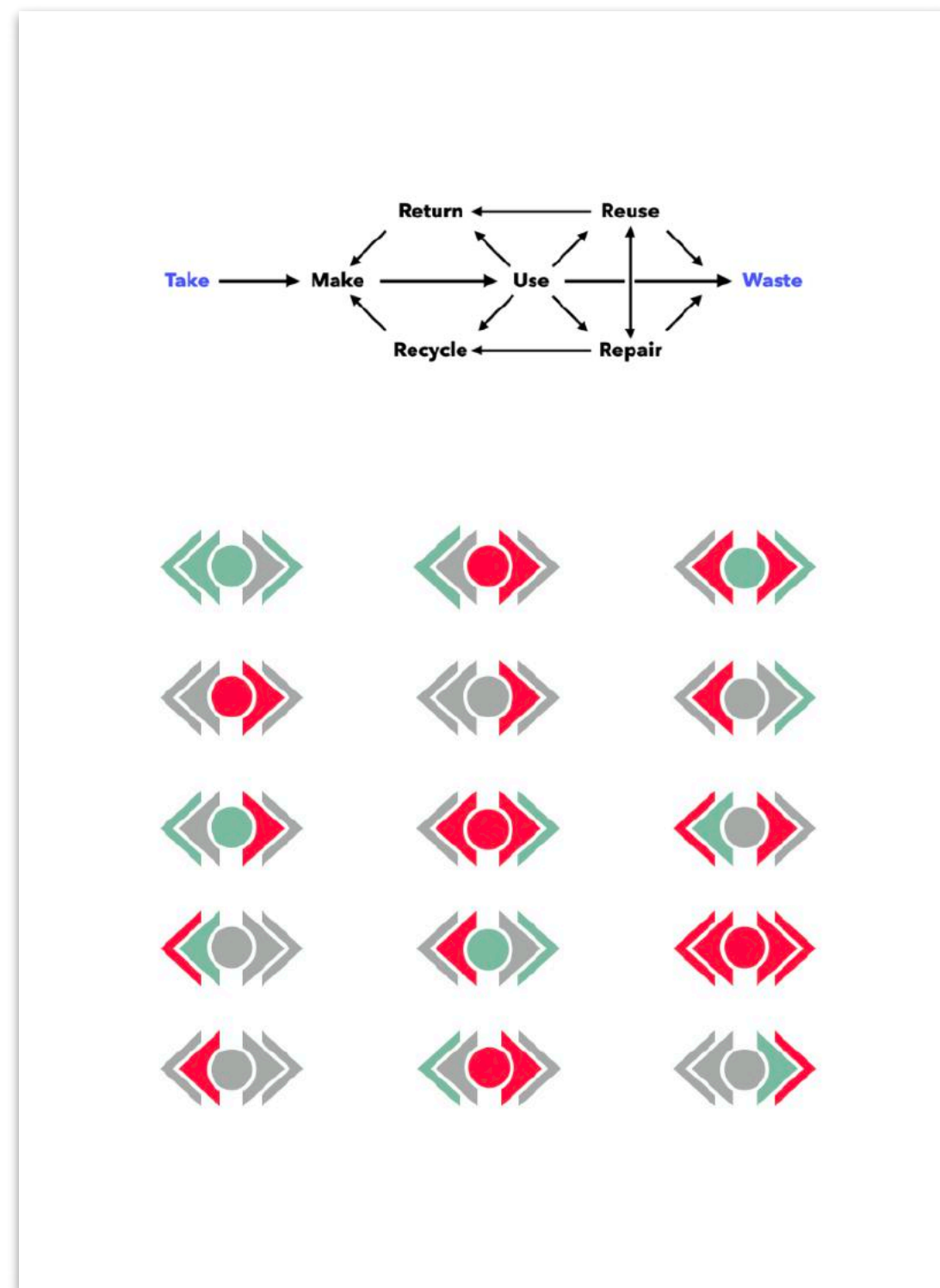


Business Models that work in **The circular economy**


Report by www.boardofinnovation.com

In this report:

New circular framework & visual rating system



Multiple cases & examples




SAPPI: Paper-based alternative to plastic

Phase: Take & Make

When companies invest in the circular economy, they often start here: sourcing of recycled materials and reduction of resource consumption in the production process.

