



Maximising Environmental and Cost Benefits through End-to-End Asset Management



TEMPERATURE CONTROLLED
LOGISTICS IN
BIOPHARMACEUTICALS
EUROPE 2025





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Increasing focus on sustainability initiatives

Embracing sustainable practices is essential not only for regulatory **compliance** but also for building **trust** and **loyalty** among stakeholders



Commitments towards sustainability

- Regulatory pressure and **compliance**
- Public **expectations**



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4.5%

Healthcare's contribution to GHG (greenhouse gas) emissions¹

71%

Derive from the **Supply Chain**

1. Peter-Paul Pichler et al 2019 Environ. Res. Lett. 14 064004



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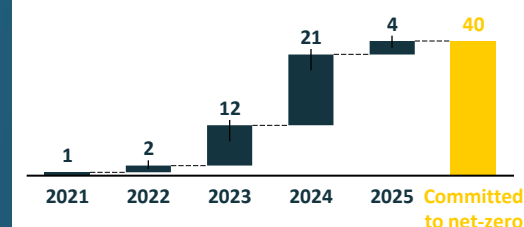
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Net-zero targets

Sustainability **commitment** surge²



71%

Derive from the **Supply Chain**

Science-based targets

Short and long term targets in SBTi have **increased by nearly 6 times** to 390 LSH companies during the same period

1. Peter-Paul Pichler et al 2019 Environ. Res. Lett. 14 064004
 2. <https://sciencebasedtargets.org/>



Case study: Thermal Packaging as a Service



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Sponsor's challenge

- Unreliable temperature-control **performance** of single-use shippers
- High materials and manufacturing **cost**
- High **environmental footprint** of single-use solution



Case study: Thermal Packaging as a Service



Product
manufacturing



Manufacturer to
depot transfers



Outbound logistics



Reverse logistics



End of life



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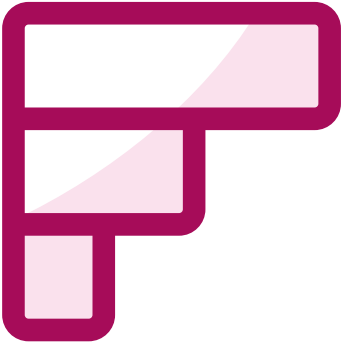


