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+20 Circular Business Examples

Business examples that successfully transformed from linear to closed production loops



Slide deck



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Have you started implementing circular strategies only to struggle with scaling them profitably?

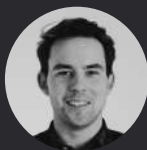
Or maybe you've invested in sustainability, but the return hasn't matched your expectations?

You're not alone. Many businesses skip the critical planning and transition phase when shifting to circular models, resulting in stalled progress.

In today's manufacturing, industrial, healthcare and consumer sectors, shifting from linear to circular business models presents a significant challenge. Many companies are hesitant, unsure of how to transition without losing profitability.

This document provides inspiring examples from market leaders who have successfully transitioned to circular models.

Don't let the shift to circularity become an obstacle, let it drive your growth and impact.



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Content

- 01 Challenges and impact on different industries
- 02 Circular business models
- 03 30 Circular business examples
- 04 Key insights

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Challenge and impact
of sustainability
on different industries

01

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Challenges and impact of each industry

Challenges

Manufacturing

Manufacturing accounts for 45% of global emissions, according to the Ellen MacArthur Foundation. Reducing waste while maintaining efficiency in automated systems remains a significant hurdle.

Healthcare

Hospitals generate significant waste, 0.5 kg of hazardous waste per bed daily (WHO). Reducing waste while complying with strict regulations is a major challenge.

Industrials

The industrial sector uses 36% of global energy and produces 24% of CO2 emissions (UNIDO). Shifting to circular practices, while addressing skill shortages, is a major challenge.

Consumer

73% of global consumers would change their habits for sustainability (Nielsen). However, integrating circularity while maintaining profitability remains difficult.

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Challenges and impact of each industry

Impact

Manufacturing

Circular economy practices can save up to 40% in material costs, with the IEA reporting a 20–25% reduction in energy use. These strategies help manufacturers cut costs and meet sustainability goals.

Healthcare

Reprocessing medical devices can save healthcare facilities up to \$2 million annually and divert 15,000 pounds of waste (Practice Greenhealth), helping reduce both costs and environmental impact.

Industrials

Circular models could save \$1 trillion globally by 2025 (Ellen MacArthur Foundation), with a 32% reduction in material consumption. This shift enhances efficiency, reduces costs, and improves sustainability.

Consumer

Circular business models can reduce raw material costs by 20–30% and cut emissions by 45% (McKinsey). Unilever's sustainable brands grew 69% faster, showing clear profitability through sustainability.

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Circular Business Models

02

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The circularity matrix

Circular Strategies

The circularity matrix helps you to identify the right circular business strategy for your products. There are two axes to think about:

1. **Ease of access:** how easily can you get your products back from customers for reuse or recycling?
2. **Ease of process:** how easily value can be recovered from the product?

The challenges companies face will depend on their capabilities and the competitive context, which can evolve with innovation.

- (RPO) Retain Product Ownership
- (PLE) Product Life extension
- (DFR) Design for recycling
- (WV) Waste Valorisation

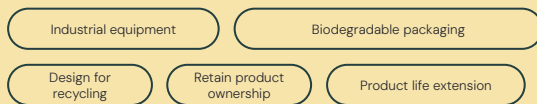
[Link](#)

Low embedded value

Strategy: DFR + infrastructure/partnerships
Example: Biodegradable packaging (Biopak)

High embedded value

Strategy: PLE + RPO
Example: Industrial equipment (Caterpillar and Xerox)



Easy (Process)

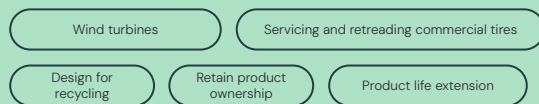
Hard (Access)

Low embedded value

Strategy: DFR + RPO
Example: Servicing and retreading commercial tires (Michelin)

High embedded value

Strategy: PLE
Example: Wind turbines



(Process) Hard

Low embedded value

Strategy: Incremental DFR
Example: Commodity raw materials (Real Alloy and Norsk Hydro)

High embedded value

Strategy: PLE + DFR
Example: Branded reusable and recyclable clothing (Paragonia)



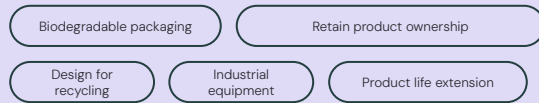
(Access) Easy

Low embedded value

Strategy: DFR + partnerships
Example: Carpets (interface); mattresses (DSM-Niaga); footwear (Nike and Adidas)

High embedded value

Strategy: PLE + RPO
Example: Consumer electronics (Apple)



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Different circular models

What is...



Retain product ownership

Companies keep control of products, offering them as services. This enables maintenance, reuse, and recycling, reducing waste and extending product life.



Design for recycling

Creating products that can be disassembled and repurposed. This approach ensures materials can be efficiently recovered, reducing waste and resource consumption.



Product life extension

Making products more durable and easier to repair or upgrade. It helps extend the product's lifespan, reducing the need for replacements and lowering overall waste.



Waste stream valorisation

Converting waste into valuable products, energy, or materials. This reduces landfill use, recovers resources, and supports a circular economy.

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Learn from
30 circular
business examples

03

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Fleet management by Hilti

Lease tools with repairs, maintenance, and durability

In early 2000's Hilti introduced their "Fleet Management" service, which currently covers almost 30% of their core business.

This subscription tool service allows construction workers to lease Hilti tools for a set period of time, rather than owning them outright. In this way users have access to the right tools for specific projects needs and Hilti redesigned their products to make them more easily repairable and long lasting.

[Link](#)



Industry
Manufacturing



Type
Service



Circular module
Retain product ownership



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Fairphone

Built for repair, designed for sustainability and longevity

The smartphone company has created modular phones, the Fairphone series, which are designed for repair and upgradeability. The phones are made up of replaceable parts, which can be easily disassembled and replaced if they become damaged or outdated.

The company also sources materials from conflict-free mines and offers a take-back program for used phones.

