

INDEED

STRATEGICALLY MOVING TOWARDS CIRCULARITY

Circular Design Guideline

Close the circularity gaps in your portfolio

Your business is facing challenges in the likes of:

- Varying stages of Circular Economy (CE) readiness across a diverse product portfolio
- Complex/heterogeneous product portfolio looking to transform all products to become circular
- Lack of guidance for the R&D/Project team
- Pressure from the CSR or compliance department

The Circular Design Guideline (CDG) will drive an equal level and consistency across the portfolio and allows proactive planning to boost your products' readiness for the Circular Economy.



Circular Design Guideline

The Circular Design Guideline is a physical or digital guidebook with industry/client specific strategies, leading the product development process for Circular Economy (CE)-readiness. This includes:

Standardized circular experience design



Increased CE readiness level of individual product



Standardized CE readiness across portfolio



We innovate for the circular economy.

With our legacy in product development and our expertise in Design for the Circular Economy, we cover all areas required to create overarching guidelines for your whole portfolio and circular (brand) experience.

We are aware of existing and upcoming regulations and respect internal and external standards. We think through customer demands and changing market dynamics while considering resource use and supply chain challenges. Interdisciplinarity is written in our DNA.

We are ready to successfully steer your product portfolio into the circular economy with an individualized circular design guideline tailored to your brand, portfolio, and stakeholders. The foundation for development is a four-step process. As laid out on the next pages.

A circular design guideline initiates circularity across your portfolio. It is the foundation for your business to lead in sustainable and regenerative practices.



Assessment of product & portfolio



Identification of KPIs & Definition of impact areas



Roadmap toward a portfolio-specific guideline



Development

01 Assessment of Product & Portfolio

The first step towards your tailored Circular Design Guideline is a kick-off workshop format to assess the following:

- Where do you stand in your journey towards circularity?
- What is your strategy?
- What is the BU(s) perspective?
- Which steps are you already taking towards (internal) CE readiness standards?

Output:

Analysis & Status Quo Report



02

Identification of KPIs & Definition of Impact Areas

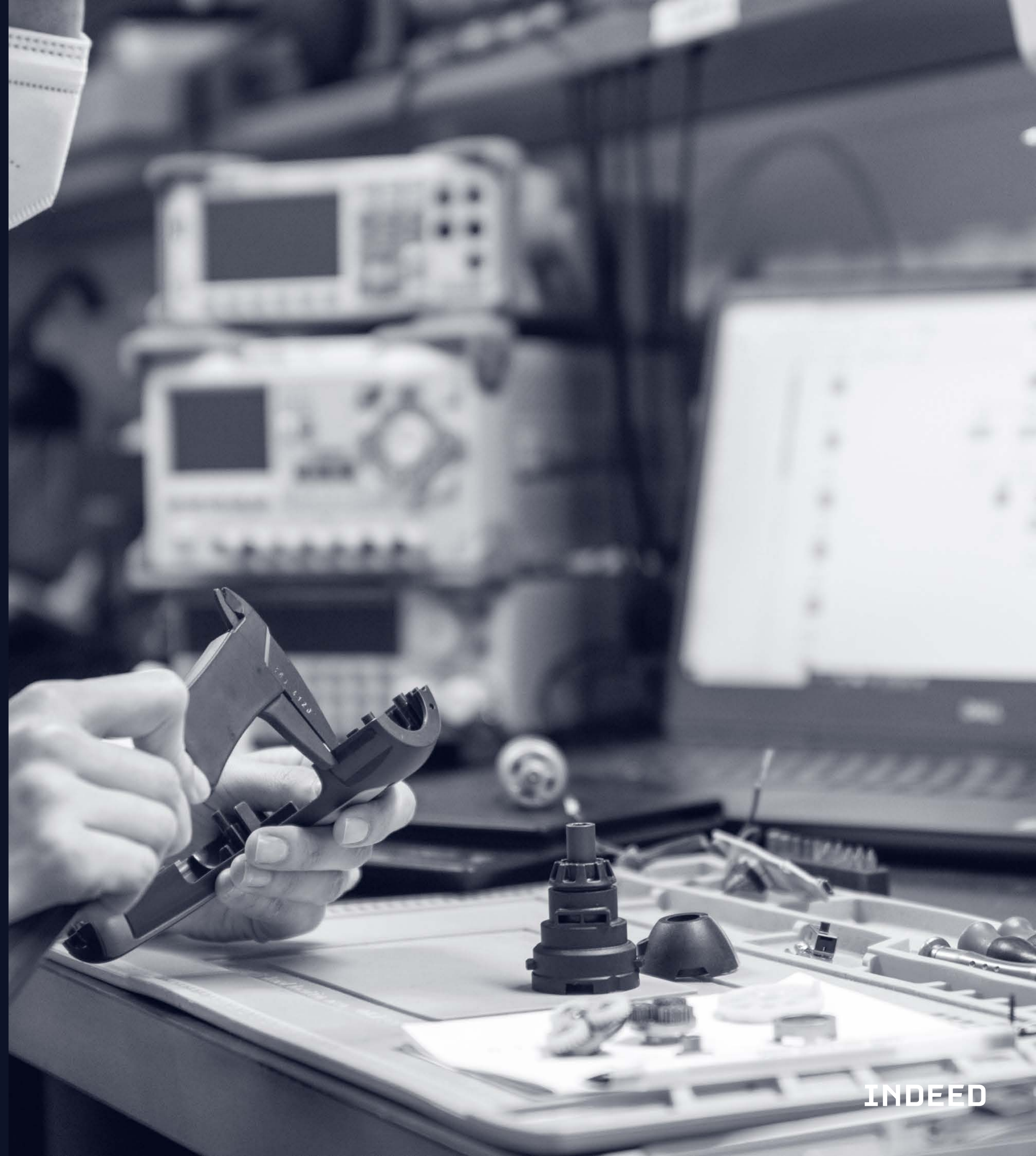
Next we take a deep dive into identifying which specific stages of the product development process can be standardized in order to promote sustainability and minimize waste.

This includes examining various impact areas such as material selection, design principles, production methods, and end-of-life considerations.

Subsequently we establish benchmarks that outline the key principles that your business should strive to incorporate into the product development processes.

Output:

Strategic Circularity Goals



03

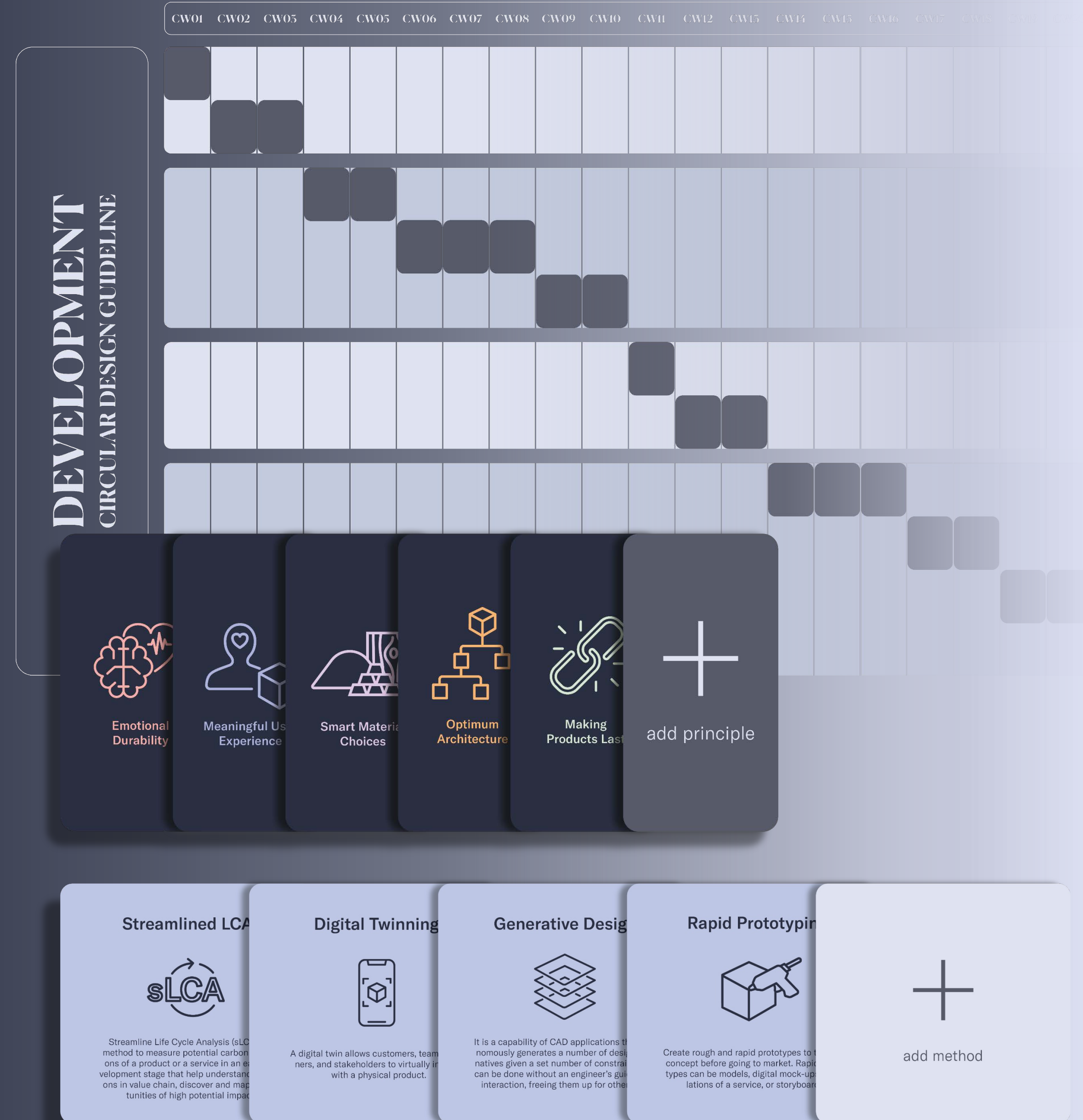
Laying out the Roadmap towards a Portfolio-specific Guideline

To unlock the development of the circular design guideline we finally synthesize decisions and internal standards by utilizing tools like decision matrix and system mapping.

This results in defining design and action principles that serve as a foundation for sustainable and regenerative practices in your product design process.

Output:

Action steps towards the Circular Design Guide



DEVELOPMENT

The development of the guideline continues with a pilot project or small-scale production run – subsequently to evaluate its effectiveness and identify areas for improvement.