End of life



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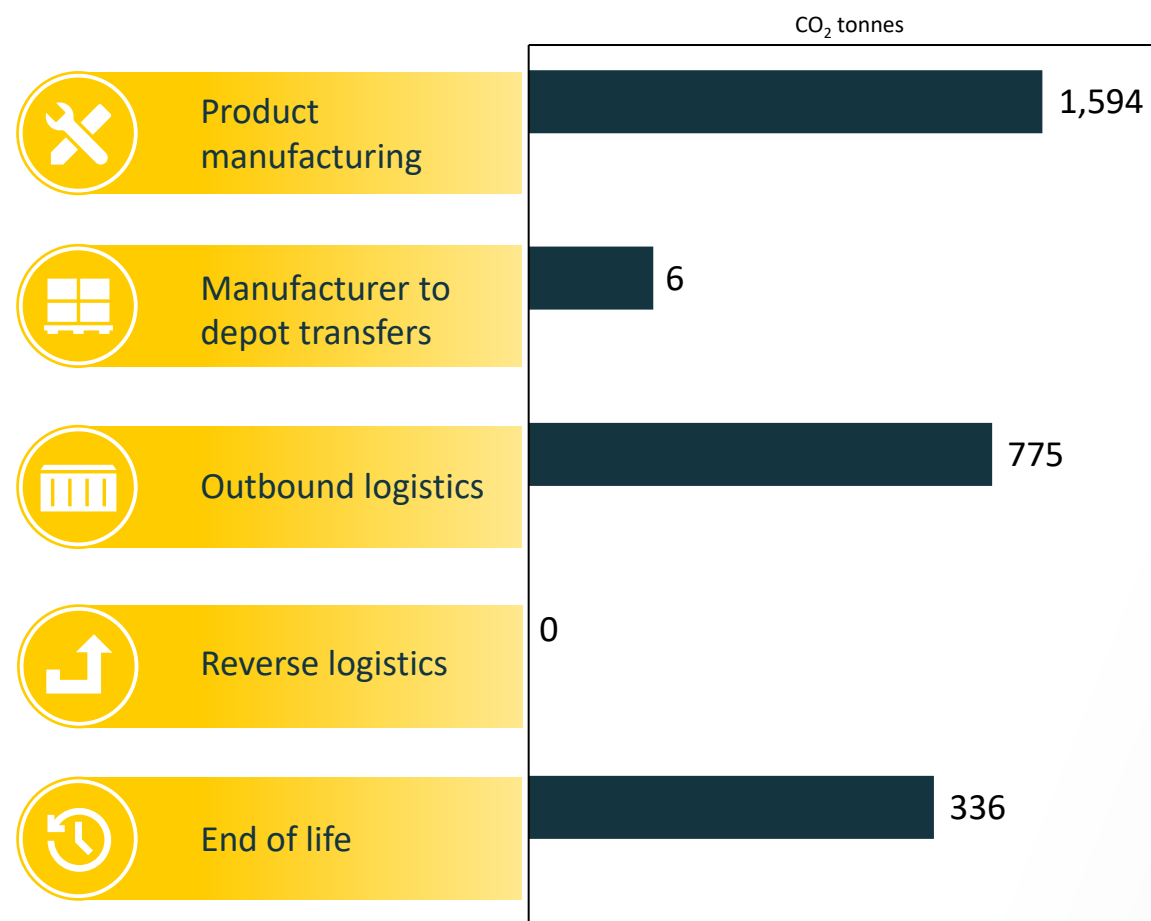
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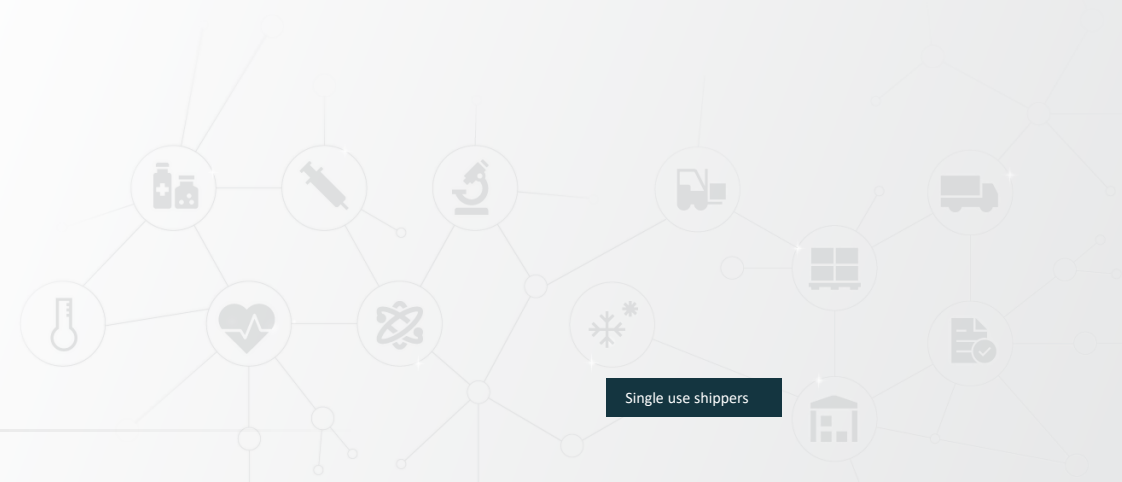
When considering single use shippers, please rank the following asset management activities from most carbon-emitting (1) to least carbon-emitting (5)

① Start presenting to display the poll results on this slide.