[Link](#)



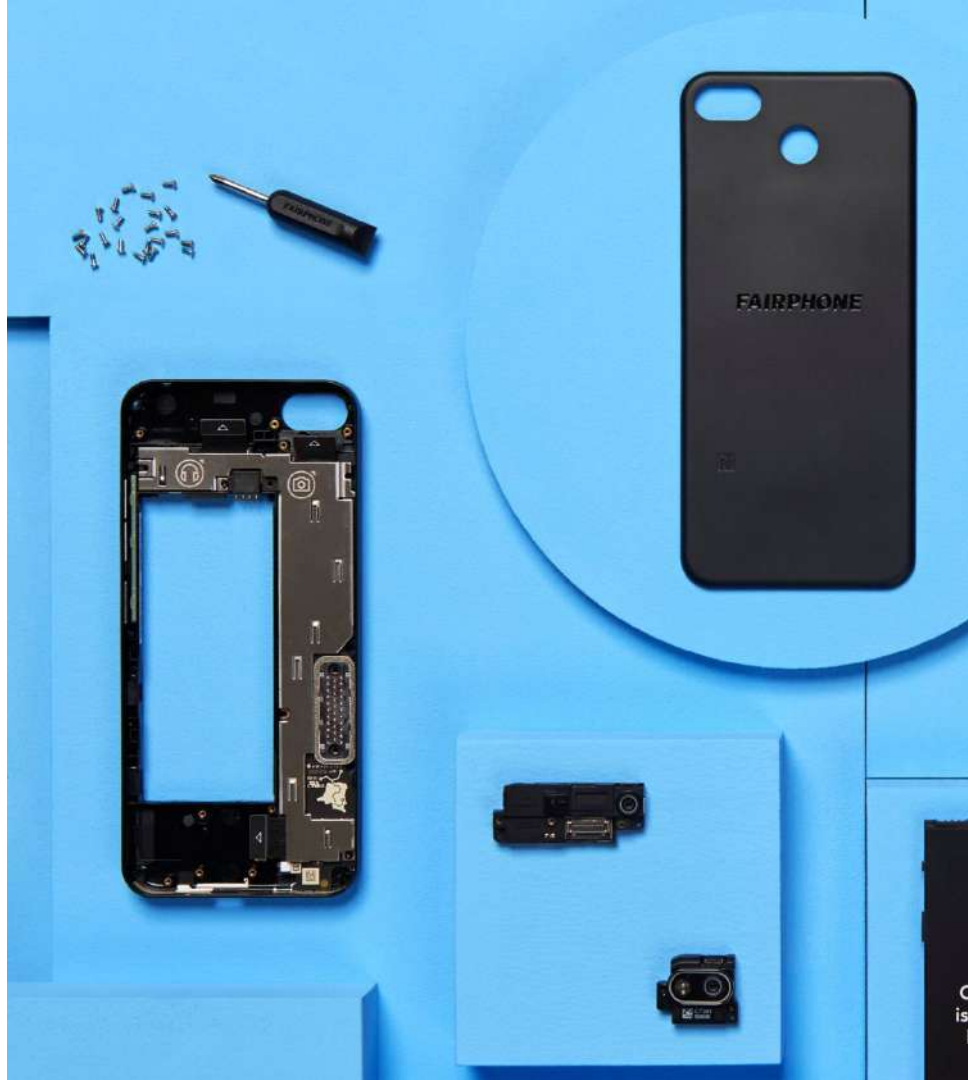
Industry
Consumer



Type
Service



Circular module
Design for recycling



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Herman Miller

Disassembly guide: Herman Miller's sustainable setu chair

In an effort to reduce toxic waste, furniture designer and manufacturer giant Herman Miller have been including disassembly steps to help take apart some of their products. By segregating the parts and materials, it's then much easier to properly recycle, repurpose, or reuse different elements within the single furnish.

A great example is the Setu Chair which comes paired with a disassembly for recycling step-by-step guide.

Link



Industry
Manufacturing

Type
Product

Circular module
Design for recycling



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Nokia

Nokia's modular design and self-repair initiative

Starting with Nokia G22, the company started designing and building smartphones that are easier to repair.

The company's phones have a modular design that allows for easy disassembly and replacement of parts, and through their "Self Repair" initiative Nokia provides repair guides and tools to help customers repair their phones themselves.

[Link](#)



Industry
Consumer



Type
Product



Circular module
Design for recycling



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Philips

Philips controlled refurbished: warranty renewed products

Selected Philips product ranges are part of the “Controlled Refurbished” initiative. Malfunctioning returned products are inspected and refurbished to give them a second life.

Users buying a refurbished item receive a 2 year warranty and the same technical and product support as if they had purchased the product new.

[Link](#)



Industry
Consumer



Type
Product



Circular module
Product life extension



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Siemens

Design for repairability

Siemens boosts profitability in refurbishment and remanufacturing by using digitalization and automation. Data analytics helps predict maintenance needs, reducing downtime and improving efficiency.

The circular business models encourage customers to return old equipment, ensuring a steady supply for remanufacturing. This approach lowers costs, reduces waste, and minimizes the need for raw materials, driving profitability and sustainability.

[Link](#)



Industry
Consumer



Type
Service



Circular module
Product life extension

SIEMENS

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Spares & Repairs. Drive circularity by refurbishing and remanufacturing

Sustainability is an imperative, and as environmental regulations tighten and milestones such as the end of the combustion engines in the EU get closer, now is the time to act. But how can you turn today's challenges into business opportunities? We empower you to switch to a circular economy while ensuring plant availability and saving resources. Let's scale sustainability impact together!



Profit from the greener choice of circularity



Maximize savings sustainably

Optimize your spare parts inventory and save warehousing costs. Additionally, you can enjoy exclusive price advantages with our buyback option. By reducing your operating costs, you'll free up resources to invest in the cutting-edge trends and innovations of our time. Optimize your cost management – and seize the future with us!



Profit from higher availability

Experience fast spare parts availability through our huge global network of over 100 Repair Centers. Our dedicated service experts are positioned worldwide, ready to leap into action in case of an emergency 24 hours a day, 7 days a week, ensuring the highest quality at manufacturer level. Speed up your success with us!