It's a great start, but creating a product with 80% recycled materials, that still ends up on a landfill is not good enough.




Re-pello model 16: repairable bike

Phase: Reuse & Repair

Next best thing to extend life cycle: Offer options to reuse product (e.g. via after market, find new users) or make sure to offer repair options.

Again, very few businesses are taking this phase seriously.



Skanska Norway: reusable concrete decks

6 different bottlenecks

Convenience
Single-use items, ignoring waste, etc. are often too convenient for consumers and companies to go for alternatives.

Trust issues
Collaborating in the value chain means sharing data & product info. Many companies are reluctant to do so.

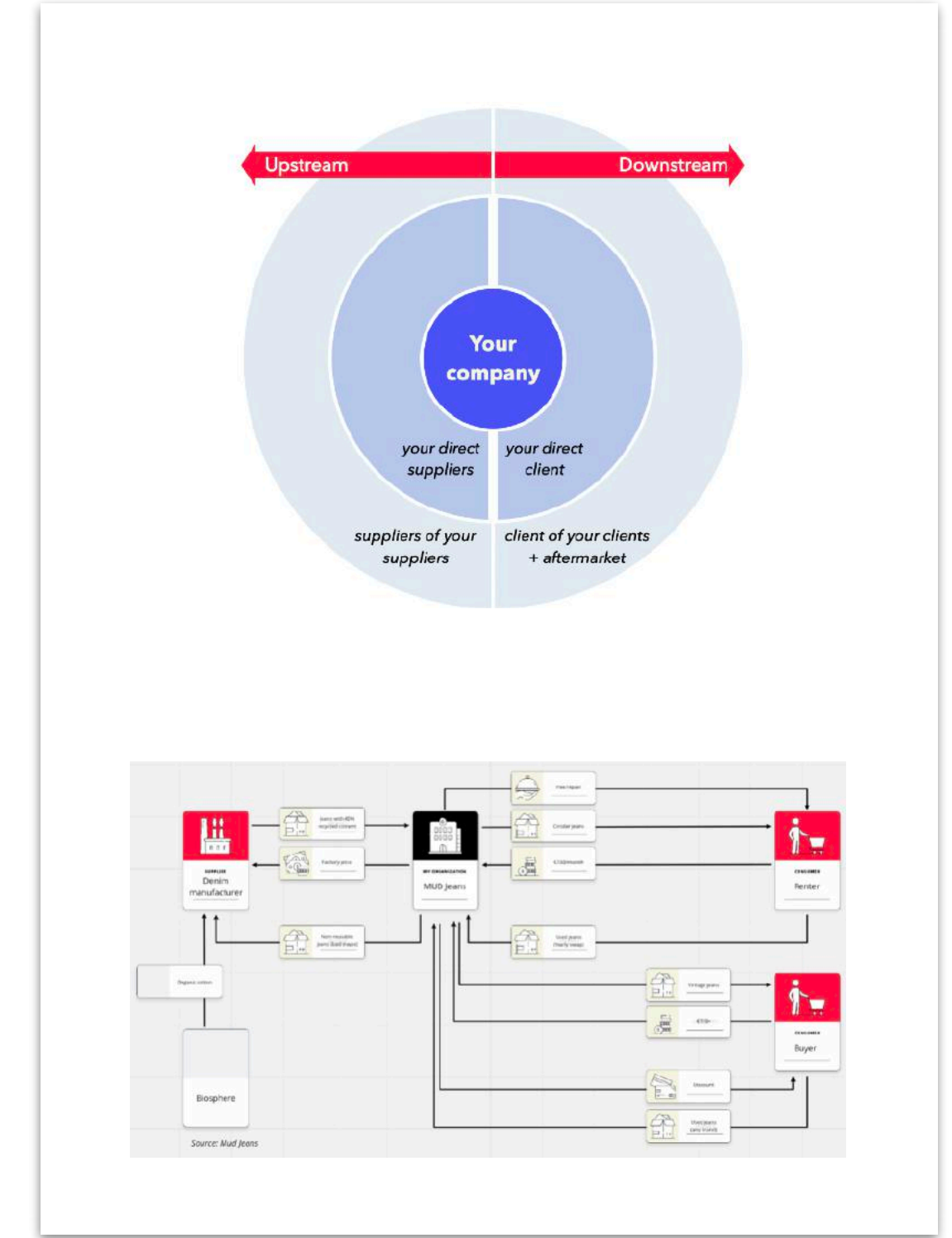
Value perception
Most clients & consumers are not willing to pay extra for products, just because they are circular.