Case study: Thermal Packaging as a Service

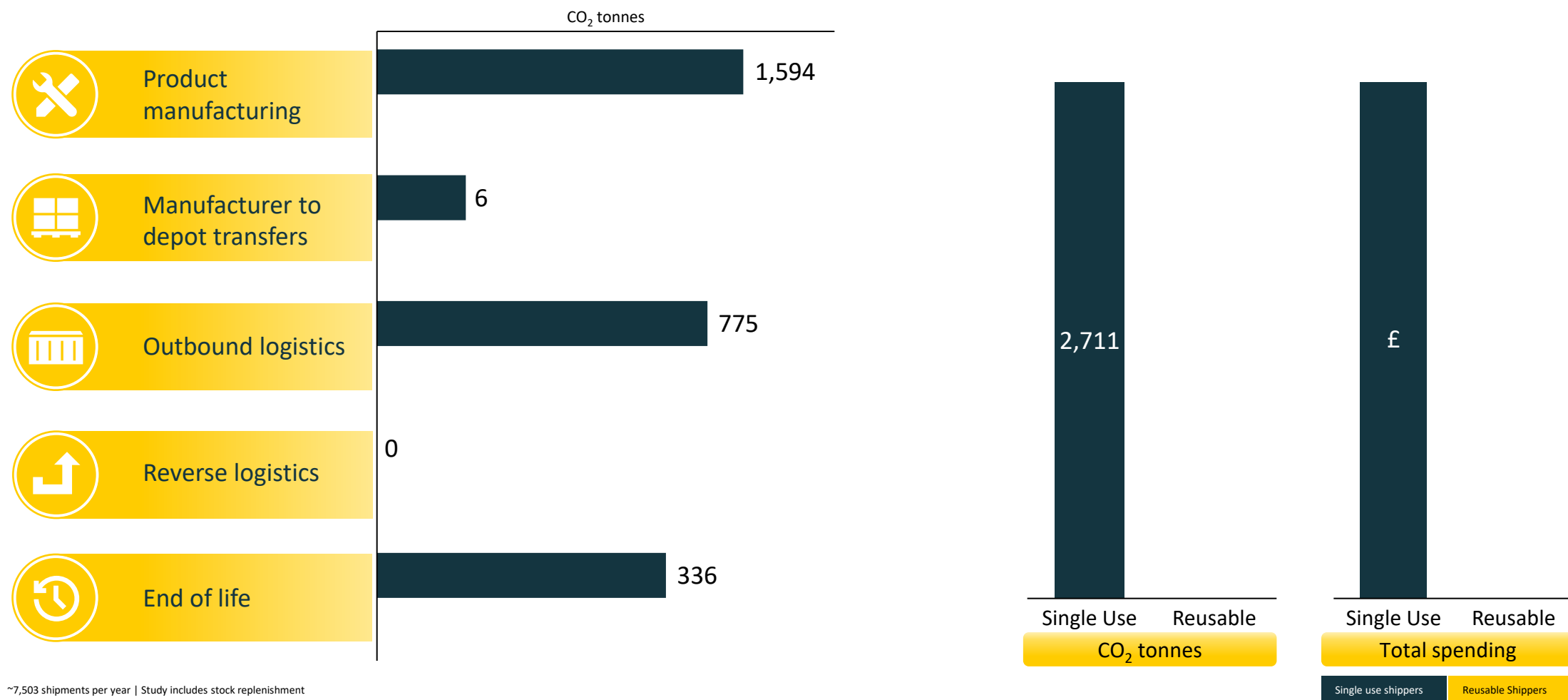


~7,503 shipments per year | Study includes stock replenishment



Single use shippers

Case study: Thermal Packaging as a Service



Case study: Thermal Packaging as a Service



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The Solution

- Validated reusable “Thermal Packaging as a service” solution that ensures end-to-end asset management service
- Regional closed loop network across 28 countries
- Centralized global procurement
- Advanced asset tracking