Increase resource efficiency

Make a powerful impact on our planet and conserve resources by extending product lifetimes and opting for expert refurbishment and remanufacturing at manufacturer level. Move into a more sustainable and resource-efficient future with us!

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Caterpillar

Caterpillar's remanufacturing program

The heavy equipment manufacturer offers a remanufacturing program for its products, in which used equipment is disassembled, rebuilt, and tested to extend its life.

Caterpillar also uses sustainable materials in its products and has set a goal of reducing its greenhouse gas emissions by 30% by 2025.

[Link](#)



Industry
Manufacturing



Type
Product



Circular module
Product life extension



made.

Miele

Quality with warranty, less waste, lower price

The German appliance manufacturer offers a range of refurbished appliances, including washing machines, dryers, and dishwashers.

The refurbished appliances come with a warranty, allowing customers to purchase high-quality appliances at a lower cost while reducing waste.

[Link](#)



Industry
Consumer



Type
Product



Circular module
Product life extension



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Kaffee Bueno

Upcycling coffee by-products into high-performance

By unlocking the untapped potential of coffee by-products, Kaffee Bueno is leading the transition to natural, phasing out unsustainable ingredients from everyday products

Link

 Industry Consumer

 Type Product

 Circular module Waste valorisation



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Adidas

Closed-loop recycling across key categories

The sportswear company has implemented a closed-loop recycling system for some of its product lines. The initiative involves designing products for disassembly and recycling, using recycled materials in new products, and offering take-back programs for used products.

Starting from 2022 the initiative is active across multiple categories (including Ultraboost, Stan Smith, Terrex Free Hiker, and NMD Hype)

[Link](#)



Industry
Sports



Type
Product



Circular module
Design for recycling



made.

Cyclon by On Running

Run, recycle and repeat

Designed for circularity, this high-performance sportswear is fully recyclable, contributing zero waste to the environment.

By offering a subscription model, customers return their worn-out gear, which is then broken down and repurposed into new items.

This closed-loop system ensures that no materials are wasted, making it a bold step toward reducing the environmental footprint of sportswear.

[Link](#)



Industry
Sports



Type
Product



Circular module
Design for recycling



made.

Ifixit

Repair hospital equipment

iFixit is an online company that provides easy-to-follow repair guides and tools for many electronic devices, like computers and smartphones. They specialize in sharing professional repair instructions to help people fix their gadgets.

During the COVID-19 pandemic, iFixit developed a tool called the "Hospital Equipment Repair Database" to help hospitals repair their own medical equipment rather than relying on manufacturers for costly repairs or replacements.

[Link](#)



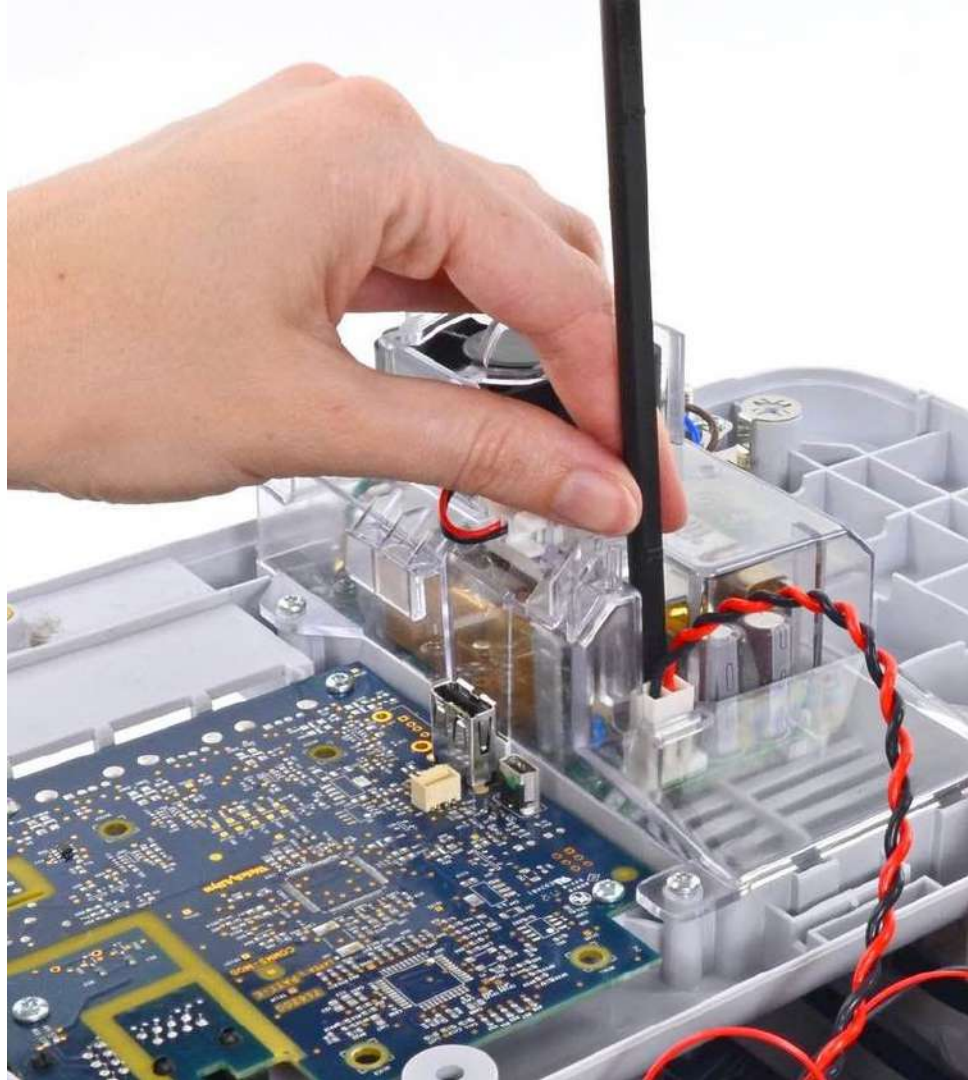
Industry
Consumer



Type
Service



Circular module
Product life extension



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Conscious energy by COOP

Cooperative solar projects for renewable energy solutions

CoopStroom is a cooperative that invests in renewable energy by installing and maintaining solar panels for large consumers such as organizations, schools, and businesses.