Knowledge
While there are successful first movers, many businesses lack the blueprints to follow in their path.

Friction for change
Switching to a new business model, negotiation new contracts etc. takes time and energy.

Profitability/ Viability
In many industries the tech or processes are not ready to create enough profit or cost-saving to justify investments.

Ecosystem & business models



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Board of Innovation is a **strategy and business design firm**. We partner with the world's largest organizations to solve their biggest challenges through **meaningful innovation**.

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Get in touch to co-create a Circular Business Strategy

For all inquiries, feel free to reach out via
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Kevin Shahbazi

Circular Economy Lead
kevin.shahbazi@boardofinnovation.com
[Connect on LinkedIn](#)

Example strategy topics to work on:

- ▶ The future of FMCG: Packaging, sustainability design,...
- ▶ Ecosystem/business model design
- ▶ Industrial waste-stream valorisation
- ▶ New business opportunities in the circular economy
- ▶ Facilitation of B2B partnerships in a value chain
- ▶ Incentive model design for consumer products
- ▶ ...

IN THIS DOCUMENT

Intro to the Circular Economy

Context: why now?

Framework: Circular Business Loops

Building Better Business Models

Comparing circular businesses

Ecosystem & Business Design

Define your Strategy

Scoping

Setting KPIs + examples

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More and more **people are pushing for change**, to build a better world for all. One of the many initiatives that is getting traction is the **17 Sustainable Development Goals** by the UN. Gradually these SDGs are being adopted in corporate strategies.

This report zooms in on a couple of tools and tips to help you join this initiative.