Case study: Thermal Packaging as a Service



Customer challenge

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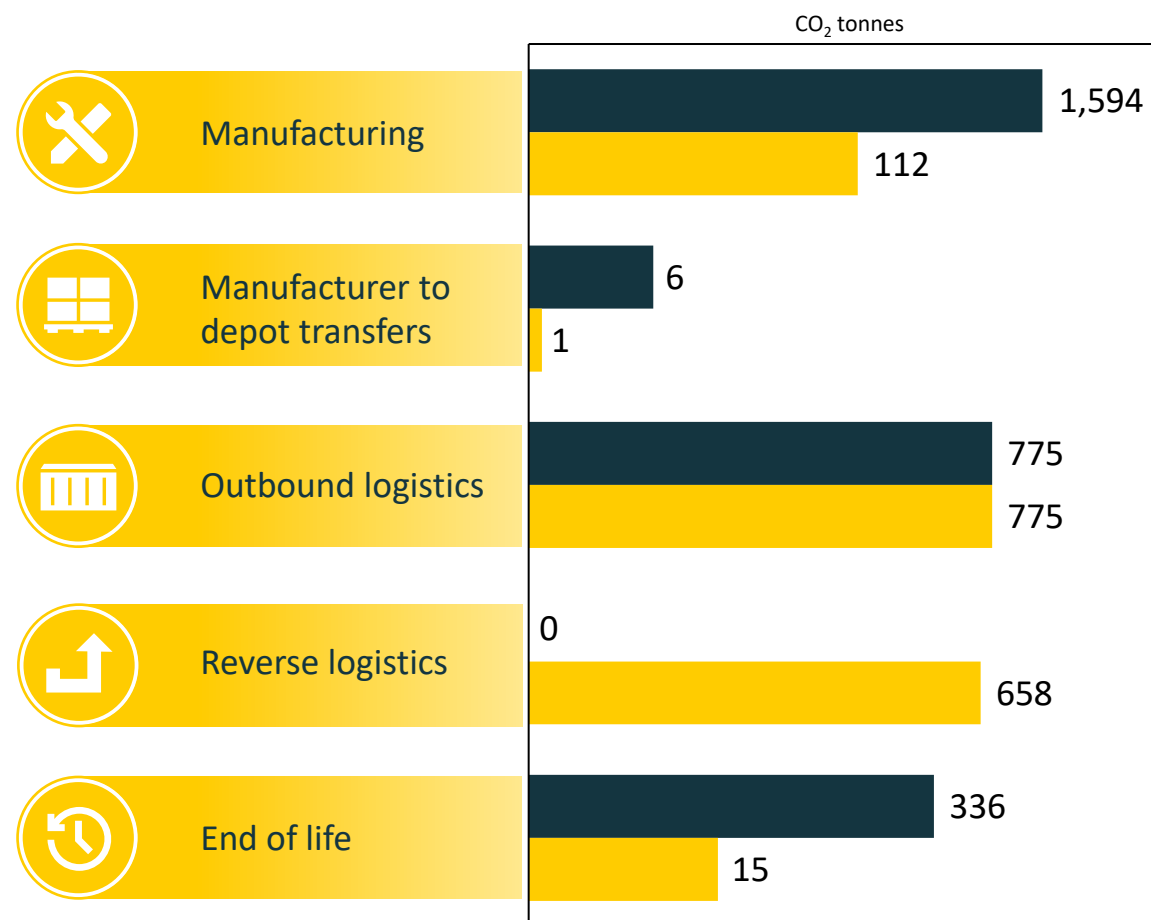


If purchasing reusable packaging, how many fewer boxes do you need to purchase over a 5 year period?

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Case study: Thermal Packaging as a Service

Sustainable Thermal Packaging as a Service solution **boosts efficiency and service quality** for clinical logistics operations



