



LEASING AND REFURBISHMENT A SUSTAINABLE BUSINESS MODEL?

LCA CASE STUDY OF CONSUMER ELECTRONICS

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logitech®



iPoint

Pádraig Murphy

logitech®



CLIMATE ACTION



CIRCULARITY



CARBON CLARITY

DESIGN FOR SUSTAINABILITY



iPoint

We develop software for
Compliance, Sustainability, and Risk Management
over the entire product life cycle



iPoint
Suite



iPoint
Compliance



iPoint
Product Sustainability



iPoint
Conflict Minerals



iPoint
Process Efficiency

Collaboration on Carbon Clarity with Logitech

Britta Schwartze





SHOP LEARN BUSINESS SUPPORT

Sustainability

Planet People Take Action! Resources Recycle




TRADE-IN PROGRAM

FOR BUSINESS, GOVERNMENT AND EDUCATION

The Logitech Trade-In Program is part of our commitment to develop a more circular, lower-carbon business, government and education customers in the gaming, professional and consumer electronics sectors. When trading in your old devices and receive value back while giving them a second life. If your devices cannot be reused, they will be responsibly recycled.

astro
QUALITY REFURBISHED

Some of our high-quality gaming products are now available as refurbished gaming headsets and controllers.

| | | |
|--|--|---|
| <p>COMPATIBLE WITH PC/MAC, PS5</p>  <p>ONLINE EXCLUSIVE/ REFURBISHED/NEW ARRIVAL</p> <p>REFURBISHED A50 WIRELESS HEADSET + BASE STATION</p> | <p>COMPATIBLE WITH PC/MAC, PS5</p>  <p>ONLINE EXCLUSIVE/ REFURBISHED/NEW ARRIVAL</p> <p>REFURBISHED A40 TR HEADSET + MIXTAPE PRO TR</p> | <p>COMPATIBLE WITH PC/MAC, PS5</p>  <p>ONLINE EXCLUSIVE/ REFURBISHED/NEW ARRIVAL</p> <p>REFURBISHED C40 TR</p> |
|--|--|---|

TRADE-IN NOW

ULTIMATE EARS

HYPERBOOM RENEWED

Same incredible features. Same perfect sound. Every refurbished **HYPERBOOM RENEWED** speaker is inspected and tested by Ultimate Ears to ensure it meets our strict standards for acoustic performance, IPX4 water resistance, and battery life.



Blue

YETI **YETI X**



THE QUESTION

How does the carbon impact of a refurbished product compare to a newly manufactured product?

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How does the carbon impact of a refurbished product compare to a newly manufactured product?

No lighting up to 180 hours
Compared to previous generation G903
Requires Logitech G HUB software available at logitech.com/GHUB
Default lighting up to 180 hours
Battery life may vary based on use and computing conditions

Spécifications techniques
Compatible avec POWERPLAY
Éclairage LIGHTSYNC RGB
Conception ambidextre pour droitier ou gaucher
Dimensions: 130x67x40 mm
Poids: 110 g (sans uniquement)
Taux de rapport USB: 1000 Hz (1 ms)
Capteur: HERO 25K
Résolution: 100 à 25 600 ppp

Autonomie¹
Éclairage par défaut: jusqu'à 140 heures
Aucun éclairage: jusqu'à 180 heures
Par rapport à la génération précédente G903
Nécessite le logiciel Logitech G HUB, disponible sur le site logitech.com/GHUB
¹ L'autonomie de la batterie est susceptible de varier en fonction de l'environnement et du mode d'utilisation.

Sauv' gaming: déplaceur sans fil LIGHTSPEED, câble de connexion, élu pour occasions, adaptateur d'extension de rétroéclairage en option, poids de 10 g en option, boutons latéraux en option (7 à gauche, 7 à droite), capot de boutons (à gauche, à droite), sonnettes personnalisées et 2 ans de garantie du fabricant.

Especificaciones técnicas
Compatible con POWERPLAY
Iluminación RGB LIGHTSYNC™
Diseño ambidiestro para diestro o zurco
Dimensiones: 130 x 67 x 40 mm
Peso: 110 g, sólo ratón
Velocidad de respuesta USB: 1000 Hz (1 ms)
Sensor: HERO 25K
Resolución: 100-25.600 dpp

Duración de la batería¹
Iluminación predeterminada: hasta 140 horas
Sin iluminación: hasta 180 horas
Compared to previous generation G903
Requires the Logitech G HUB software, available at logitech.com/GHUB

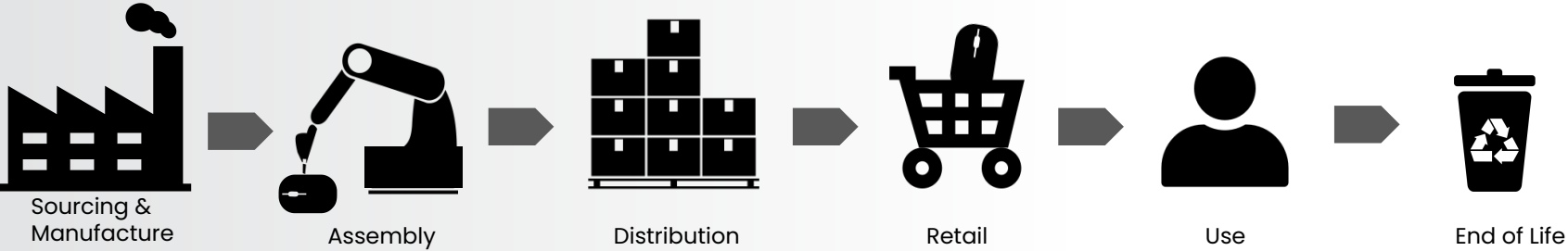
La batería depende del uso y de los dispositivos conectados.
Sauf gaming: déplaceur sans fil LIGHTSPEED, câble de connexion, élu pour occasions, adaptateur d'extension de rétroéclairage en option, poids de 10 g en option, boutons latéraux en option (7 à gauche, 7 à droite), capot de boutons (à gauche, à droite), sonnettes personnalisées et 2 ans de garantie du fabricant.

For further information visit
Pour plus d'informations, rendez-vous à l'adresse
Para obtener más información, visita
Logitech.com/transparency

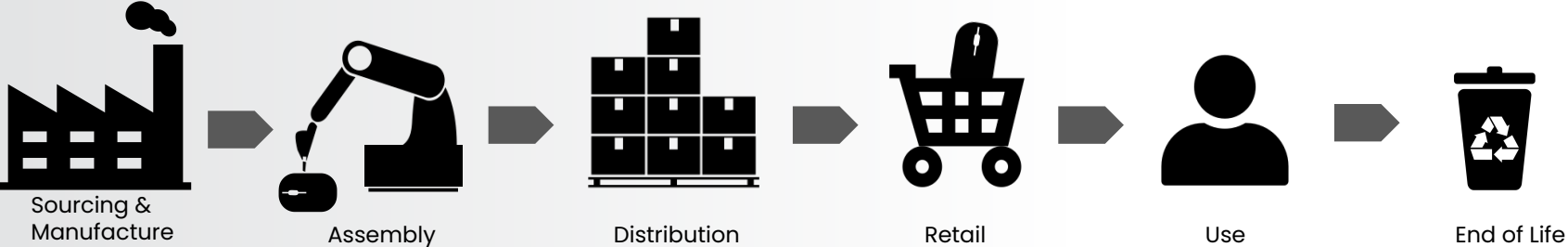


LINEAR BUSINESS MODEL (LBM)