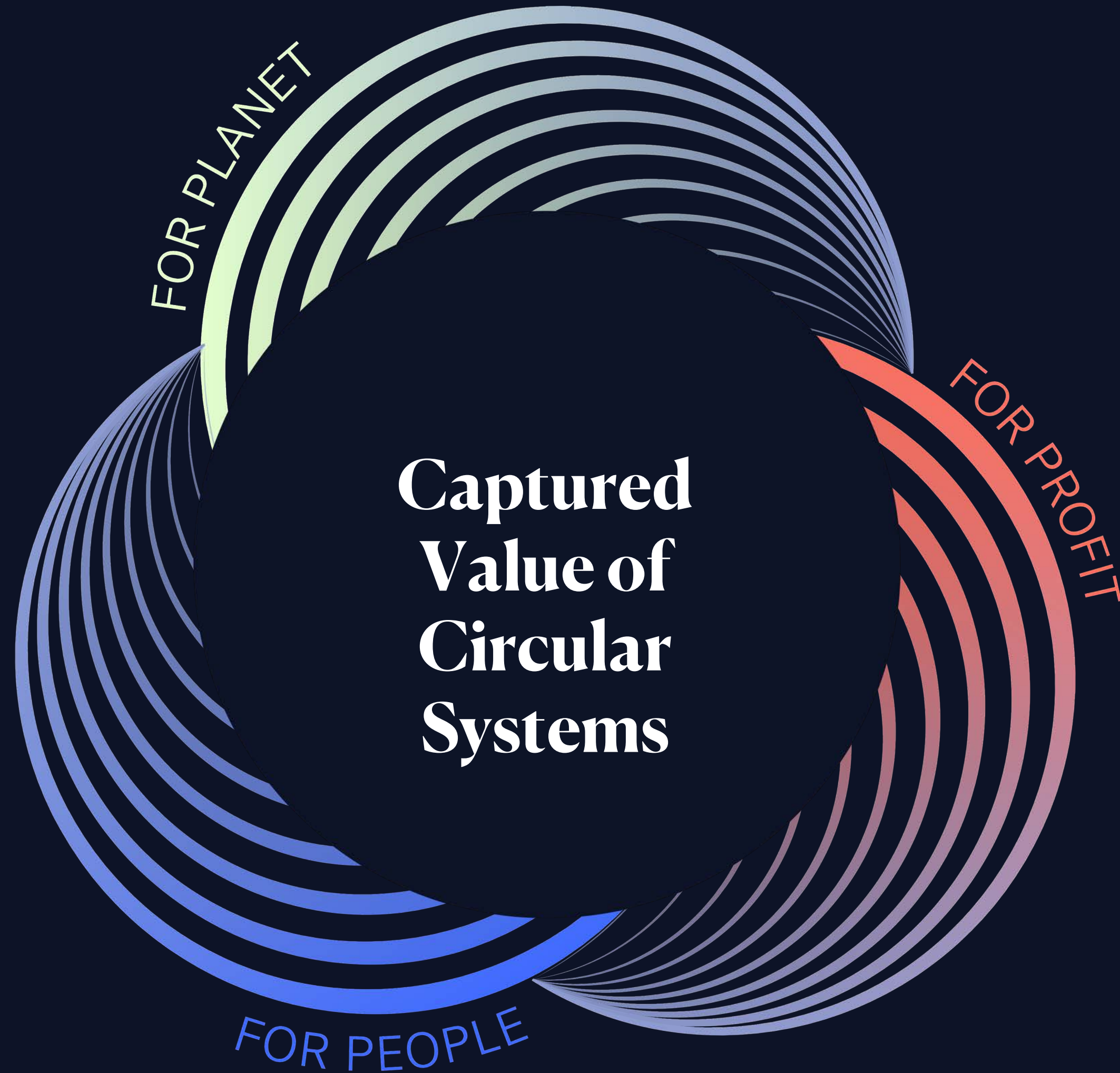
Once the circular design guideline has been refined, it is implemented in the product's design and manufacturing process.

Output:
TBD

The image shows three overlapping tablet screens displaying various circular design tools. The top screen is titled "sLCA | Material Footprint" and shows a total of 0,846 kgCO2e. The middle screen is titled "Product Journey Mapping" and shows a flowchart of the product lifecycle. The bottom screen is titled "Circular Design Guideline" and shows a table of principles and actions/methods.

Principles	Actions/Methods		
Making Products Last	Rapid Prototyping	Digital Twinning	+ add method
Optimum Architecture	Streamlined LCA	Generative Design	+ add method
Smart Material Choices	User-Centered Research	Engineering	Product Journey Mapping
Meaningful User Experience	Disassembly Mapping		

Benefits



REDUCED WASTE & EMISSIONS

Circular systems aim to reduce waste and emissions by keeping products and materials in the loop and minimizing the extraction of new resources.



ENHANCED CUSTOMER LOYALTY

By providing customers with high-quality products and services that are designed to last longer and have a lower environmental impact.



REDUCED COSTS

Businesses can save money on raw materials, production costs, and waste disposal by keeping products and materials in use for longer and reducing waste.