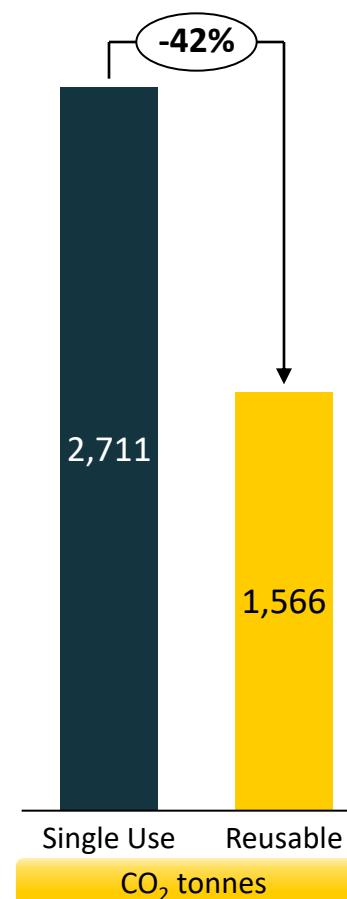
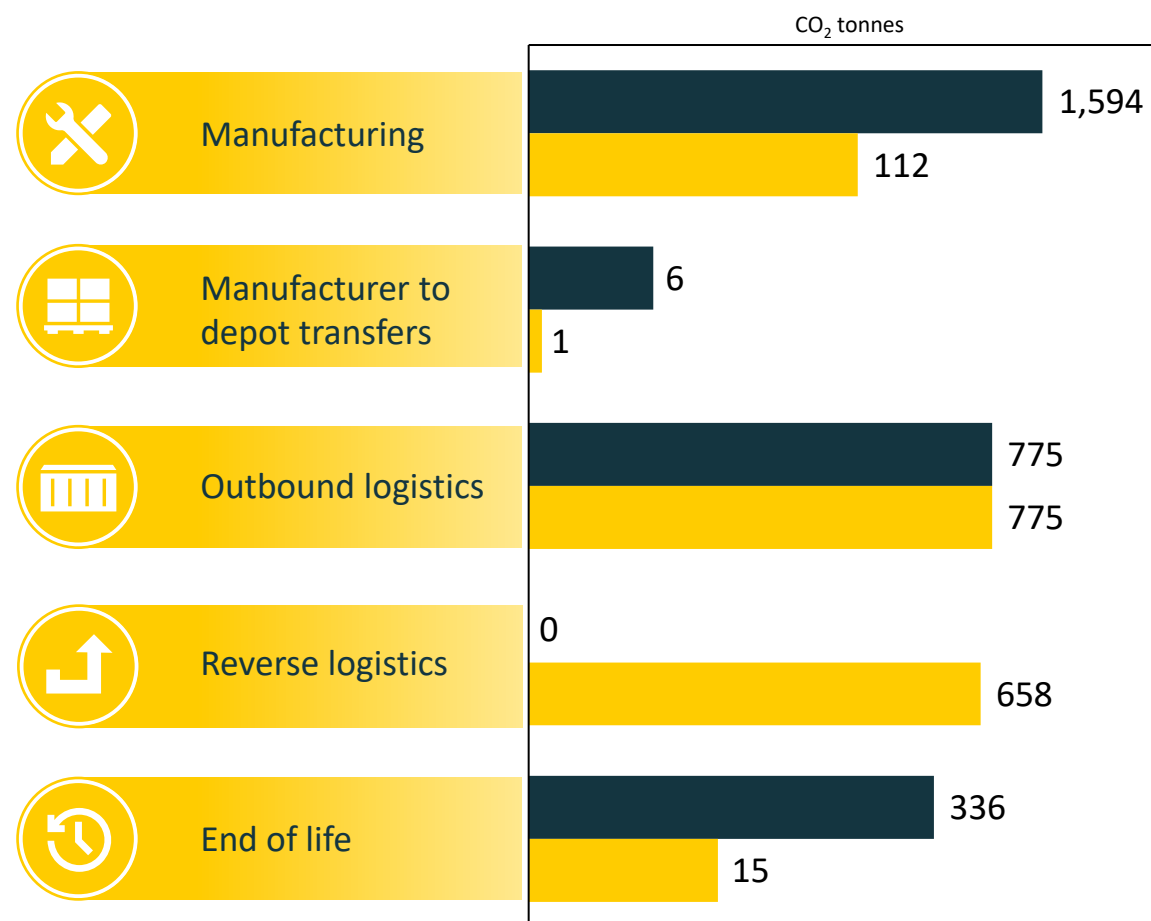
~7,503 shipments per year | 96% return rate | Study includes stock replenishment | 70% of outbound shipments via airfreight (DHL Medical Express) | Ground services used predominately for reverse logistics