1st Product Lifecycle

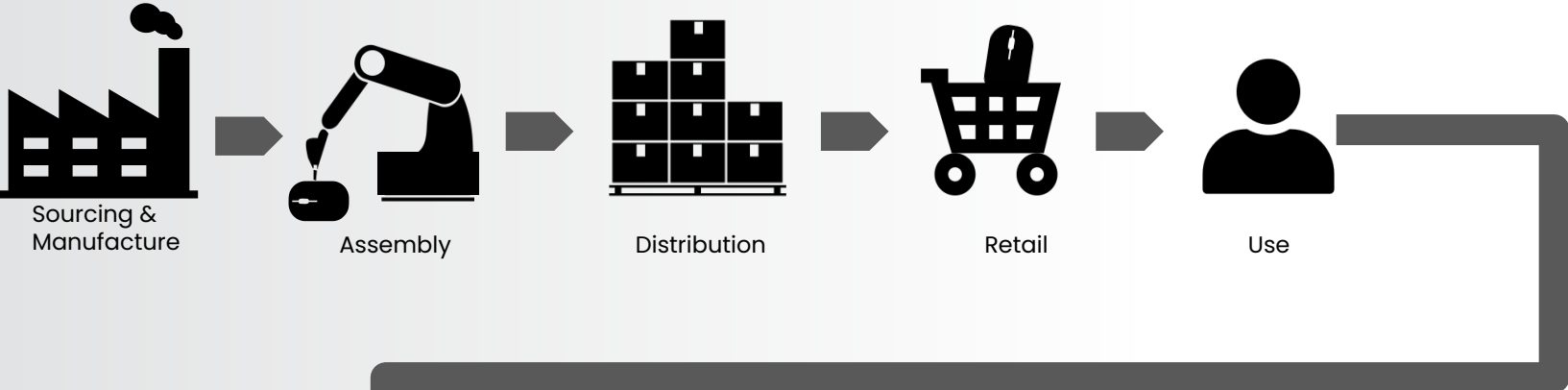


2nd Product Lifecycle

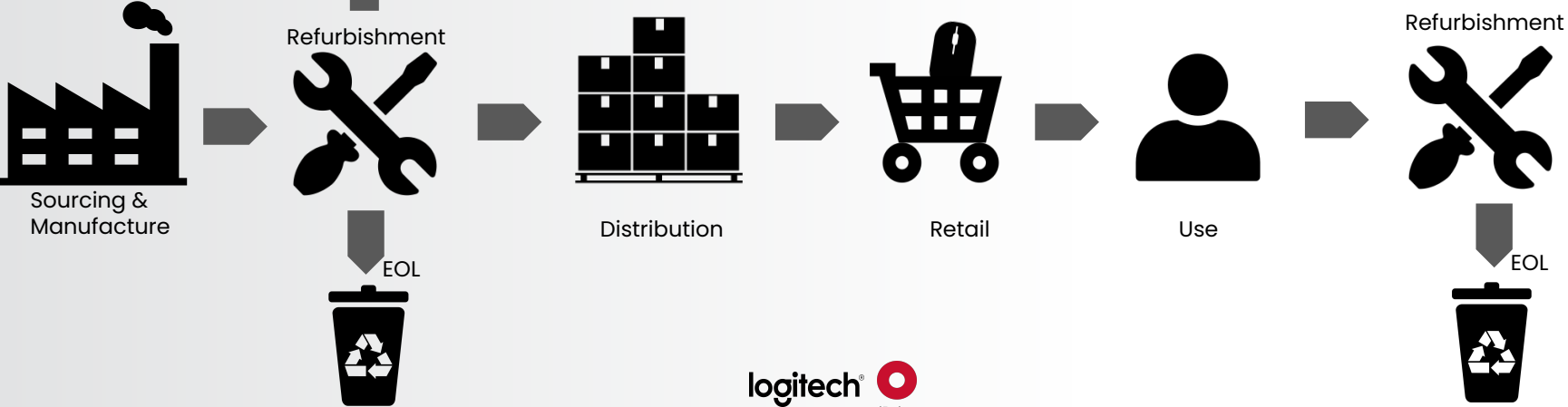


REFURBISHMENT-BASED BUSINESS MODEL (RBM)

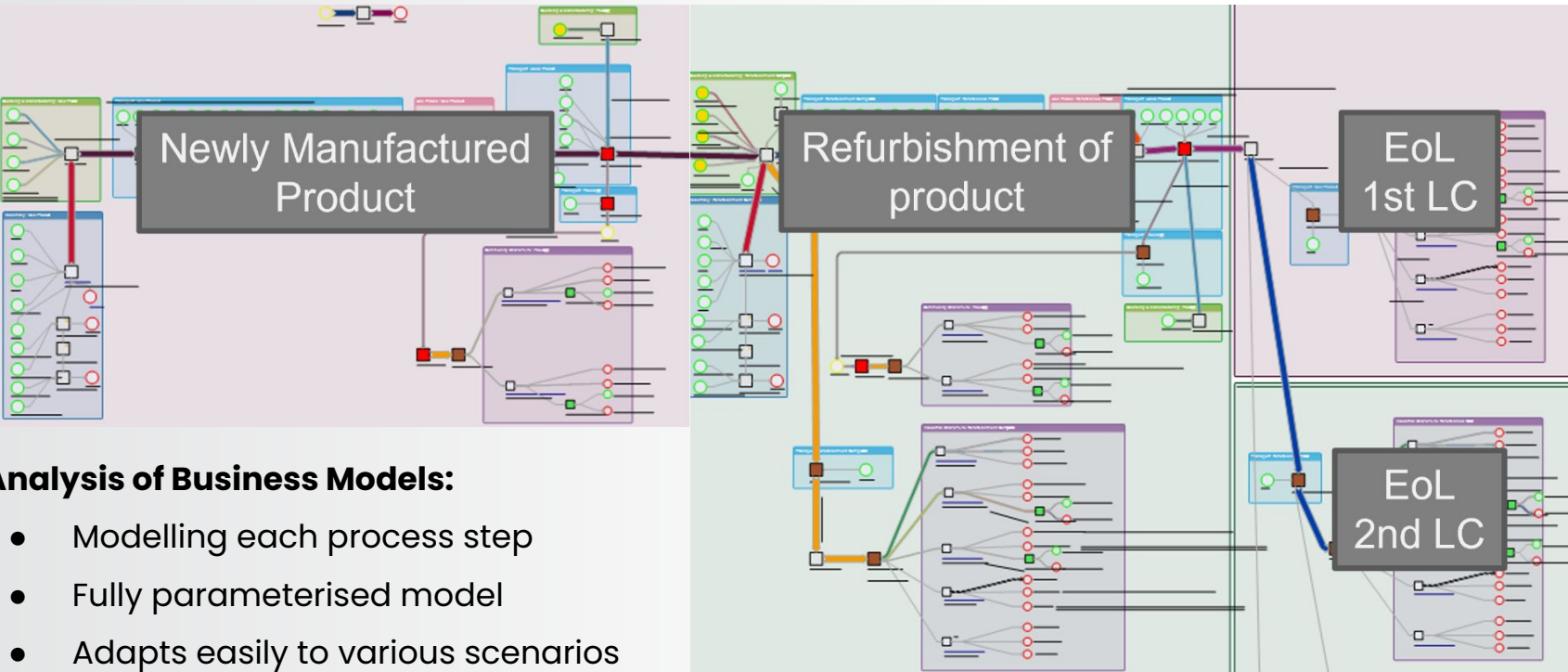
1st Product Lifecycle



2nd Product Lifecycle



UMBERTO MODEL



Analysis of Business Models:

- Modelling each process step
- Fully parameterised model
- Adapts easily to various scenarios

