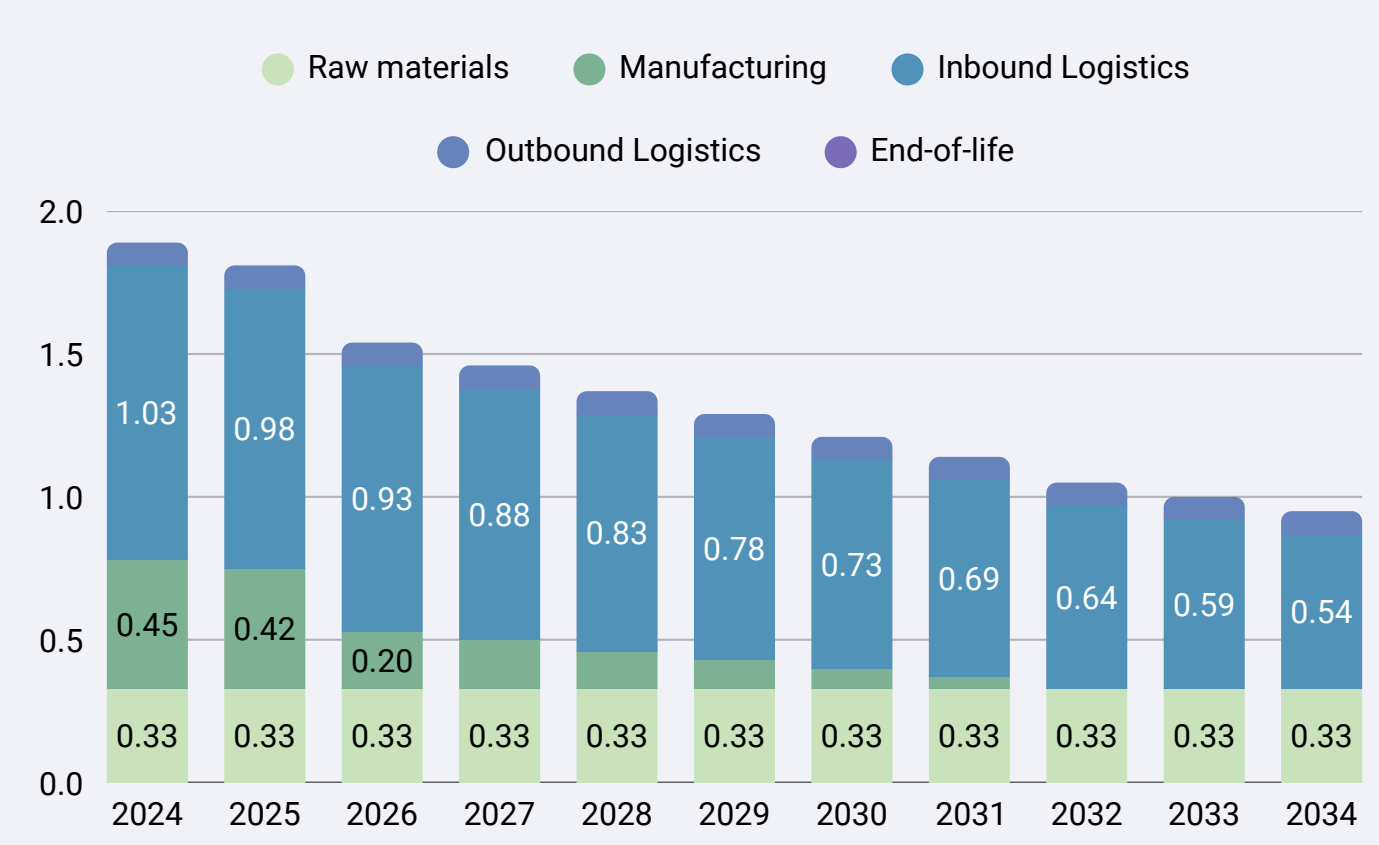
To tackle this, we have created a carbon reduction action plan, which has already been partially put in place.

Actions in the plan include enacting the recycling scheme into all active markets, increasing shipments by sea, and implementing green energy at manufacturing sites, which would cumulatively reduce the emissions by 1kgCO_2eq per product.

The goal is to reduce our carbon footprint by 52% in the next 10 years.

*"End-of-Life accounts for 0%

Action plan



So how do the two relate?

The results of both the study and the PCF Report show that instead of focusing on the difference between SUIs and RUIs, it is better to focus on a third type of instrument: single-use recyclables. When comparing the two, HASA OPTIX instruments are ahead of the curve, allowing surgeons to benefit from SUIs when needed, while avoiding the CO_2 impact of regular non-recyclable SUIs.

HASA OPTIX has taken into account all of the findings from both reports and put them in action, thus paving way for an innovative, sustainable way to use SUIs in a circular economy.

For more information on our ESG activities, please visit https://hasaoptix.com/about/sustainability/