board of
innovation

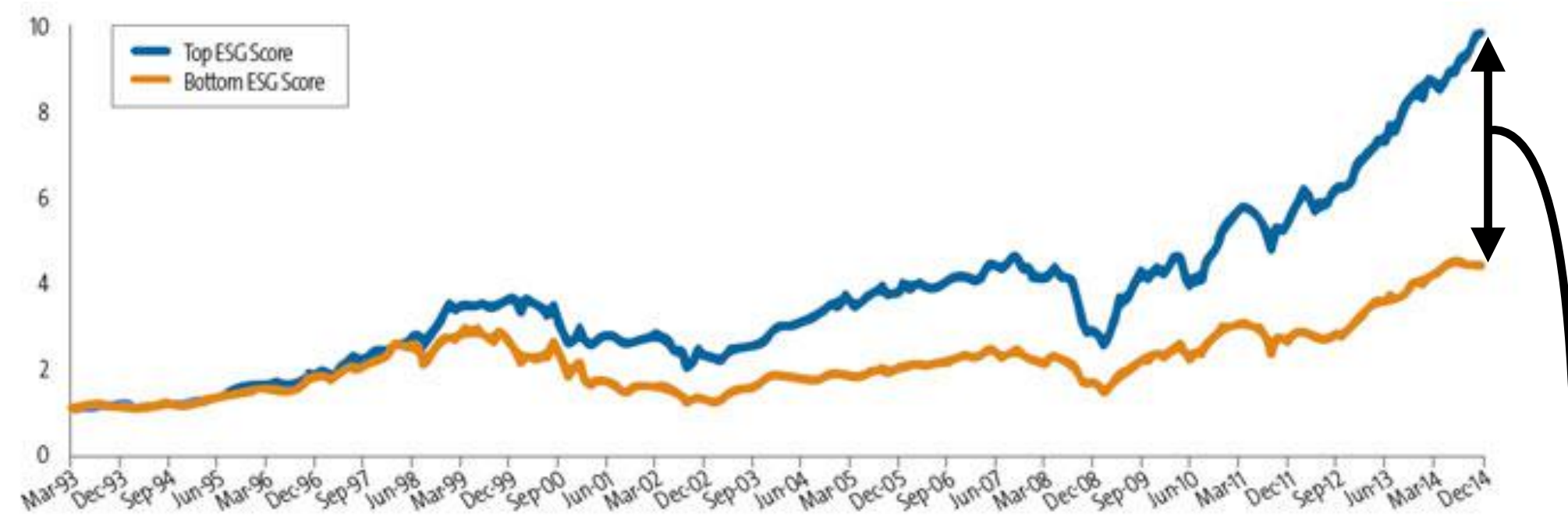
Design of ecosystems & business models are some of our core strengths. We use these to create progress related to several SDGs with our clients.

challenge:
Access to medicine
(focus of upcoming report)



challenge:
Circular economy
(focus of this report)

More evidence: Investing in ESG factors pays off. (Environmental, Societal & Governance)



Source: Khan, Mozaffar and Serafeim, George and Yoon, Aaron S, Corporate Sustainability: First Evidence on Materiality (November 9, 2016), The Accounting Review Vol. 91, No. 6, pp. 1697-1724. <http://ssrn.com/abstract=2575912>



“Businesses who lead in carbon performance delivered twice the financial return compared to their peers. Companies in the Carbon Disclosure Leadership Index (CDLI) and Carbon Performance Leadership Index (CPLI) delivered approximately double the total return of Global 500 companies between January 2005 and May 2011.”