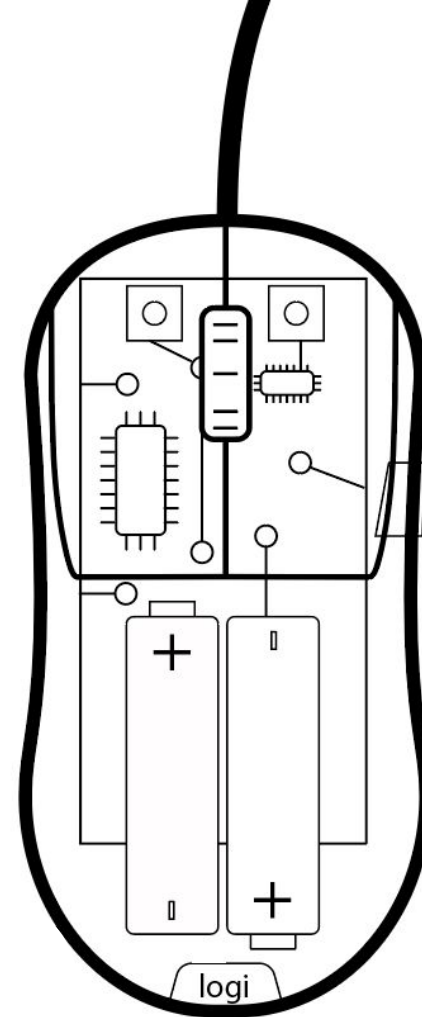
TYPE OF REFURBISHMENT

(CR) No components replaced (cleaning only)