ACCESS TO HIGH-QUALITY PRODUCTS

Circular systems prioritize the reuse of products and materials. This can provide consumers with access to high-quality products at a lower cost.



INCREASED TRANSPARENCY

By providing information about the origin and impact of products and materials, consumers can make more informed choices about the products they buy and the companies they support.

PLEASE REACH OUT FOR A FIRST FREE CONSULTATION.

Circularity is the path to sustainability.

PLEASE REACH OUT FOR A FIRST FREE CONSULTATION

If you are running a circular business and you seek to create a new product or service.

If you are managing a product that you want to become circular, or if you want to create a circular product from scratch.

If you are considering moving your business to circularity and need help weighing your options and mapping it out.

If you want to evolve the innovation culture in your company through circular thinking.

WWW.INDEED-INNOVATION.COM

 @INDEED-INNOVATION

 @INDEEDINNOVATES

 @INDEEDINNOVATION



SARAH CROOKS

+44 7365 913 942

S.CROOKS@INDEED-INNOVATION.COM

What makes us different?

We are the innovation firm for a circular economy.

The climate crisis and finite resources are very real. Sustainability is not just our shared responsibility but a critical success factor for every business. We must develop circular value propositions for both business and the environment, balancing the benefits of all stakeholders instead of focusing on single customer needs.

The future must be circular.

We combine design, engineering, and strategy services with sustainable development practices and behavioral science principles to drive your business into a circular future.



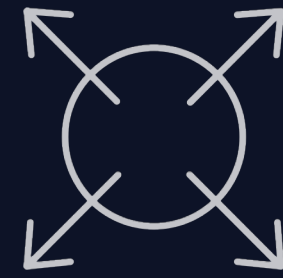
We became a B Corp to demonstrate our active commitment to eliminate waste, regenerate resources, close the lifecycle loop and help humans to adopt circular business models.

As a Certified B Corporation, we report on all aspects of our business so that we can validate we are contributing to the positive impact that we promise.



Identify

We identify circular opportunities for your business by conducting research and helping you shape your innovation strategy.



Build

We design, build and deliver circular products and services by combining design excellence with sustainable business models.



Scale

We enhance and scale circular business systems by measuring and optimizing their performance and fostering cross-company ecosystems.

Embed

We help to embed circular thinking in your organization by inspiring and educating your staff, redesigning your innovation culture, and creating a vision and roadmap towards circularity.



WORK CASES



Consumer innovations with circular R-strategies

We designed and engineered a close to zero emission home appliance with a lifetime guarantee delivered by the capacity for consumer-paced self-repair and end-of-life recovery of all parts. Economics and sustainable material were respected by design.

And more:

AIRBUS

Beiersdorf

Deutsche Telekom

WAGNER

SENNHEISER

sartorius

Henkel

eppendorf



Enabling CO2 neutral urban delivery

We developed the E3-Trix, an electric-trike transportation solution that enables small businesses and retailers to deliver their products efficiently, safely, and cost-effectively while reducing inner-city traffic, thus improving the city's living space. Development included service, industrial and systems design.



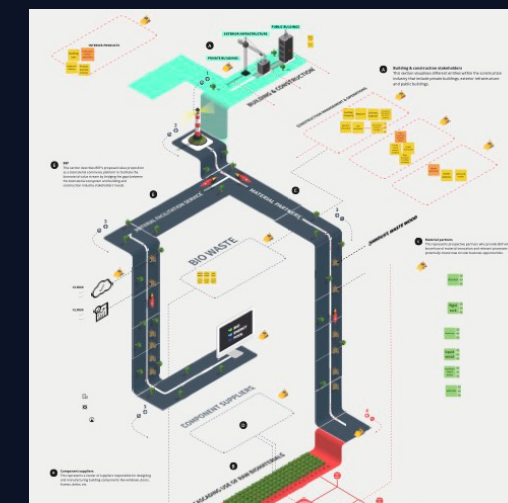
Anchoring circularity in the product range

We have worked with Hilti for many years, improving sustainability and usability aspects in their products and portfolio modularity based on extensive field research and deep dive into construction workers' needs. This led to the launch of many highly successful and benchmark-setting products.