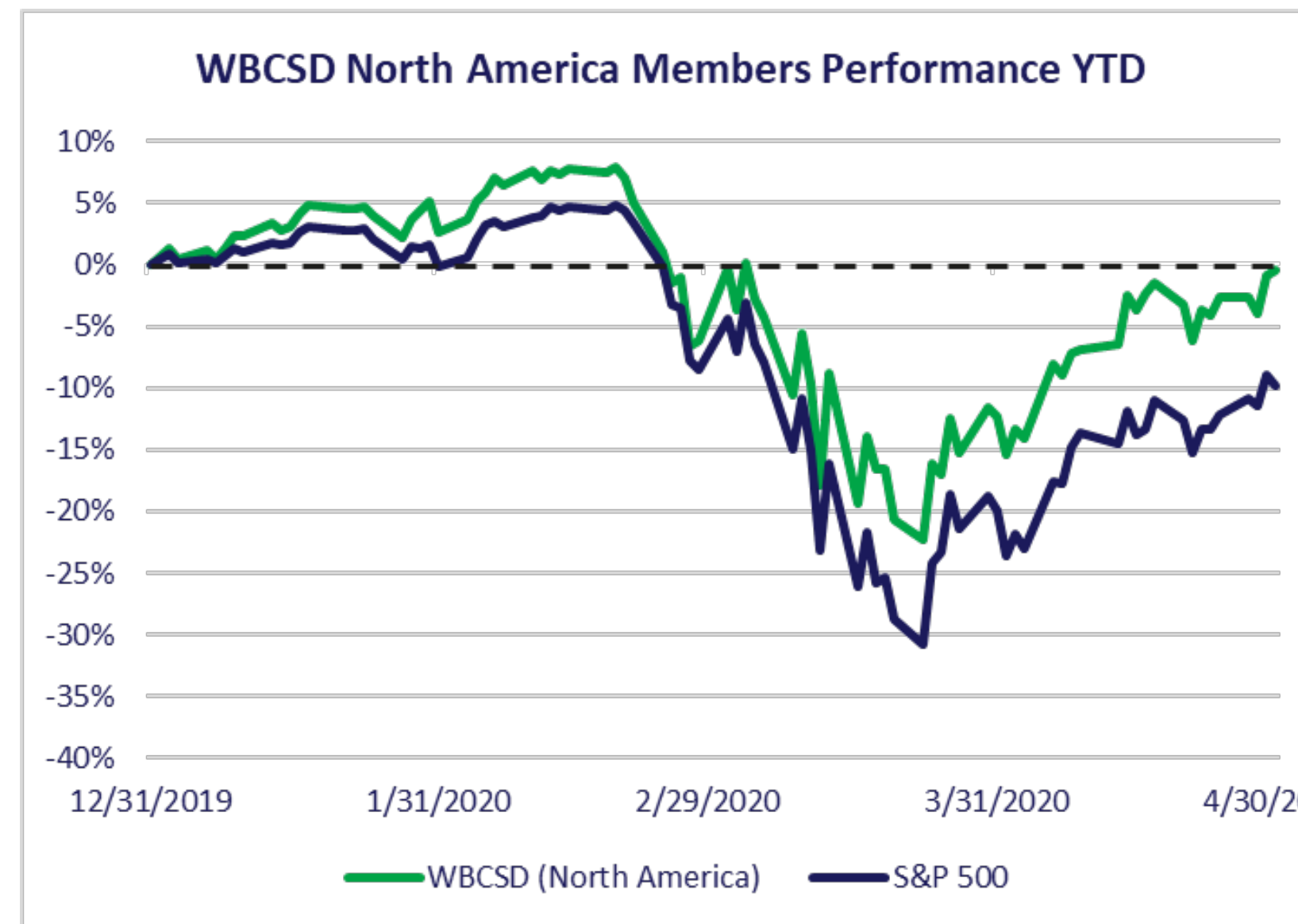
Source

Source Source

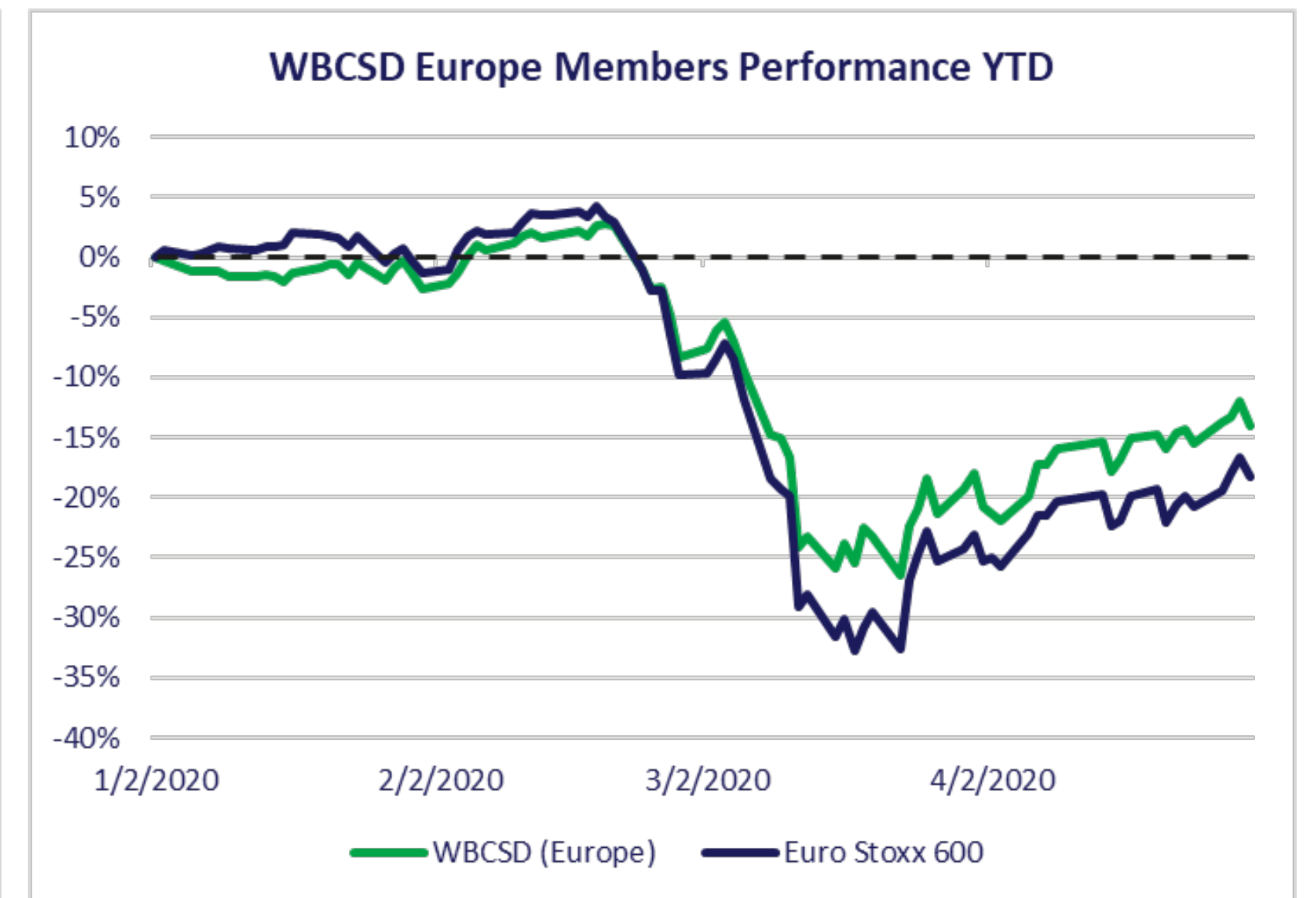
More evidence: Investing in ESG factors pays off. (Environmental, Societal & Governance)

Even in **COVID-19 times**, we notice that companies that invested earlier in ESG-factors are proven to be **more resilient in crisis times**.

e.g. In 2020, the 200 WBCSD members with a strong ESG focus are still outperforming many competitors.



