

Circular Economy Starter Kit

Start small. Learn as you go. Build circularity into everyday decisions.

Welcome to the **Warwick Circular Economy Starter Kit**, a practical tool designed to help manufacturers take impactful and effective steps toward increasing circularity in their businesses and beyond. It was designed via engagement and consultation with business leaders, policy advisors and academics at the University of Warwick and beyond. The aim is to provide you with actionable prompts, questions and starting points to help drive greater resource efficiencies, reduce supply chain risks and increase business resilience.

How to use it

Start small. Learn as you go. Build circularity into everyday decisions.

- Work through each stage of your product or process (design, operations, supply chain, etc.).
- Consider each question to assess your current processes and baseline for improvement.
- If the answer is “**No**”, follow the suggested action to get started.
- If the answer is “**Yes**”, move to the next-level action to build on what you’ve achieved.
- We recommend you focus on **one product or process at a time**. You don’t have to do it all at once. Make note of what works or doesn’t work.
- Share with and learn from others. Please also provide feedback on your experience by contacting IDResearch@warwick.ac.uk and via our dedicated [Padlet](#).
- Please also contact business research and support available from across the University of Warwick, including:
 - WMG SMW Support (<https://warwick.ac.uk/fac/sci/wmg/for-industry/sme-support/>)
 - WBS Enterprise Research Centre (<https://www.wbs.ac.uk/research/research-centres-and-networks/erc/>)
 - WBS Executive Education (<https://www.wbs.ac.uk/courses/executive-education/for-organisations/>)
 - WBS Engagement (<https://www.wbs.ac.uk/working-with-wbs/>)
 - Warwick Business Partnerships (<https://warwick.ac.uk/business>)

	Question	If “No” → Suggested Action	If “Yes” → Next-Level Action	Possible actions
Product Design & Development	Do we currently design products to be disassembled or repaired?	Start small. Select one product and apply basic Design for Disassembly principles (see Principle 11 of the 12 Principles of Green Engineering). Provide staff with a short primer or checklist explaining what design for disassembly means and simple steps to try.	Document and refine your process. Explore opportunities to scale up and enhance your design-for-disassembly capabilities.	• Redesign at least one product with reuse or repair in mind. • Make designs modular and standardised, ensuring parts are interoperable across products where appropriate. • Implement upgradeable components to extend product life. • Strengthen collaboration between design and production teams to identify and eliminate waste early in the process.
	Do we use any recycled, reused, or locally sourced materials in production?	Identify one component or material to test with recycled or secondary inputs. Use free tools (e.g., WRAP , OpenLCA).	Increase proportion of recycled content. Ask suppliers to certify % of reused/recycled materials.	• Measure and track material waste each month, aiming for continual year-on-year reduction. • Reuse offcuts or defective parts in other processes. • Optimise material efficiency to reduce inputs without compromising quality. • Maintain a list of suppliers on the same circularity journey and prioritise collaboration with them.

	Question	If “No” → Suggested Action	If “Yes” → Next-Level Action	Possible actions
Manufacturing & Production	Do we offer product repair, refurbishment, or take-back options?	Try repairing or refurbishing your own products first to understand how and why they fail. Use these insights to identify design improvements and potential repair opportunities.	Analyse reasons for product failure. Determine whether faults stem from quality issues, design weaknesses, or planned obsolescence. Use findings to extend product life and inform new service models.	• Identify early candidates for repair/refurbishment pilots. • Create basic repair or refurbishment guides (e.g., spare parts, instruction manuals). • Explore partnerships for take-back or resale of used products.
	Are we able to recover or reuse waste from our production process?	Begin manual separation and reuse of offcuts or scrap. Explore low-cost local reuse partners.	Prioritise reducing waste at the source. Optimise production processes and material use to minimise offcuts and scrap. Where recovery remains necessary, integrate closed-loop reuse systems (e.g., grinding, remelting, repurposing) and prepare for upcoming regulations that may exclude post-industrial waste from recycled content reporting	• Measure % of materials wasted and set annual reduction targets. • Map all waste streams and identify opportunities for internal reuse. • Benchmark production waste levels against industry standards.

	Question	If “No” → Suggested Action	If “Yes” → Next-Level Action	Possible actions
Sourcing & Procurement	Do our suppliers know we’re working toward CE goals?	Communicate CE intent to suppliers. Add a CE-related question to new supplier selection forms. Establish regular CE-focused check-ins with key suppliers. Share simple CE scorecards (e.g., % waste avoided, reused packaging). Explore shared marketing of your CE collaboration to customers.	Collaborate on shared CE pilots (e.g., packaging reuse, batch testing recycled materials).	• Include circularity clauses in contracts or RFQs (e.g., recycled content, take-back schemes). • Co-develop returnable packaging or secondary material pilots. • Create a supplier list aligned with your CE values and prioritise them for procurement.
Product Use, Take-Back & End-of-Life (EoL)	Do we track any CE performance metrics (e.g., material efficiency, reuse rate)?	Choose 2–3 simple KPIs (e.g., % waste diverted, % recycled input, # repairs) and share results with the team.	Integrate KPIs into team targets or grant applications. Create simple internal CE scorecards.	• Measure waste generated during production. • Track recycled or reused input materials. • Calculate material efficiency (e.g., kg useful output / kg input). • Record repair, reuse, or refurbishment activities in costing systems. • Monitor product longevity, durability, and returns.
CE Strategy, Data & Governance	Have we engaged staff or customers in our CE goals?	Run a CE awareness session or survey. Use storytelling to explain why CE matters.	Co-create CE solutions with frontline staff or customers (e.g., product feedback for reuse or modularity).	• Assess staff understanding of CE principles. • Include CE metrics beyond waste and cost. • Develop communication materials to market CE progress. • Schedule regular CE training or updates.

How's your experience with the Starter Kit?

We'd love to hear what you think about your Starter Kit. Share your feedback and ideas with us by emailing IDResearch@warwick.ac.uk or posting on our interactive [Padlet](#).

Acknowledgement

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