(ME) All mechanical components replaced

(EE) All electronic components replaced

(EE + ME) All components replaced



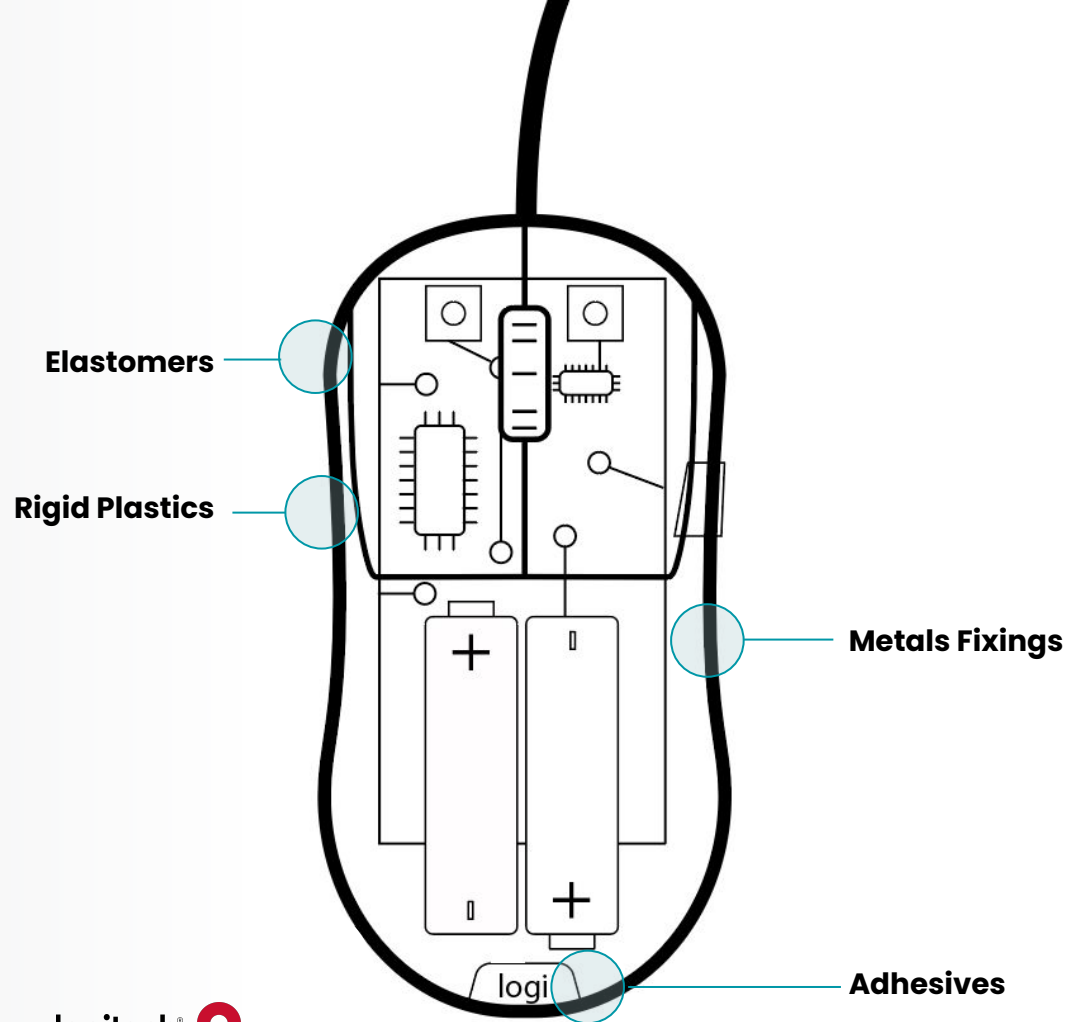
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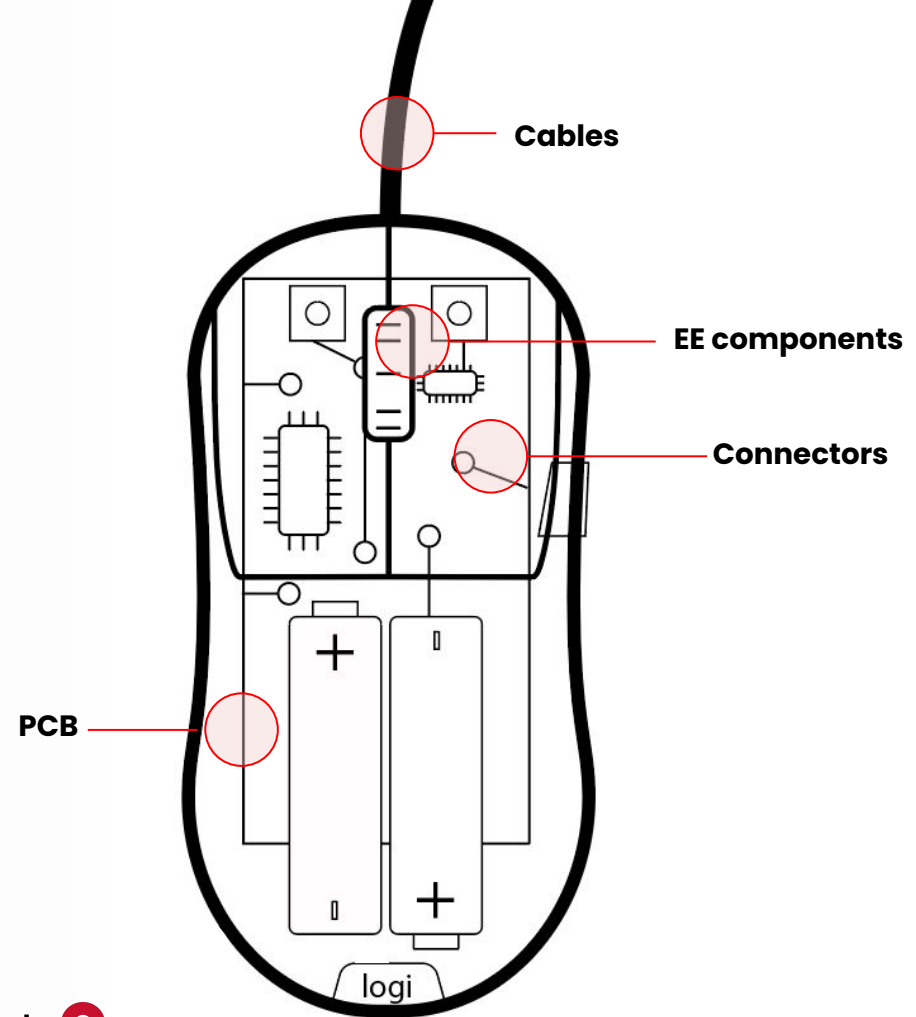
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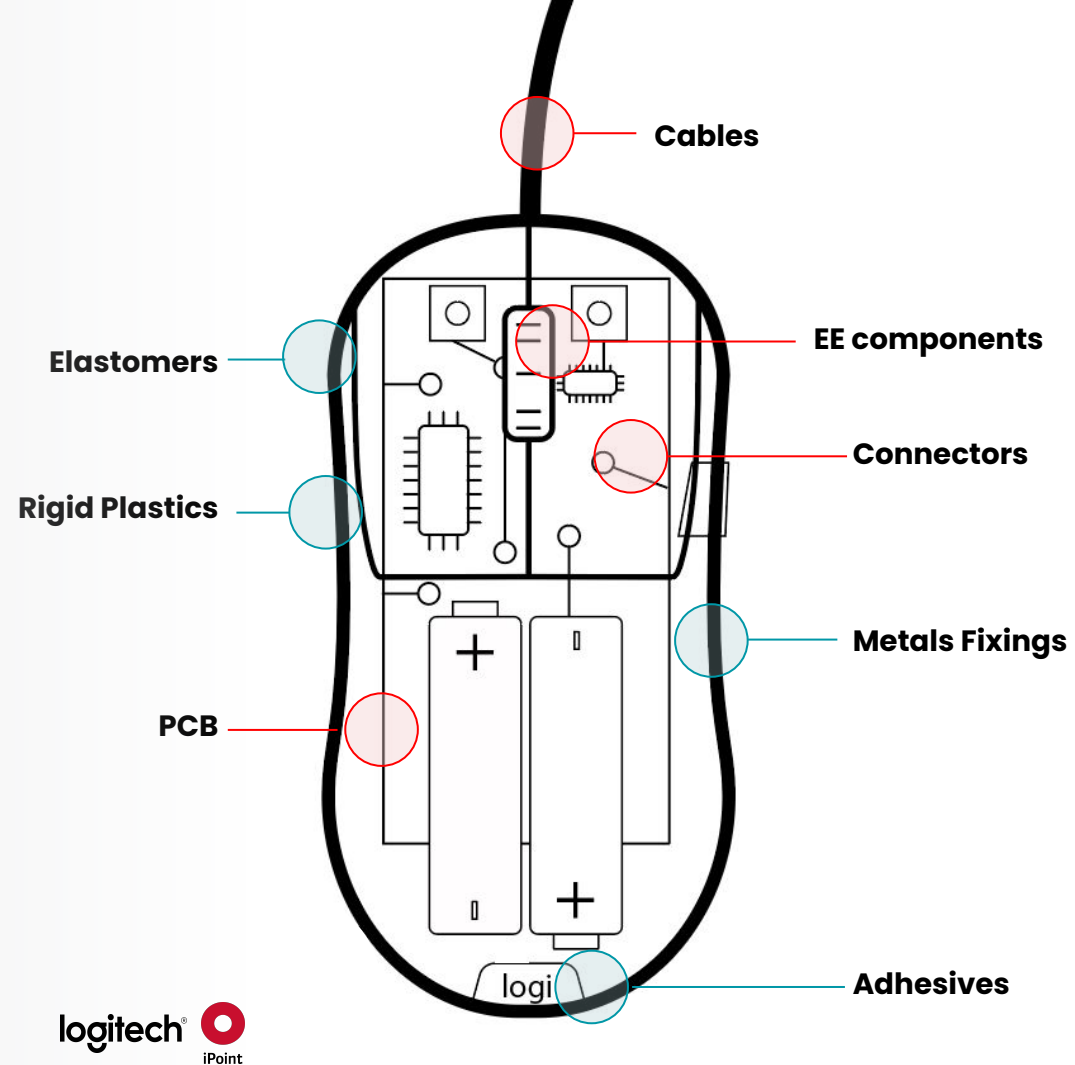
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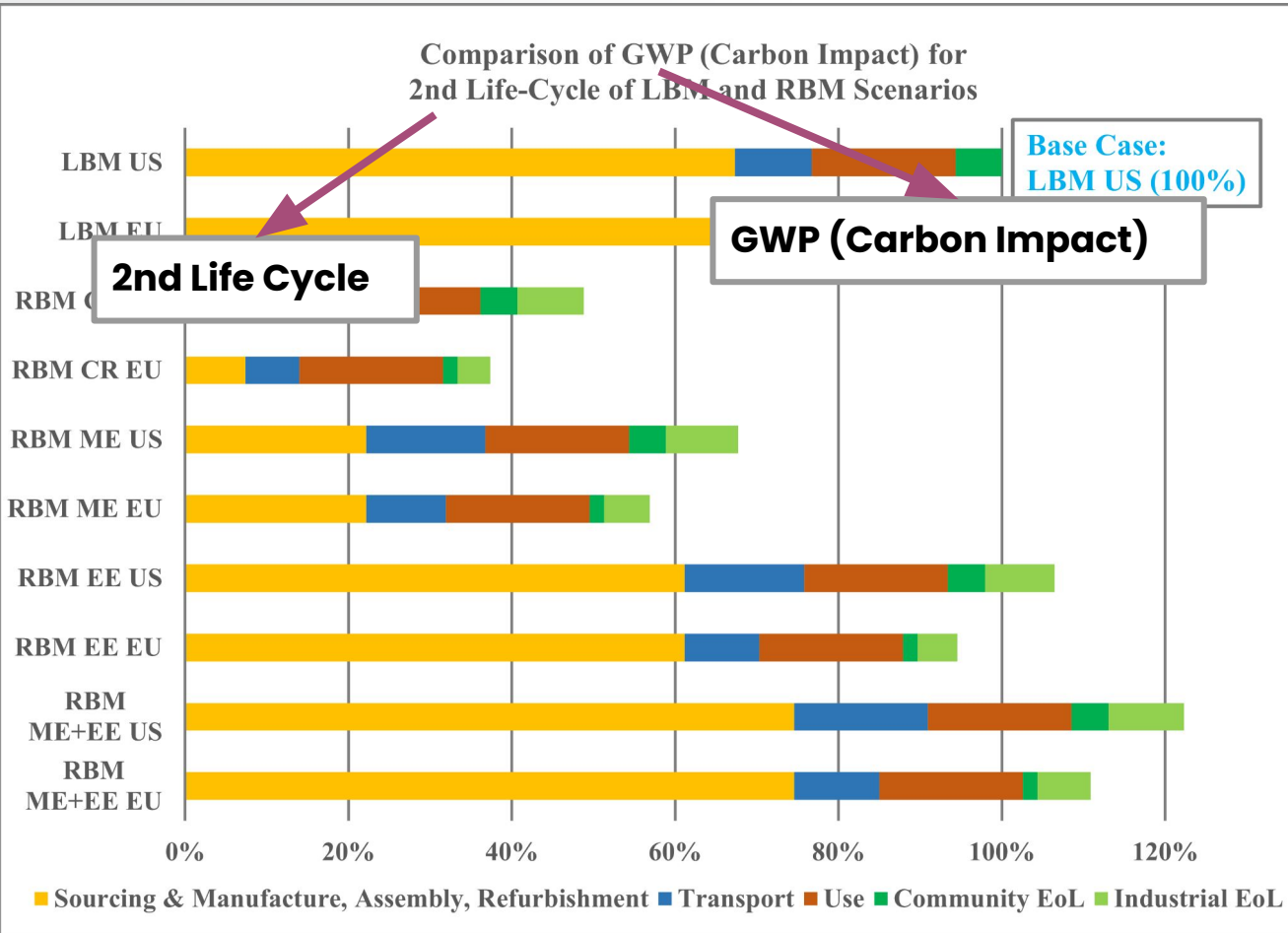
Critical Parameters:

- Type of refurbishment
- Geography of sale
 - Transport distances
 - Waste treatment

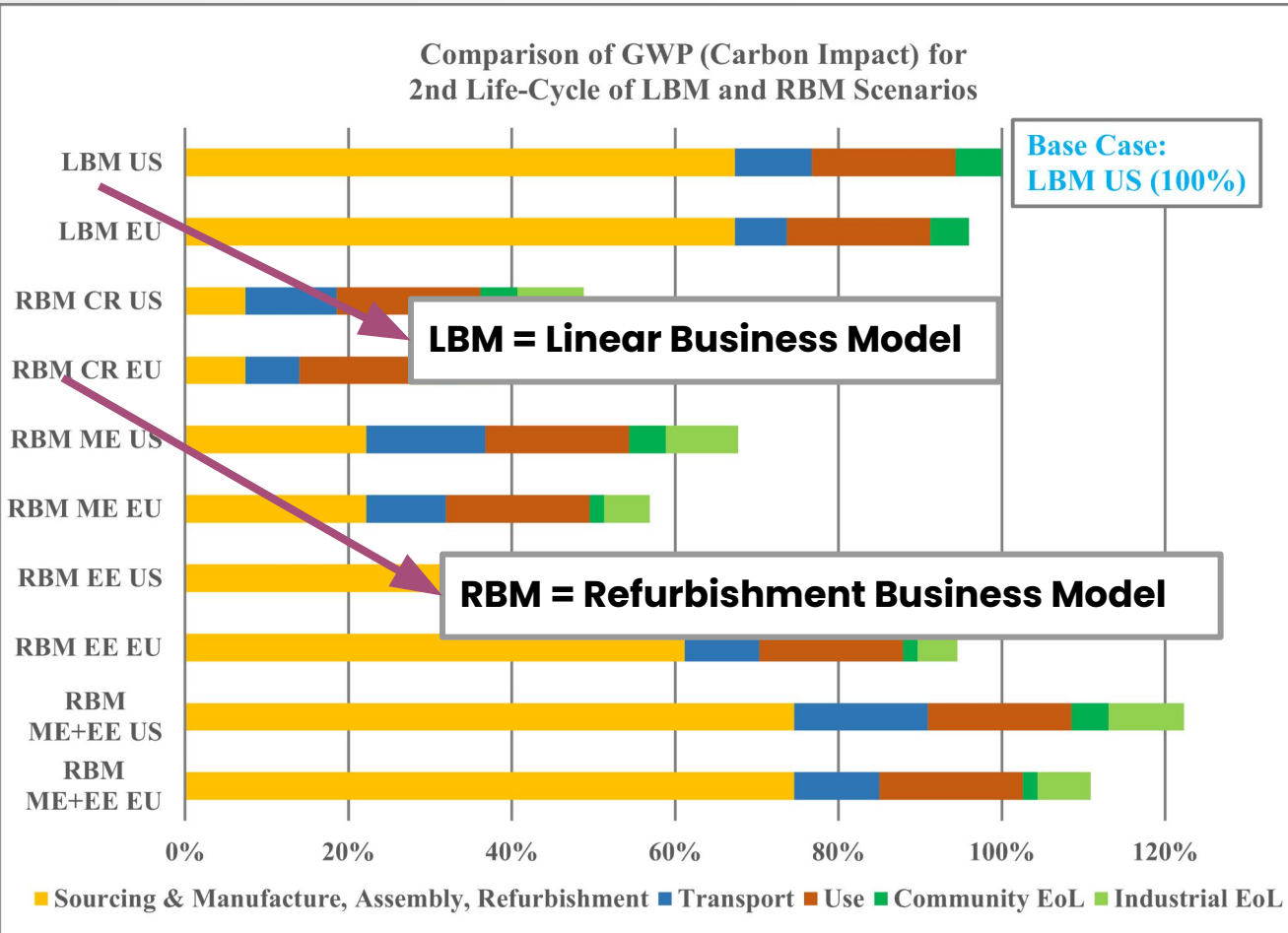
Parameters in our Analysis:

- Type of refurbishment:
 - Cleaning only (**CR**)
 - Refurbishment of mechanical components (**ME**)
 - Refurbishment of electronic components (**EE**)
- Geography of sales:
 - **US** and Europe (**EU**)