Closing the loop for standardized industrial processes

We worked for years with Linde AG, one of the largest industrial gas manufacturers in the world. In the business case of the industrial gas cylinder, the company established a closed circle with strongly standardized and fixed processes. Our approach made this cycle more sustainable, efficient, and safer by enhancing the industrial gas cylinder and making it smart. Moreover, an economic impact on the brand and the profit could be achieved.



Circular business modeling and strategic roadmap

We unraveled the multidimensional landscape of the biomass energy business and its complex ecosystem to guide business decisions. In a three-step-consulting we supported identifying unique customer benefits and competitive advantages for the biomass value chain by exploring future scenarios and strategic roadmap to win in the Biomass market and achieve a complete circular business.



Optimization of packaging waste management

Our task was to optimize the packaging sustainability of 1300 SKUs for a large European supermarket retailer in China with the goal to integrate all private-label products' packaging for end-of-life integration into the existing waste management system of East China.

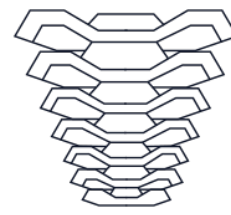
Founded in
2010

3

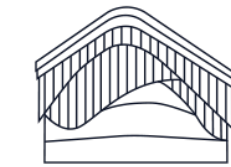
Locations



Hamburg



New York



Shanghai

26

Disciplines

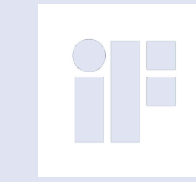
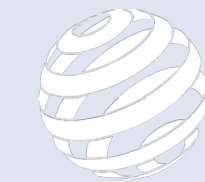
Certified



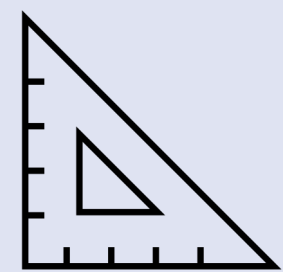
Corporation

200+

Patents & design awards



Facts about us



Inhouse
3D & electronics
prototyping lab

47

Team members
from 13 countries
speaking 10 languages

Independent
and privately
owned

10%
owned by
employees

Sustainable Circularity
Impact Verification/Evaluation
Circular Business Modeling &
Opportunity Identification
Circular Strategy & Roadmap
Development
Circular Innovation Management
Circular Value Chain Design

Service Design
User Research & Persona Dev.
Business Design
Service Blueprint

Industrial Design
Planet-Centric Design
Life Cycle Design Assessment
Circular Material Sourcing
Design Leadership & Strategy

Mechanical Engineering
Technology Concepts

3D / CAD Engineering
Design for Manufacture

Technology & Development
Software Architecture (Low
Emission)
Frontend & Backend Development
Circular Hardware development
Integration test and acceptance
support

UI/UX Design
UX Strategy & Testing
Interaction Design
Phygital Design
AR/ VR Applications

Artificial Intelligence
AI Opportunity Analysis
AI Concept Development
AI Prototyping
AI Innovation Strategy

WE
ARE **Climate
Neutral**

Member of



Part of the
Ellen MacArthur
Foundation community

Alle Inhalte dieser Präsentation, insbesondere Texte, Fotografien und Grafiken, sind rechtlich geschützt. Das Nutzungsrecht liegt, soweit nicht anders gekennzeichnet oder durch unsere AGBs anderweitig geregelt, bei Indeed Innovation GmbH. Bitte fragen Sie uns, falls Sie die Inhalte dieser Präsentation verwenden möchten.

All contents of this presentation, in particular texts, photographs and graphics, are legally protected. Unless otherwise indicated or otherwise regulated by our terms and conditions, the right of use lies with Indeed Innovation GmbH. Please ask us if you want to use the contents of this presentation.