They finance these projects through shareholders, provide full maintenance for 20 years, and after this period, the ownership of the installation transfers to the client, offering long-term access to green energy at a low, fixed price.

[Link](#)



Industry
Industrials



Type
Service



Circular module
Product life extension



made.

Green Steel 2.0

From rubber to steel

Green steel is created by transforming waste tyres and plastics into high quality steel via polymer injection technology, liberation hydrogen from the rubber through a series of chemical reactions.

[Link](#)



Industry
Industrials



Type
Service



Circular module
Retain product ownership



made.

Mitsubishi

Mitsubishi's marine CO₂ system cuts shipping emissions

Mitsubishi has developed the world's first marine-based CO₂ capture system, which is installed on vessels to capture and store CO₂ emissions. This system helps reduce the carbon footprint of shipping, and the captured CO₂ can be stored or used in industrial processes, contributing to a circular economy

[Link](#)



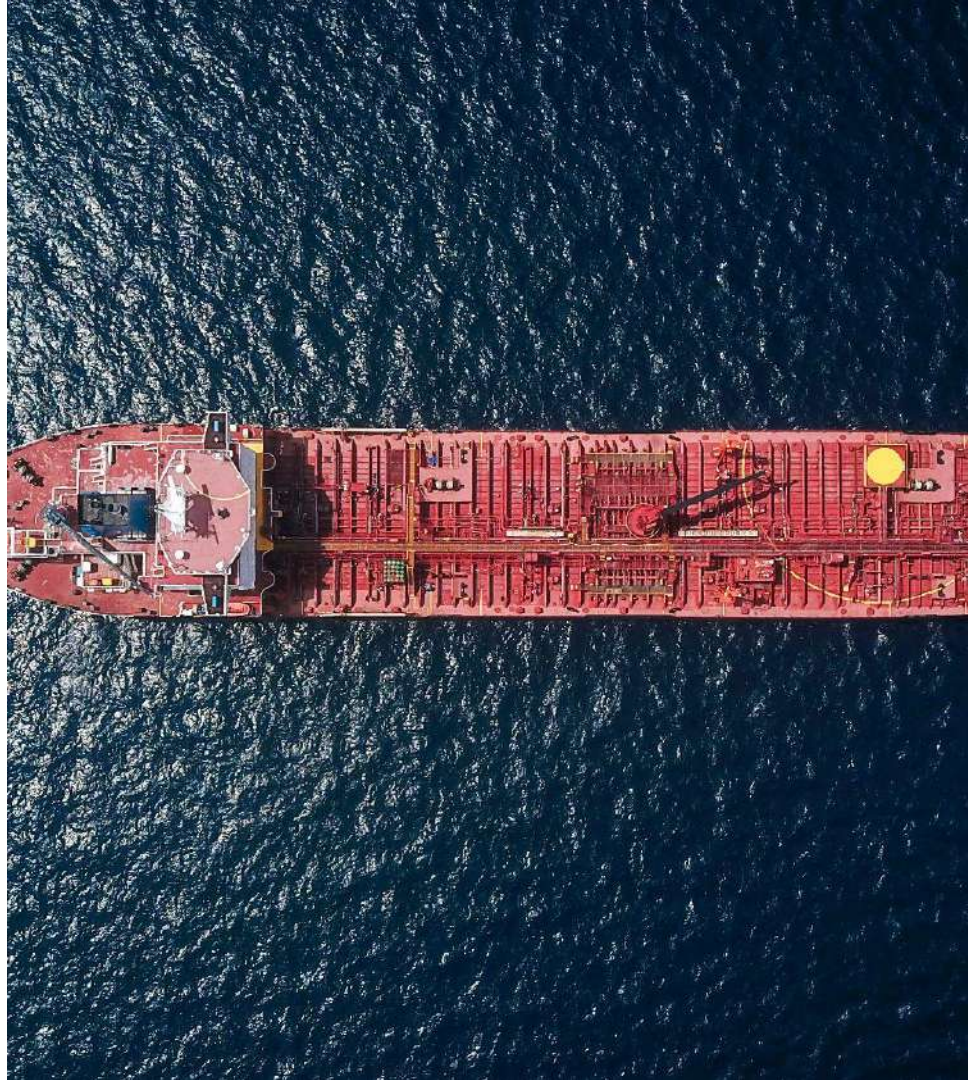
Industry
Industrials



Type
Product



Circular module
Product life extension



made.

Sharenow

Free floating car services reduce emission

Like many free floating car sharing services, the company allows users to rent cars on an as-needed basis, reducing the need for car ownership and the associated waste and emissions.

Previously known as Car2Go, the service from Automotive Holding Daimler is one of the first companies to have scaled free floating services starting from 2008.

[Link](#)



Industry
Consumer



Type
Service



Circular module
Retain product ownership



made.

Mud Jeans

Mud Jeans' circular model: lease, refurbish or recycle

The Dutch denim company offers a circular business model for its jeans, which involves leasing the products to customers for a monthly fee, collecting the used products at the end of their life, and either refurbishing them for resale or recycling the materials.

Mud Jeans also uses sustainable materials such as organic cotton and recycled polyester in its products.

[Link](#)



Industry
Consumer



Type
Service



Circular module
Retain product ownership



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Dressr.

Rent. Return. Repeat.

The online clothing rental service allows customers to rent designer clothing and accessories for a fraction of their retail price. This model encourages reuse of clothing and reduces waste from the fast fashion industry.

For €39/month users get instant access to the collections as well as free shipping & returns, members-only discount and more.

[Link](#)



Industry
Consumer



Type
Service



Circular module
Retain product ownership



made.