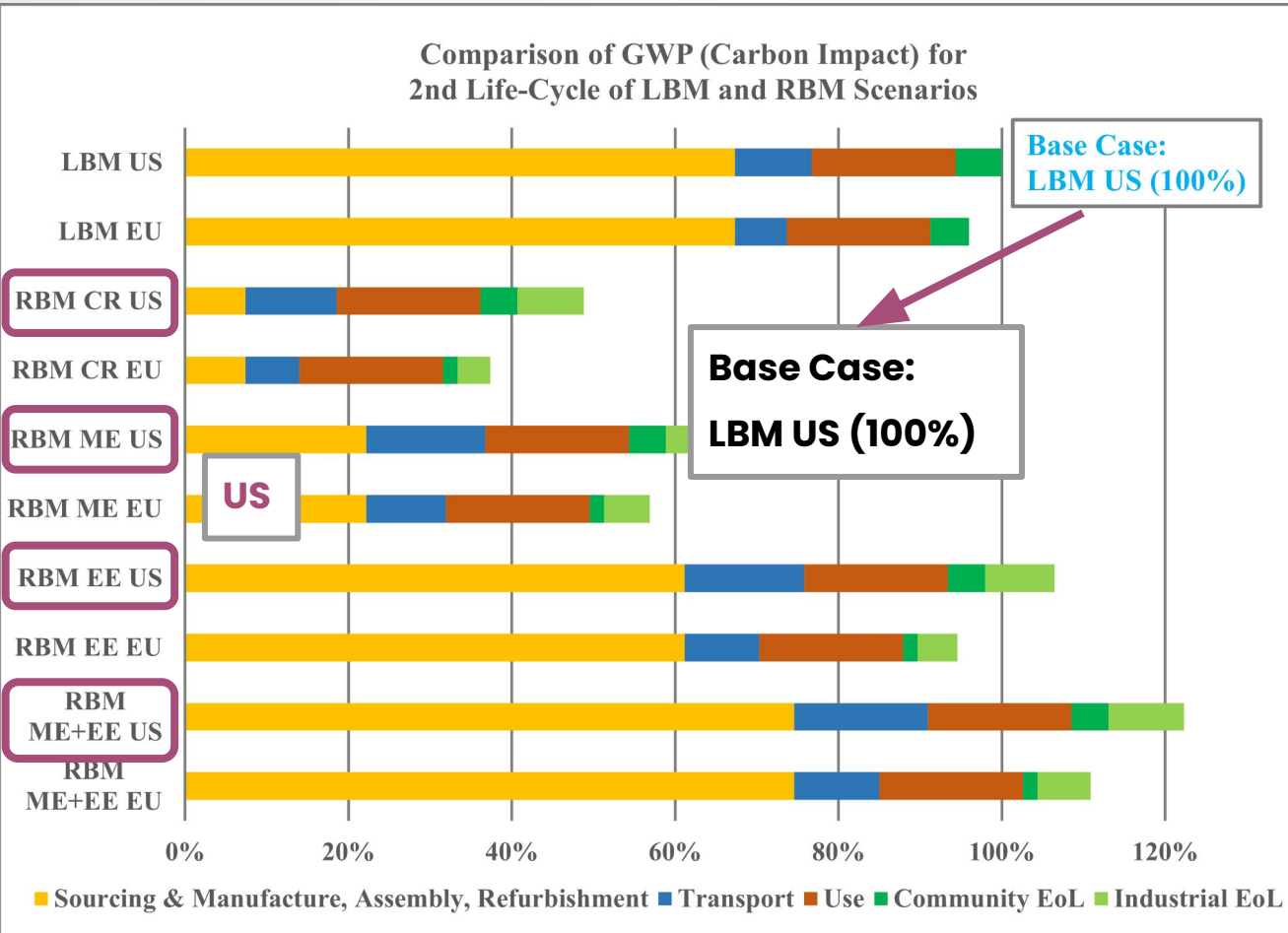
RESULTS



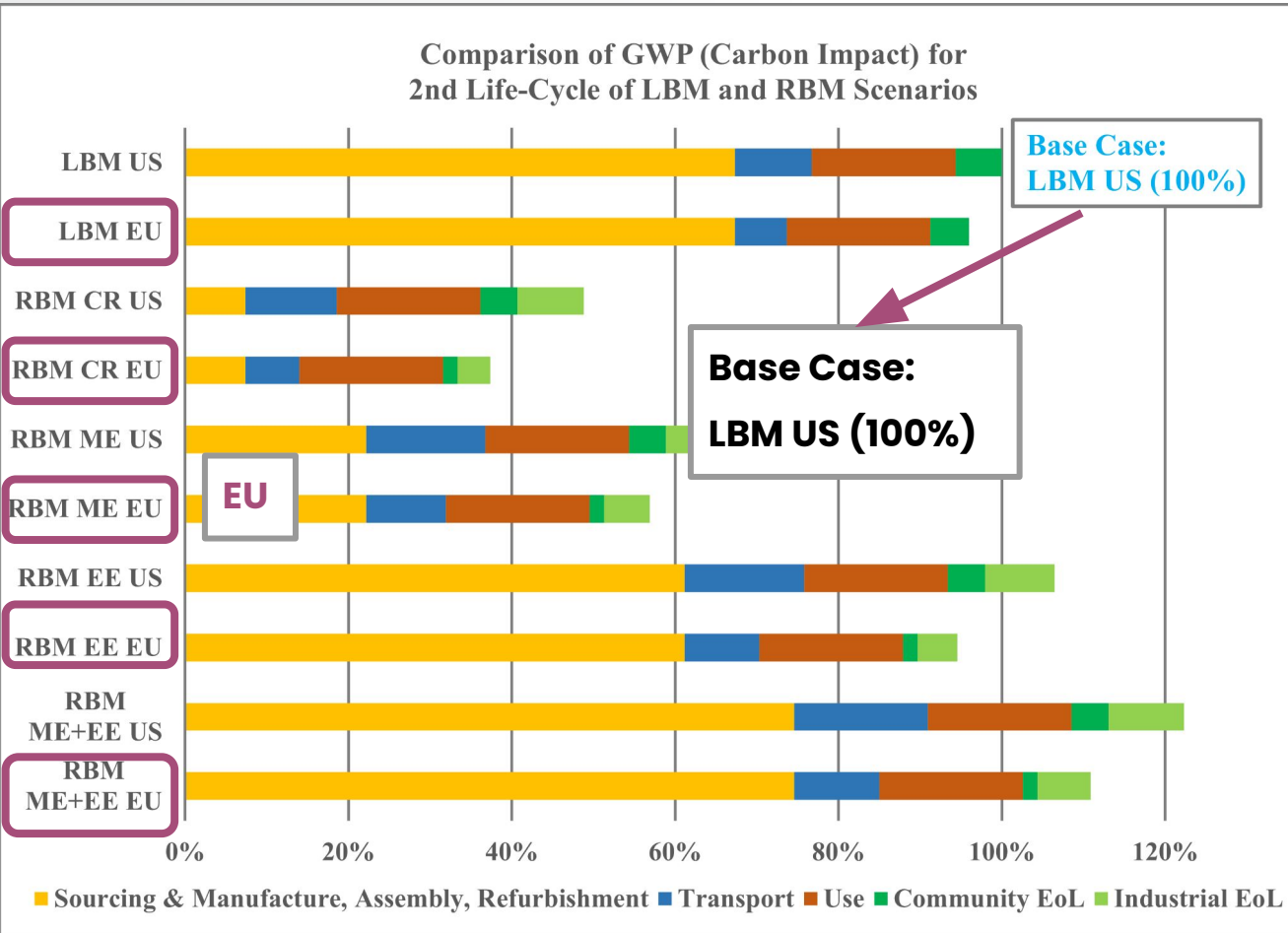
RESULTS



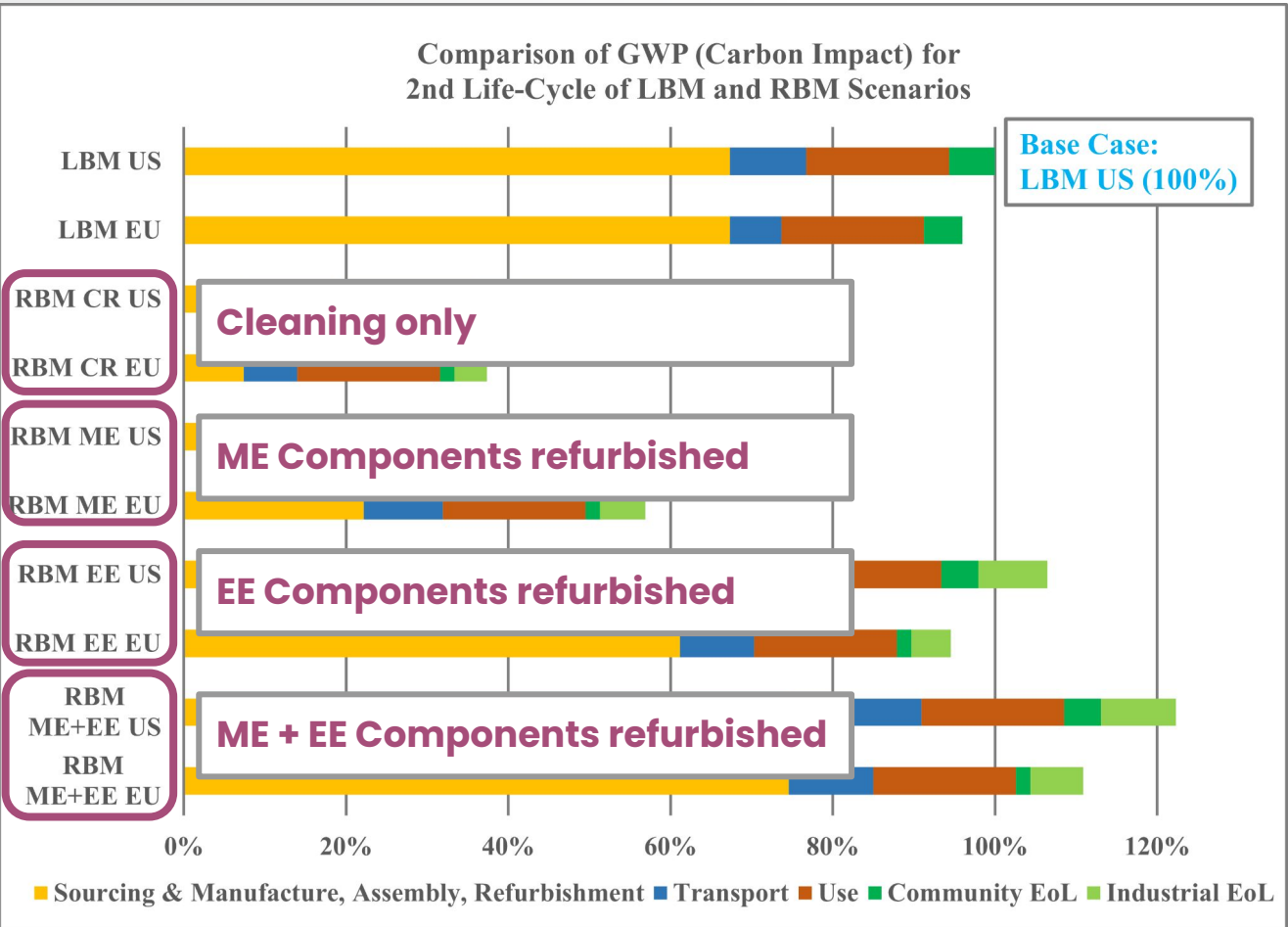
RESULTS



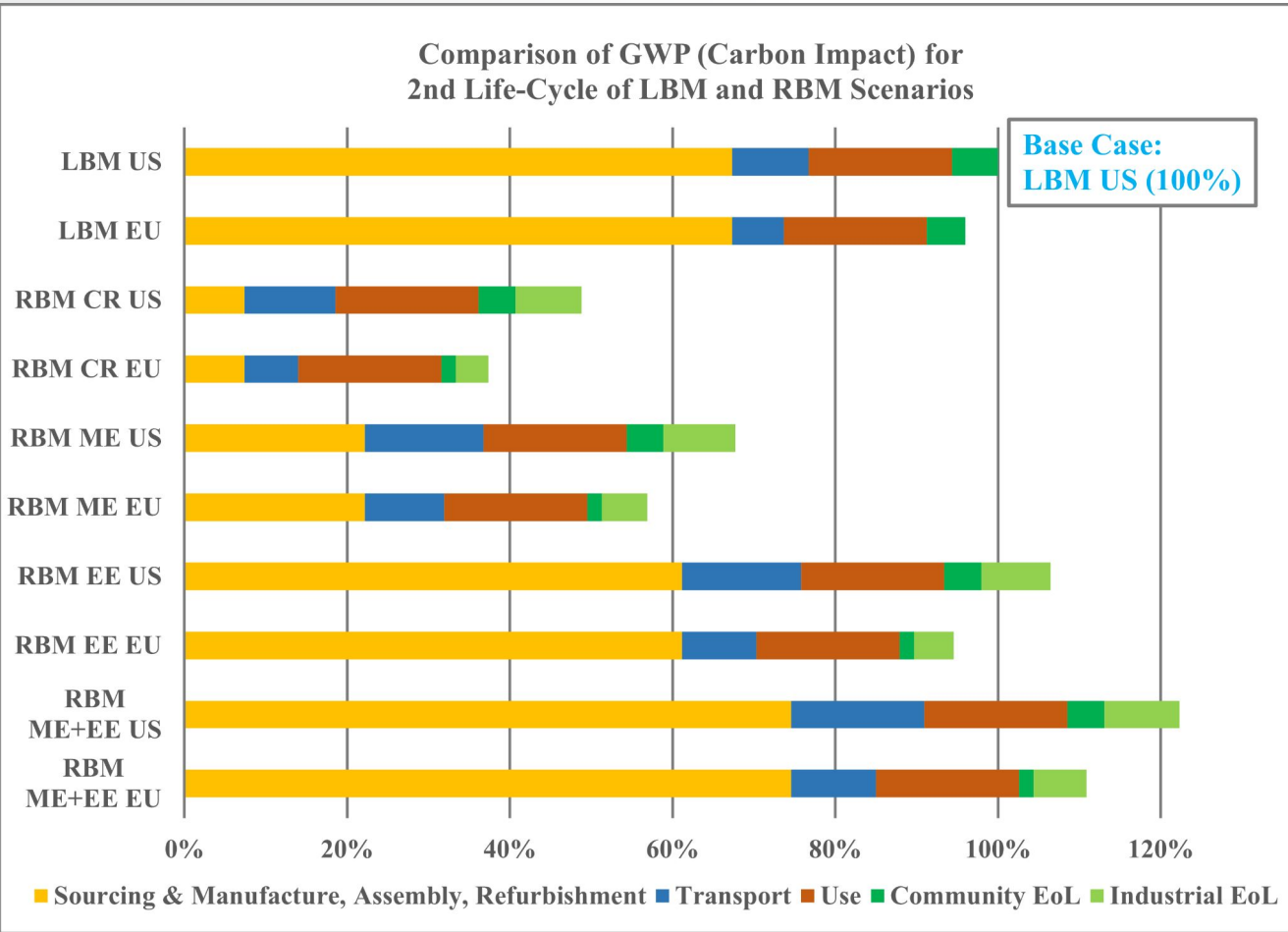
RESULTS



