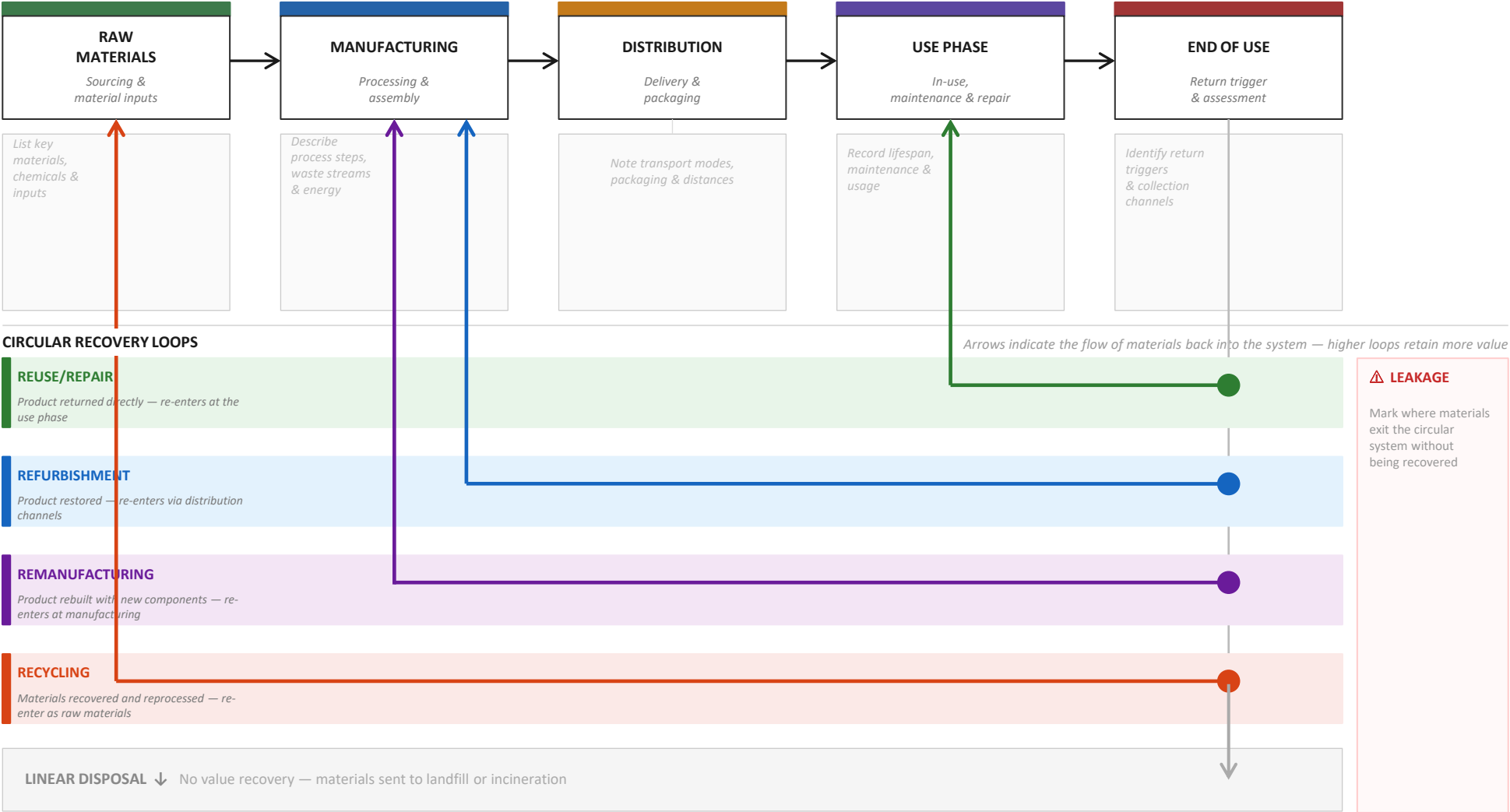


Material Loop Map

Product Name: _____

Use this diagram to trace your product's lifecycle, map recovery opportunities, and identify where material value is lost.



HOW TO USE THIS DIAGRAM

- 1 Map materials & flows** In each annotation box, describe the key materials, processes, or logistics at that lifecycle stage.
- 2 Identify active loops** Mark which recovery loops currently apply to your products and which could be activated.
- 3 Locate leakage points** Note where materials leave the system without being recovered — these are priority improvement areas.
- 4 Transfer insights to canvas** Use findings to complete the 9 sections of the Material Loop Map canvas.

The Material Loop Map

Designed for:

Designed by:

Date:

Version:

FORWARD MATERIAL FLOW <i>How do materials and products currently flow through the system?</i> ☐ Raw materials sourced and input streams identified ☐ Production and manufacturing processes mapped ☐ Distribution and delivery routes to customers ☐ Primary packaging and transport documented ☐ Volume and weight of key material flows estimated	USE PHASE DYNAMICS <i>How are products used, maintained, and circulated during their use phase?</i> ☐ Average product lifespan and usage patterns ☐ Maintenance, repair, and servicing during use ☐ Product sharing, leasing, or subscription models ☐ Upgrade, adaptation, or reconfiguration opportunities ☐ Customer engagement and stewardship practices	REVERSE FLOW SYSTEM <i>How do products return into the system after use?</i> ☐ Take-back programmes and return trigger events ☐ Collection channels and logistics for return flows ☐ Consolidation hubs and sorting locations ☐ Assessment and triage of returned products ☐ Routing of products to appropriate recovery pathways
RECOVERY LOOPS <i>Which recovery loops are currently active or could be activated?</i> ☐ Reuse: redistribution without processing intervention ☐ Repair: restoring functionality of damaged items ☐ Refurbishment: restoring products to good condition ☐ Remanufacturing: rebuilding with new components ☐ Recycling: recovering raw materials for reprocessing	LEAKAGE POINTS <i>Where and why is material value lost in the system?</i> ☐ Products disposed of instead of recovered or returned ☐ Materials downgraded or mixed during sorting ☐ Absence of collection infrastructure or incentives ☐ Products that cannot be disassembled or repaired ☐ Data loss preventing traceability and recovery routing	ECOSYSTEMS ACTORS <i>Which actors are involved in enabling or constraining material flows?</i> ☐ Suppliers and raw material producers ☐ Logistics and reverse transport partners ☐ Refurbishment and repair service providers ☐ Recyclers, processors, and secondary markets ☐ Customers, retailers, and facility managers
ENABLING INFRASTRUCTURE <i>What infrastructure and systems enable or limit circular material flows?</i> ☐ Reverse logistics and collection network capacity ☐ Digital Product Passport (DPP) and data systems ☐ Sorting, processing, and refurbishment facilities ☐ Traceability and lifecycle tracking platforms ☐ Partnership agreements enabling recovery activities	VALUE RETENTION LOGIC <i>How effectively is value retained across the lifecycle?</i> ☐ Value maintained at each recovery loop level ☐ Current vs potential value retention comparison ☐ Economic viability of each recovery option ☐ Environmental value from avoided waste and emissions ☐ Priority loops offering highest total value recovery	IMPROVEMENT OPPORTUNITIES <i>Where should we intervene to improve circular material flows?</i> ☐ Priority actions to close identified material loops ☐ Infrastructure or capability investments required ☐ New ecosystem partnerships to develop ☐ Digital enablement and traceability improvements ☐ Pilot initiatives or quick wins to test and scale



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