Grover

Subscription service high-end gadgets, reducing e-waste

The Berlin-based company offers a subscription service for electronic gadgets, allowing customers to rent high-end gadgets such as smartphones, laptops, and gaming consoles for a monthly fee. This model encourages reuse of existing products, reduces electronic waste, and allows for a more sustainable consumption pattern.

Grover has been valued at over \$1 Billion in 2022.

[Link](#)



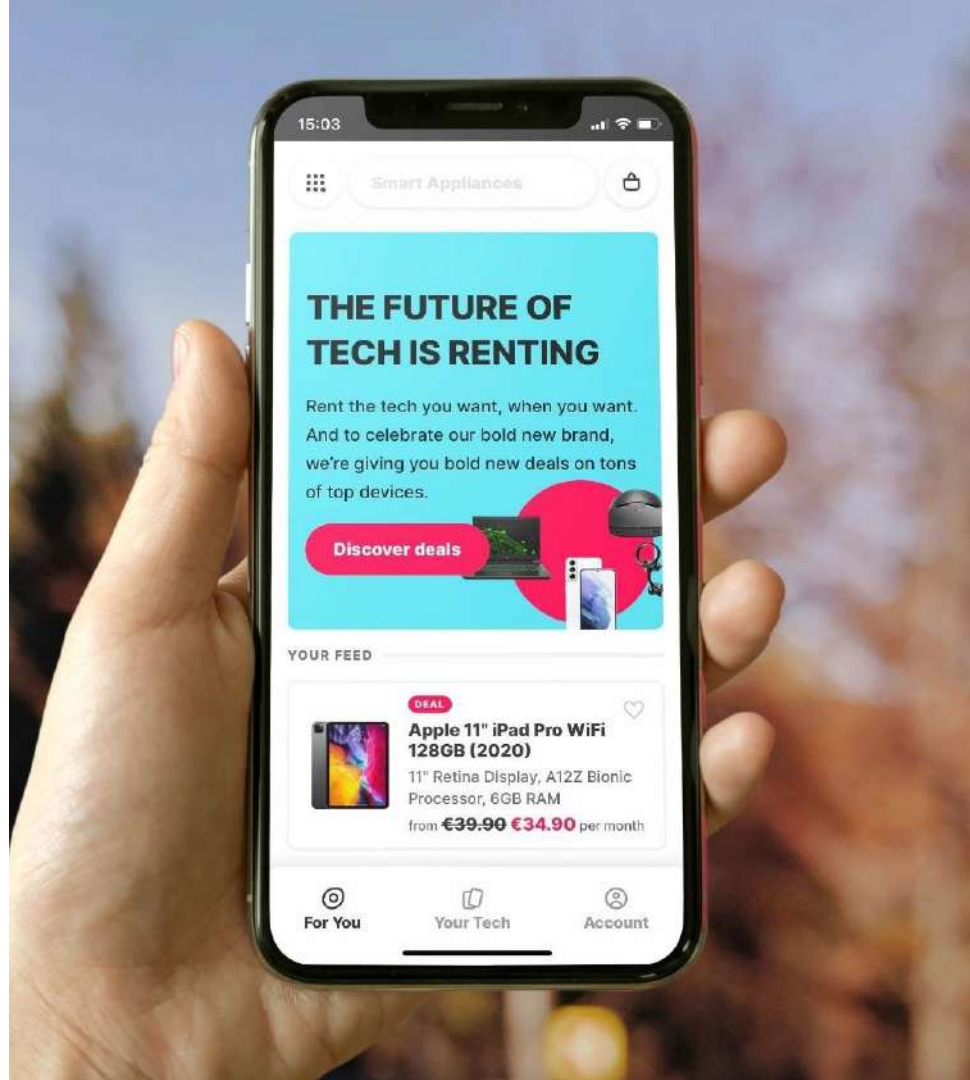
Industry
Consumer



Type
Service



Circular module
Retain product ownership



made.

Interface

Recyclable carpet tiles made from reused materials

The modular flooring company has developed a circular recycling program for its carpet tiles.

The company uses materials such as recycled nylon and polyester in its products, and the tiles are designed to be easily disassembled and separated into their component materials.

The separated materials are then recycled or reused, reducing waste and allowing Interface to create new products from old materials..

[Link](#)