RESULTS



RESULTS



RESULTS

NOTE: These findings are specific to the scenario and product modelled

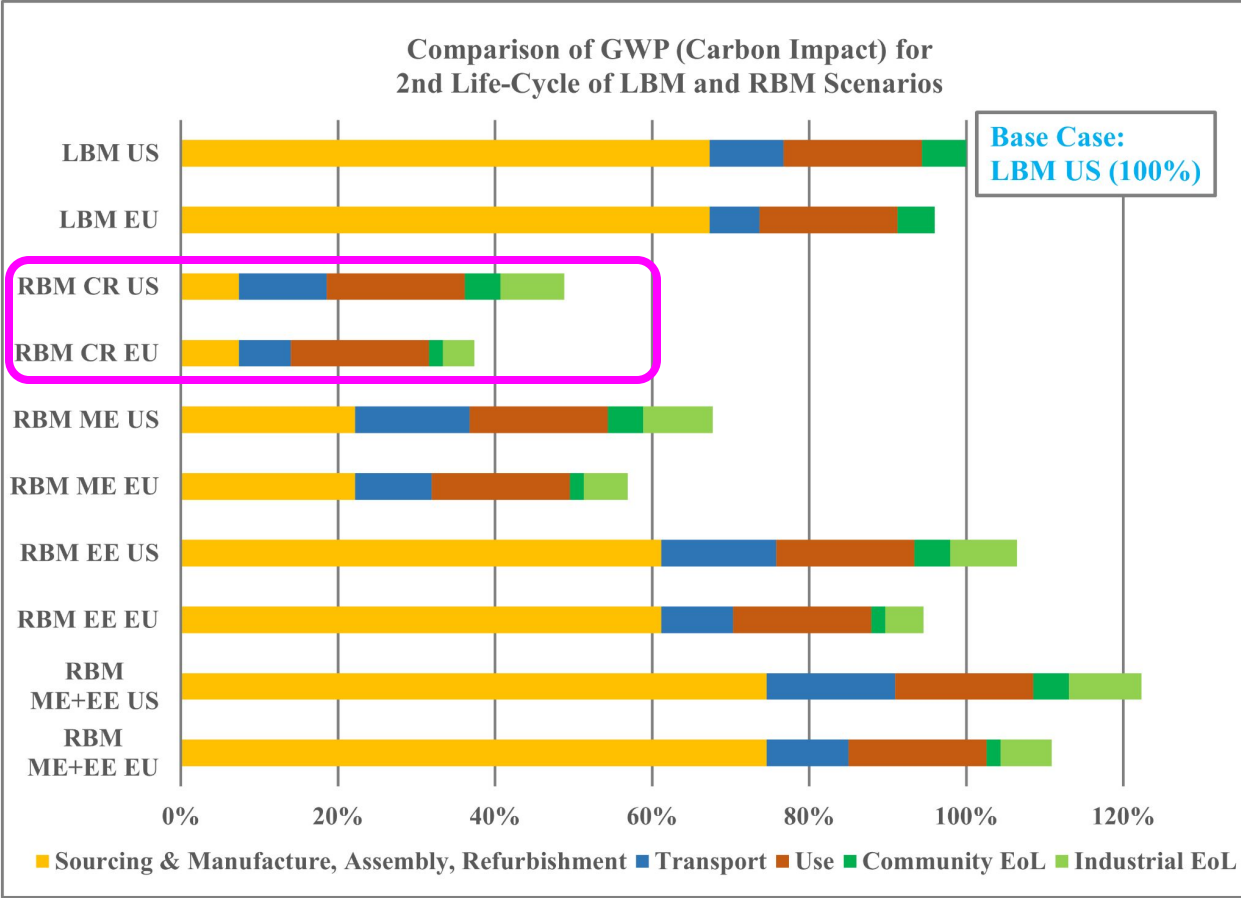
The impact reduction is most significant (~40%) when