Single use shippers

Reusable Shippers

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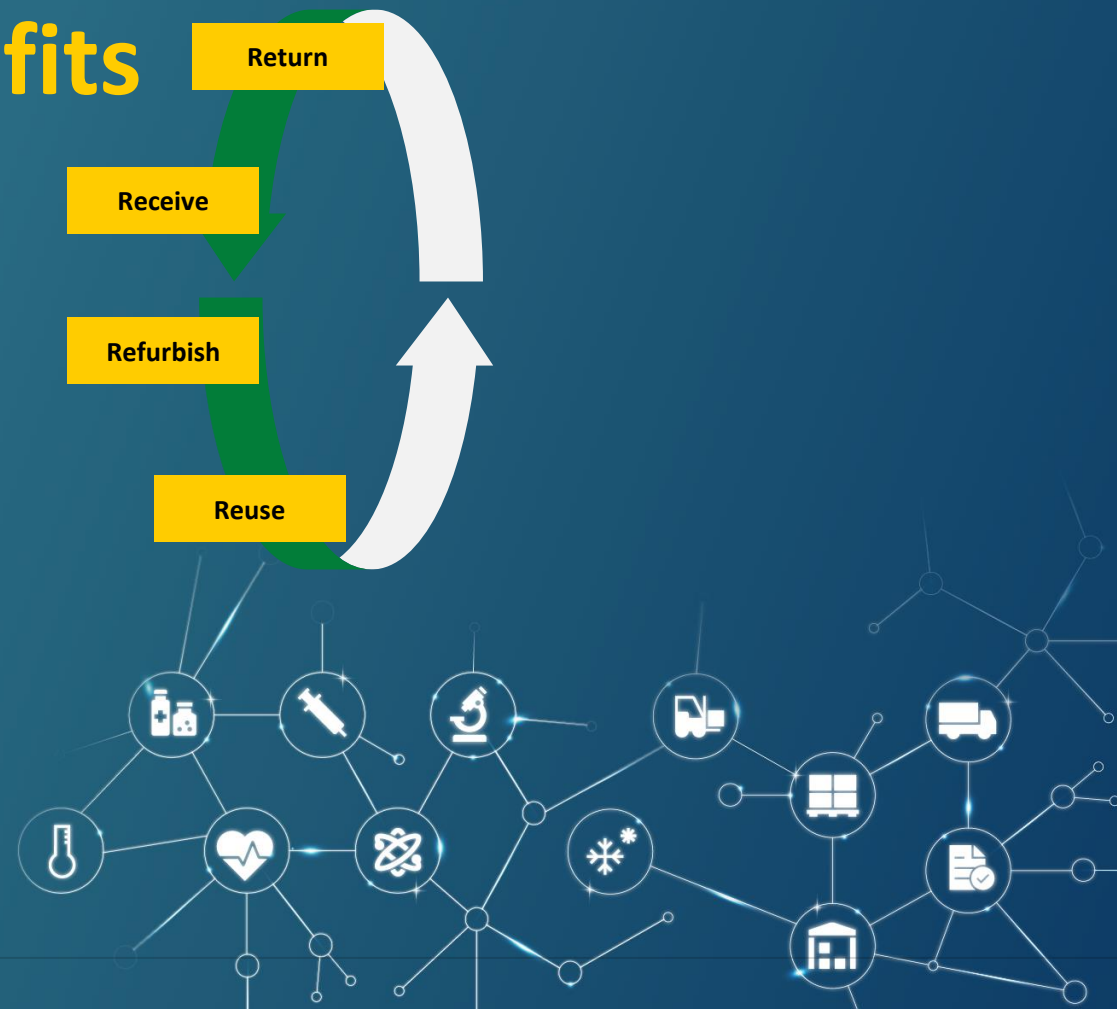


Sponsor's benefits

- **Near-elimination** of temperature excursions during transit
- **45% storage** requirements reduction with the new approach
- **40% CO₂ reduction** compared to single-use equivalent
- **Investment free** solution



Scaling and Replicating Benefits



Scaling and Replicating Benefits

Standardisation of processes

Standardization allows for easier replication of successful practices in different locations or departments.

Maximising benefits

Leveraging technology

Data-driven approach not only enhances visibility but also supports the scalability.

Asset management solutions

Fostering collaboration

Insights gained from one area can be effectively applied to others, amplifying the overall impact of end-to-end asset management initiatives.

Continuous Improvement culture





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Any questions?

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