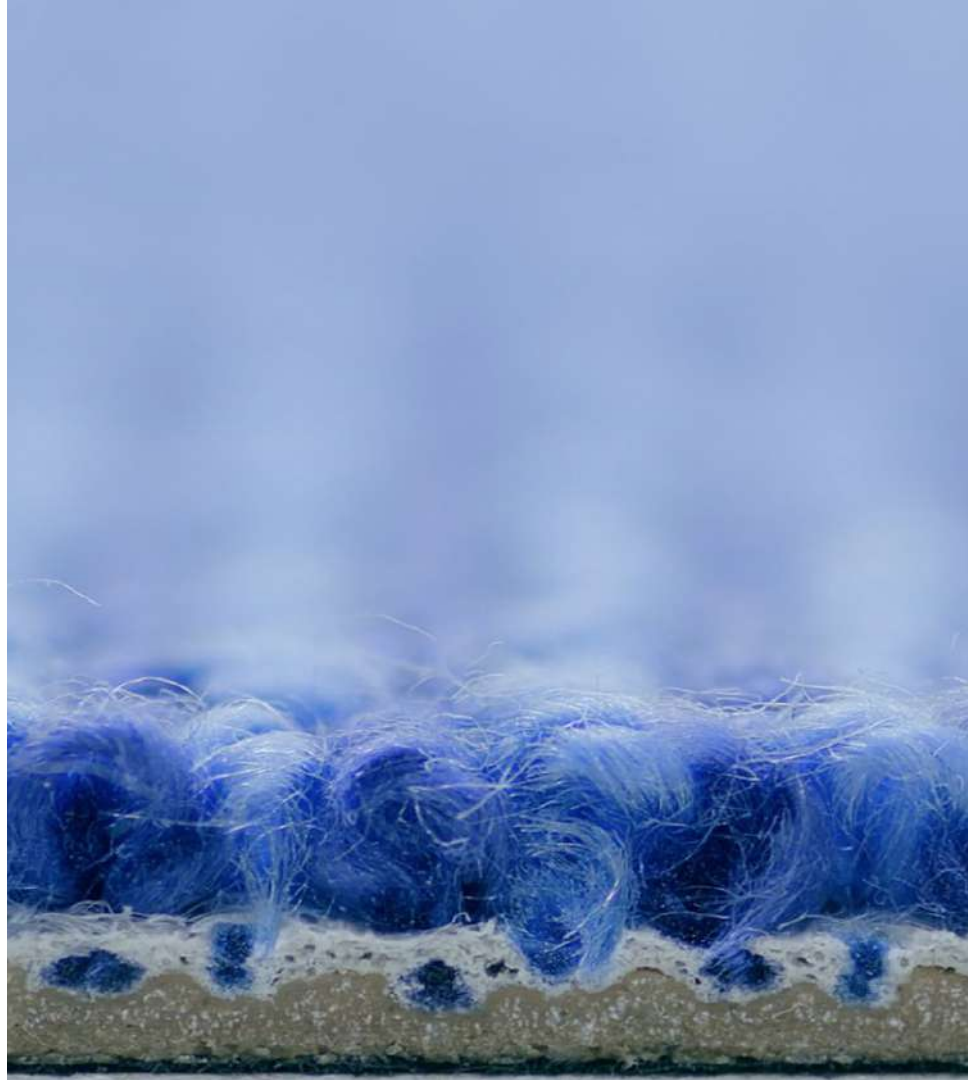
Industry
Consumer



Type
Products



Circular module
Design for recycling



made.

Rifo

Cashmere sweaters from recycled yarn

The Italian fashion brand Rifo has developed a circular business model for its cashmere sweaters. The company sources pre-consumer cashmere waste from textile factories, which is then sorted, carded, and spun into new yarn.

The resulting yarn is used to create new sweaters, and any leftover scraps are used to make accessories or insulation.

[Link](#)



Industry
Consumer



Type
Products



Circular module
Design for recycling



made.

Ikea

Repair, buy-back, and resale for a circular economy

The Swedish furniture retailer has launched a number of initiatives to extend the life of its products, including offering spare parts for furniture, repairing furniture in-store, and buying back used furniture from customers.

IKEA also offers a range of services to help customers resell or donate their used furniture, encouraging a more circular economy.

[Link](#)



Industry
Consumer



Type
Products



Circular module
Product life extension



made.

Lensable

Lens replacement, keep the eyeglass frames

The US-based company offers a service for replacing prescription lenses in customers' existing eyeglass frames, allowing them to extend the life of their frames rather than purchasing new ones.

Lensabl also offers other repair services for eyeglasses, such as replacing broken hinges or nose pads.

[Link](#)



Industry
Consumer



Type
Products



Circular module
Product life extension



made.

Cabinet.health

Product as a service

Cabinet Health offers sustainable pharmacy solutions by reducing and eliminating single-use plastic from medication packaging. They provide medications in reusable bottles and deliver refills in compostable pouches. Cabinet's system focuses on reducing environmental impact through carbon-neutral shipping and waste-reducing initiatives.

[Link](#)



Industry
Healthcare



Type
Products



Circular module
Waste valorisation



made.

Philips Healthcare

Product as a service

Philips has introduced a circular model where they offer medical devices as a service. Hospitals lease the equipment, and Philips retains ownership, maintaining, refurbishing, and eventually recycling the machines. This extends the product life cycle and ensures optimal resource efficiency.

[Link](#)