Impact of replaced components is minimised

Transport is a significant contributor to impact in some geographic regions

Main reduction in sourcing and manufacturing phase

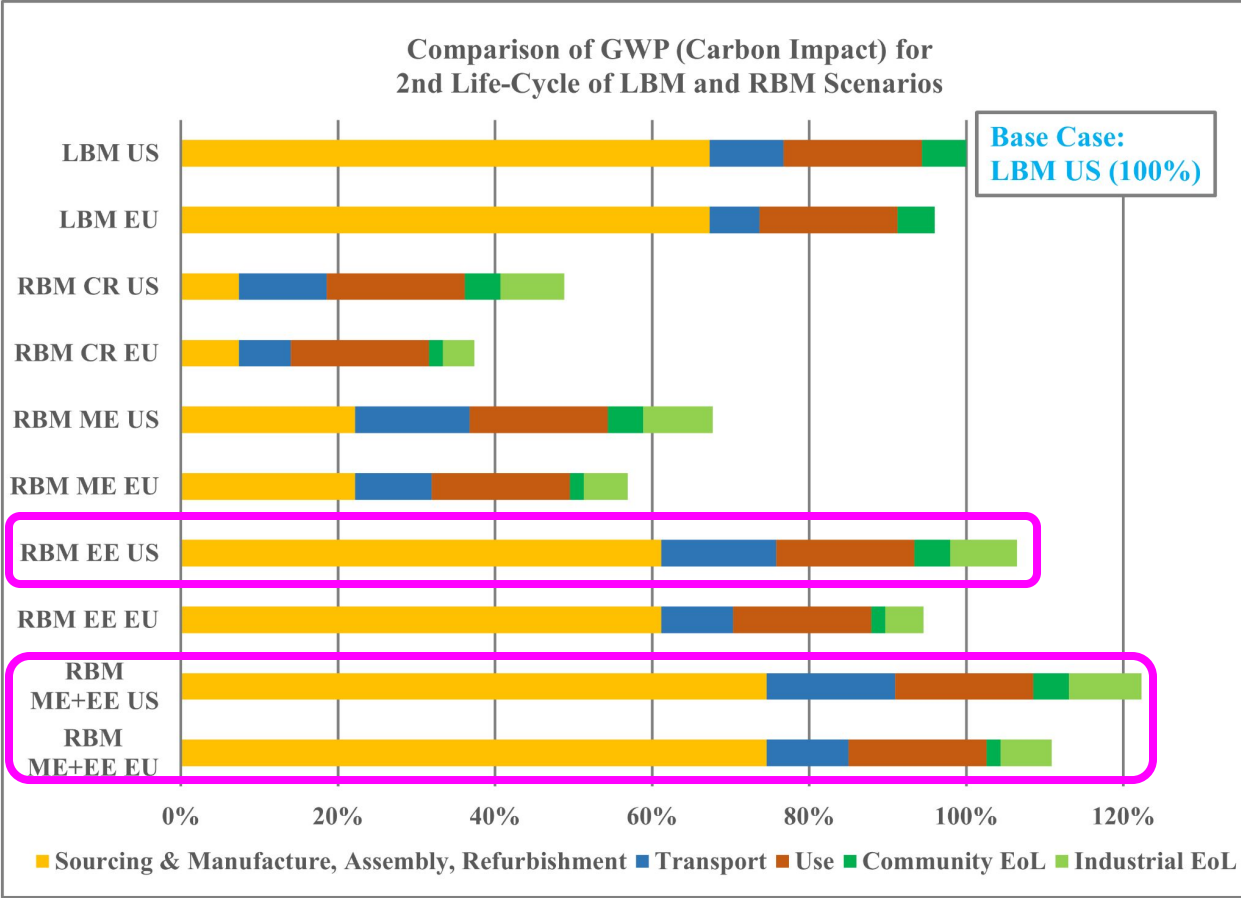
Recycling of replaced components is a benefit of refurbishment



RESULTS

It is possible for a refurbished product to have a higher carbon impact than a non-refurbished product, especially when:

- the sales geography involves high transport distances
- the refurbishment involves replacement of higher impact components.



CONCLUSIONS

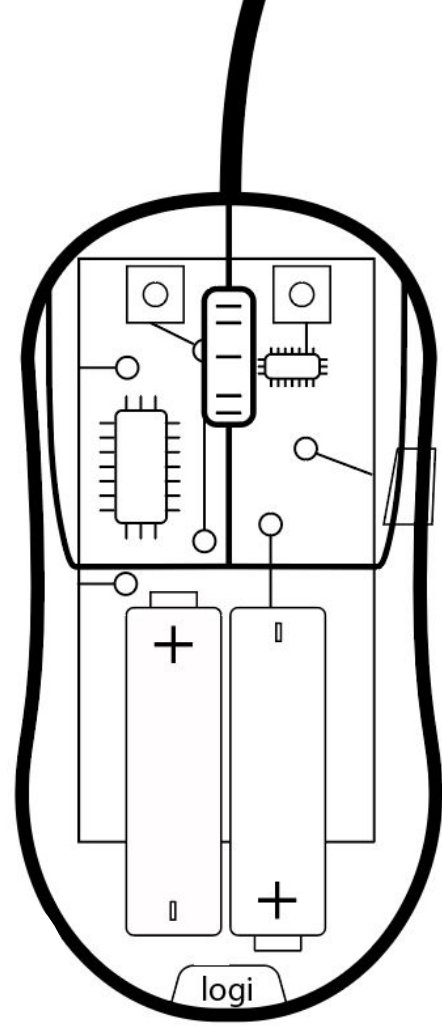
✓ A refurbished product is *likely* to be lower impact product

! However, this cannot be guaranteed!

⚖ We need to recognise the tipping points..

🧠 Smart management of the refurbishment process (based on quantitative assessment) is possible

☁ CO₂ Intelligently assessing lifecycle impact at the point of refurbishment can lead towards lower impact product portfolios, in which the mix of new and refurbished devices is optimised



THANK YOU!

Pádraig Murphy, Britta Schwartze, Marten Stock, Maulana Ajie

Download the presentation