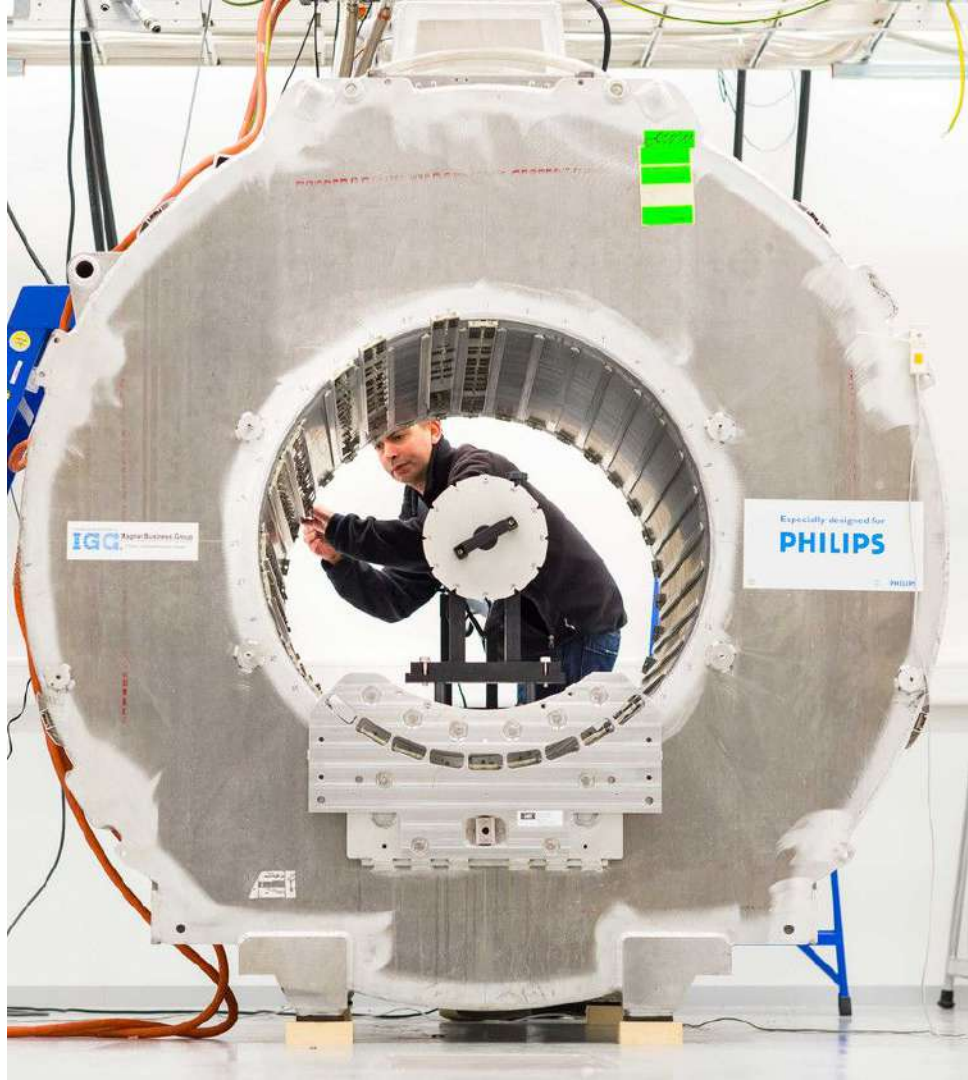
Industry
Healthcare



Type
Products



Circular module
Retain product ownership



made.

Returpen

A recollection and recycling scheme by Novo Nordisk.

Every year, millions of injection pens are produced for people around the world. After use, many of them end up as waste, which is a shame. Because the materials can be reused for other purposes.

Since 2020, returpen™ has been collecting used pens at pharmacies in Denmark, and fortunately there is broad support for the initiative.

[Link](#)



Industry
Healthcare



Type
Products



Circular module
Waste valorisation



returpen™

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Becton Dickinson (BD)

Reducing medical waste

BD is working on more sustainable disposal systems. Their efforts aim to minimize medical plastic waste, which constitutes a significant environmental challenge for the healthcare industry.

A new health care sector collaboration in Denmark will evaluate the feasibility of recycling used blood collection tubes to reduce medical waste as part of the participants' sustainability goals and Denmark's Climate Action Strategy.

[Link](#)



Industry
Healthcare



Type
Products



Circular module
Waste valorisation

Turning a Waste Stream into a Resource Stream



made.

UZ Gent

Redesign the healthcare cart

Observations have show an overstock of healthcare materials on the nursing cart. This leads to large amounts of expired healthcare equipment.

UZ Gent's project aims to redesign healthcare material storage by innovating stock management and raising staff awareness.

More efficient stock management reduces the waste flow and pressure on the environment and budget. This theme is applicable throughout the healthcare sector.

[Link](#)



Industry
Healthcare



Type
Products



Circular module
Waste valorisation



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SHL

Reusable auto inject with cartridges

SHL Medical Autoinjector system is specifically designed for self-administered treatments. SHL has explored the use of reusable autoinjectors, which are designed to have replaceable drug cartridges. This system reduces waste by allowing patients to use the same device for multiple doses, only replacing the drug-containing component.

[Link](#)



Industry
Healthcare



Type
Products



Circular module
Retain product ownership



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Ecosteryl

Infectious medical waste decontamination

Ecosteryl aims to eradicate the environmental and health problems associated with medical waste in the world. Infectious medical waste is considered a risk and cannot follow the traditional household waste stream. Ecosteryl offers solutions whereby the medical waste is treated in such a way that the materials used can again be recycled in existing processes.

[Link](#)



Industry
Healthcare



Type
Products



Circular module
Waste valorisation



Medical waste
treatment and
recycling

Environmental Solutions Since 1947



Mission

We imagine, develop, manufacture and provide innovative environmental solutions for the treatment of medical waste.

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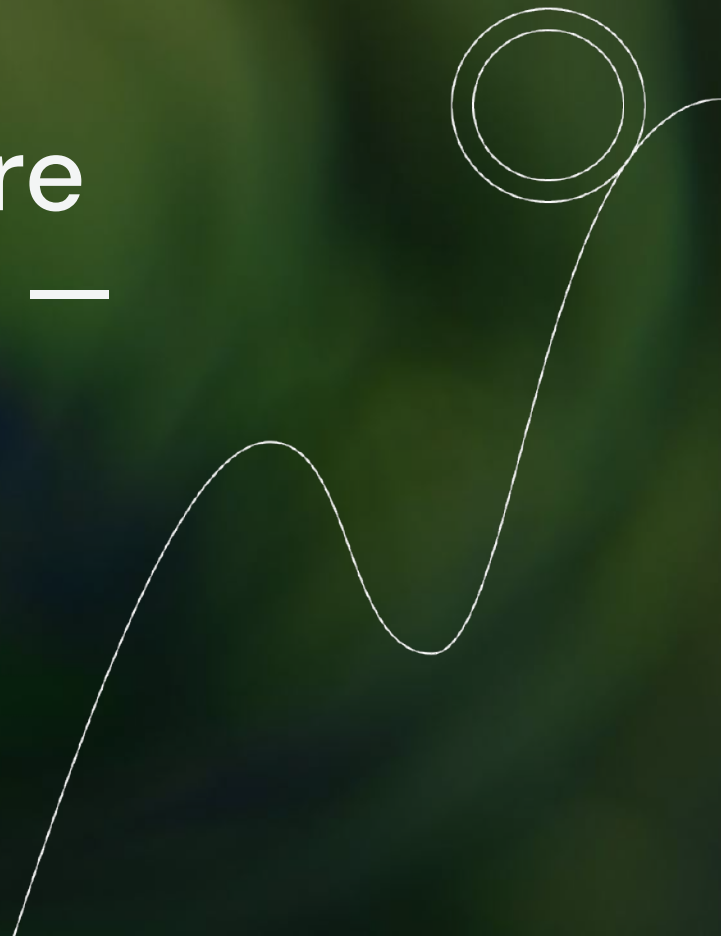
Key insights

04

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Circular models are not just sustainable — *they can be profitable*

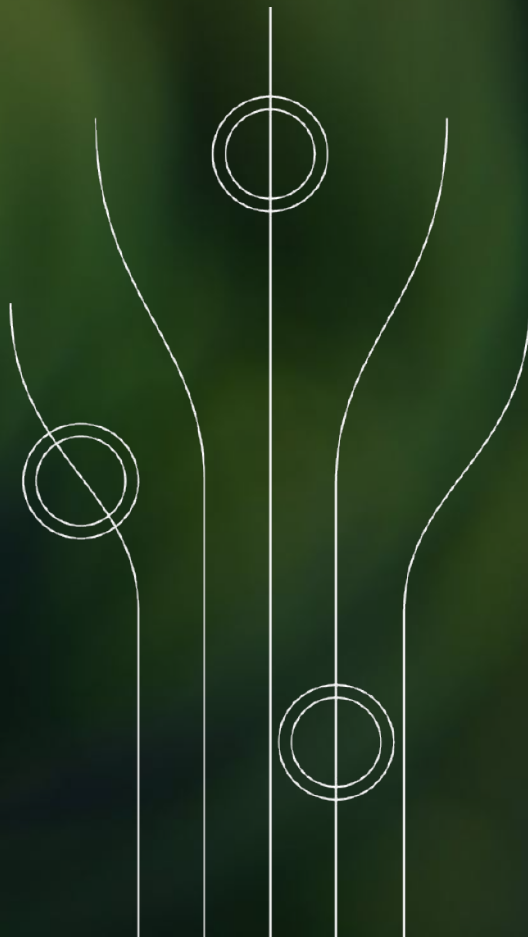
Circularity is not just an environmental strategy but a profitable business model if built on methodology of scan & scale. Companies can reduce waste, extend product life, and lower operational costs while creating additional revenue opportunities.



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Innovation reduces costs & creates *new* *revenue streams*

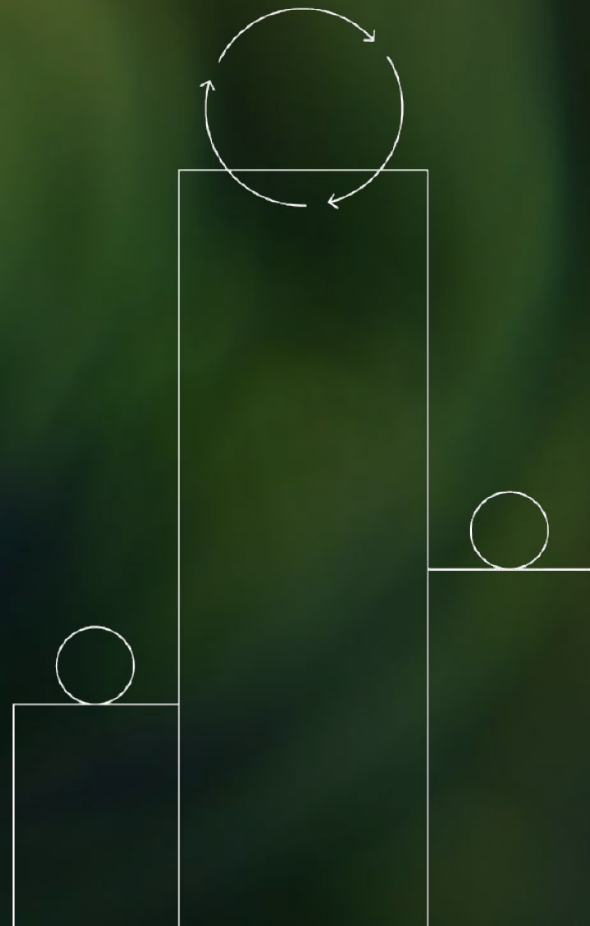
Extending the life of products through remanufacturing, refurbishment, or repair programs helps businesses save on raw material costs and reduce waste. By extending product life cycles, companies can reduce production costs and environmental impact, making it a win-win for both businesses and sustainability goals.



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Designing for recycling & reuse is *a competitive advantage*

Businesses that integrate circular design principles—ensuring products can be repaired, reused, or recycled—position themselves as innovative market leaders, appealing to both environmentally conscious consumers and regulators.



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Now it's your turn

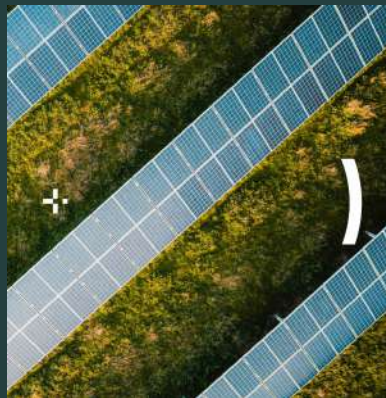
The future isn't
waiting. Will you take
the leap, or will you be
left behind?

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Go Circular

A business incubator for sustainable innovation

At Made, we're transforming sustainability from a buzzword into a business advantage. We empower companies to thrive within the circular economy, offering comprehensive solutions that drive growth and environmental responsibility.



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Here's how we make it happen

01 *Measure & scan*

We dig deep into your company's environmental footprint through impact analyses and life cycle assessments. Using data-driven insights, we pinpoint opportunities for immediate and long-term improvements.

02 *Define vision & roadmap*

Together, we craft a sustainability strategy with a clear vision and actionable roadmap. From setting milestones to building strategies for growth, we ensure your path to circularity is both achievable and impactful.

03 *Design better solutions*

Our eco-design approach focuses on reducing environmental impact without compromising functionality. We develop circular business models and prototype innovative concepts that align with your sustainability goals.

04 *Deliver impact*

Leveraging cutting-edge technology, we provide the tools for smarter sustainability decisions, from reporting to prototyping circular business models. Driving tangible impact and building a greener, more profitable future.

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Let's kickstart your next project

I'm Jonas, eager to discuss creative ideas and solutions within your company ecosystem.

Let's discuss how you can take your sustainability journey to the next level. Whether it's reducing your carbon footprint or developing groundbreaking new strategies, we're here to help you make an impact.

The future isn't waiting. Will you take the leap, or will you be left behind? Contact us today to see how we can transform your sustainability journey.



Jonas Burm

Director Sustainable Innovation

Tetra Pak

ECO
VER

SODAL

NOVY

Kringwinkel

DANONE

IPSEN

PHILIPS

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