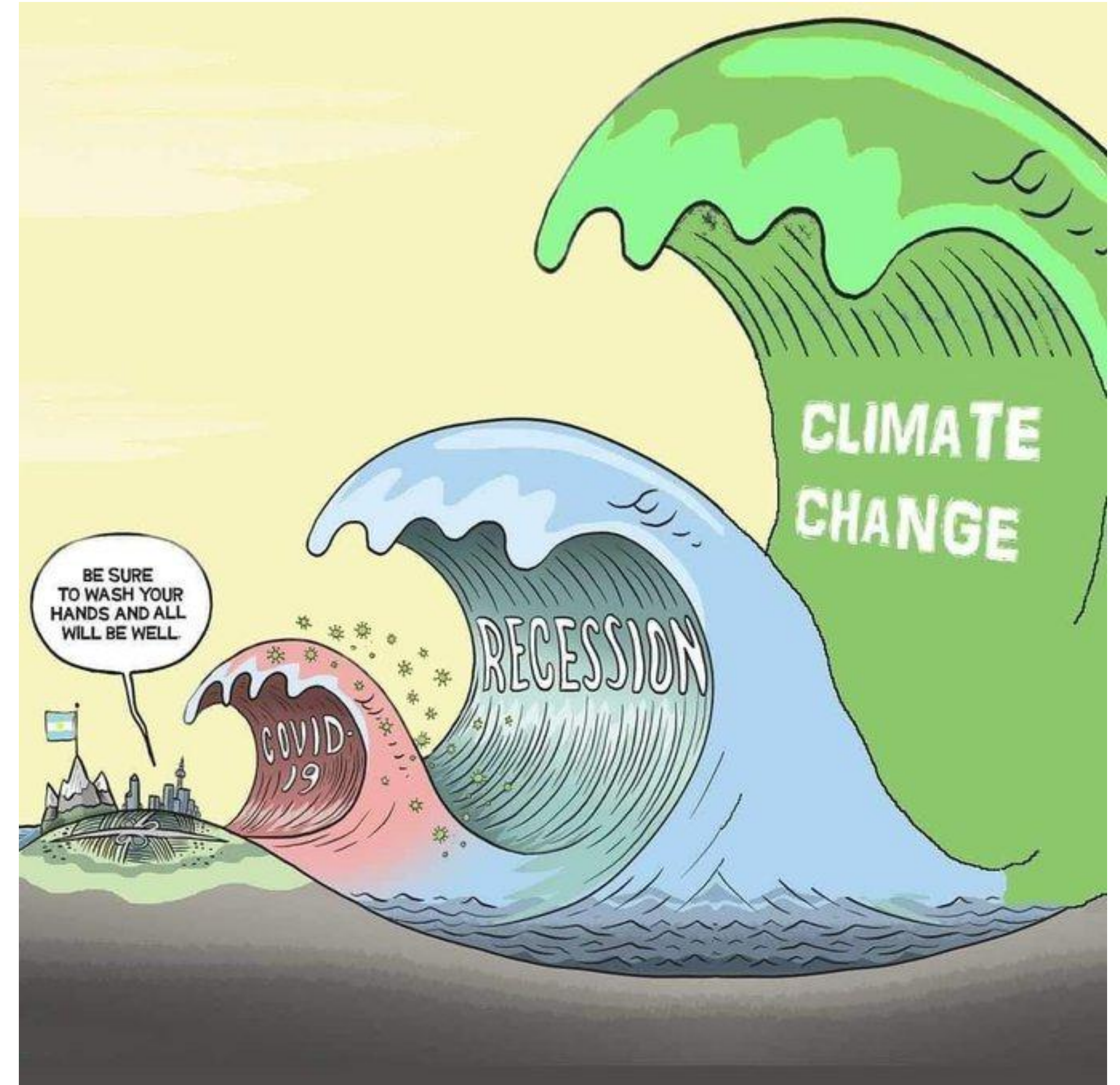
North America



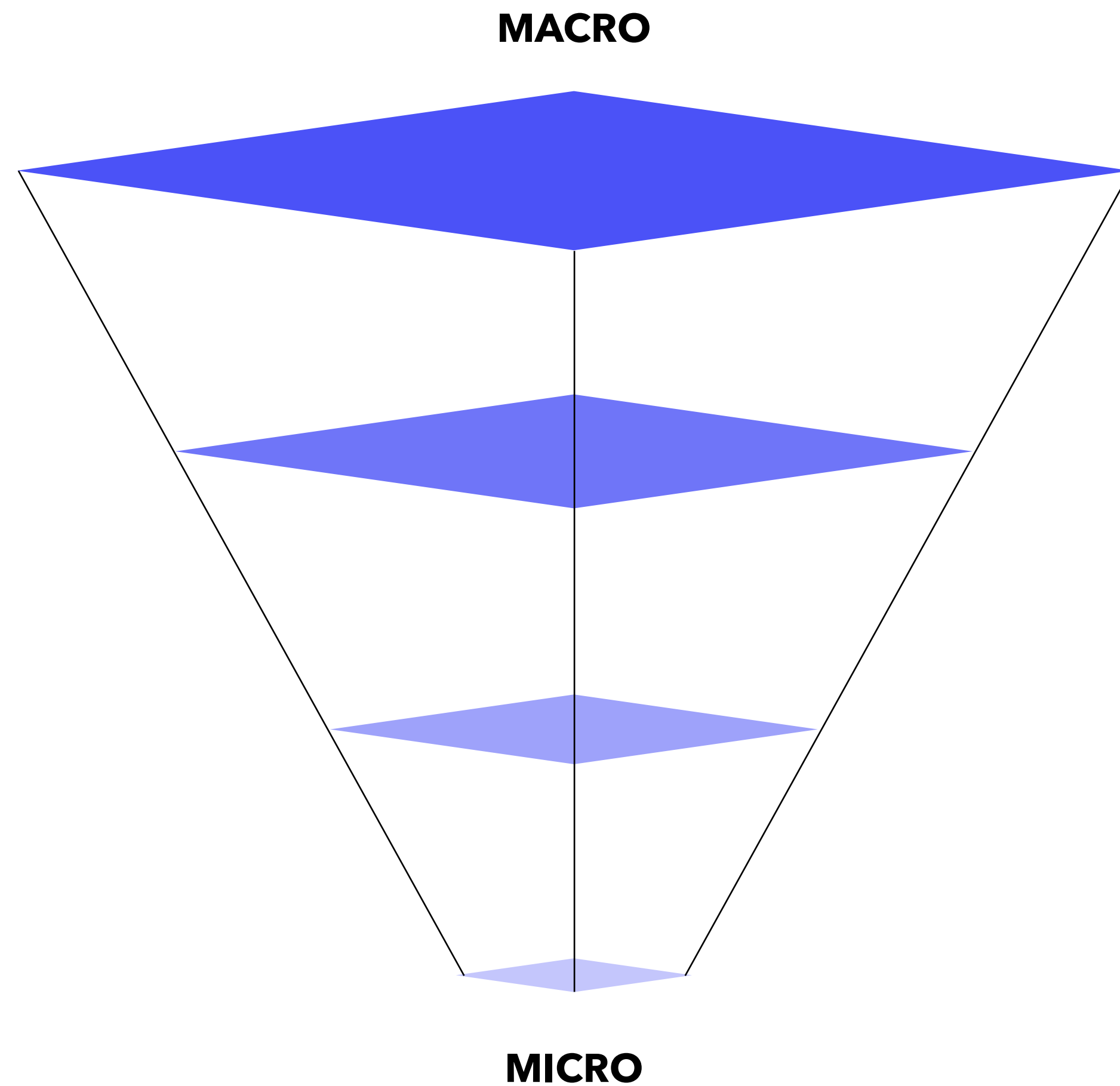
Europe

Lessons from the Covid crisis for the circular economy

- › Importance of acting early to avoid larger negative impact
- › Resilience in value and supply chains
- › Overall risk-mitigation
- › The ability to make significant changes how we live, work, and produce in a short time frame
- › You can't just wait and rely on governments to steer towards safety.
- › **Whatever bold ambition you have or ideology you are following, you need to be financially healthy to thrive.**



The best level to contribute to the circular economy?



Level: Society or nation

Toolkit: Taxes/subsidies, regulation + fines, policies, credible communication

Level: Large organisations & multinationals

Toolkit: Valuable & convenient products, ecosystem partnerships, inspirational branding, policies/guidelines

Level: Teams or groups

Toolkit: Enforce culture & value, spot bottlenecks & issues

Level: Individual

Toolkit: Role model, peer pressure, purchasing decisions

**But to thrive, a company needs
drivers beyond sustainability & circular goals.**

Luckily, there are plenty of others reasons to join a circular economy:

IT WILL HELP A BUSINESS TO

> **Save costs**

E.g. Recover resources

> **Access new markets**

E.g. Client expect companies to lead

> **Resilience to shocks**

E.g. Don't depend on limited resources

> **New IP**

E.g. valorize new tech

> **Compliance**

E.g. Regulation quickly evolves

> **Access to talent**

E.g. Meaningful work

In this document, we offer tools & tips to build future proof business models.

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▶ Framework: Circular Business Loops

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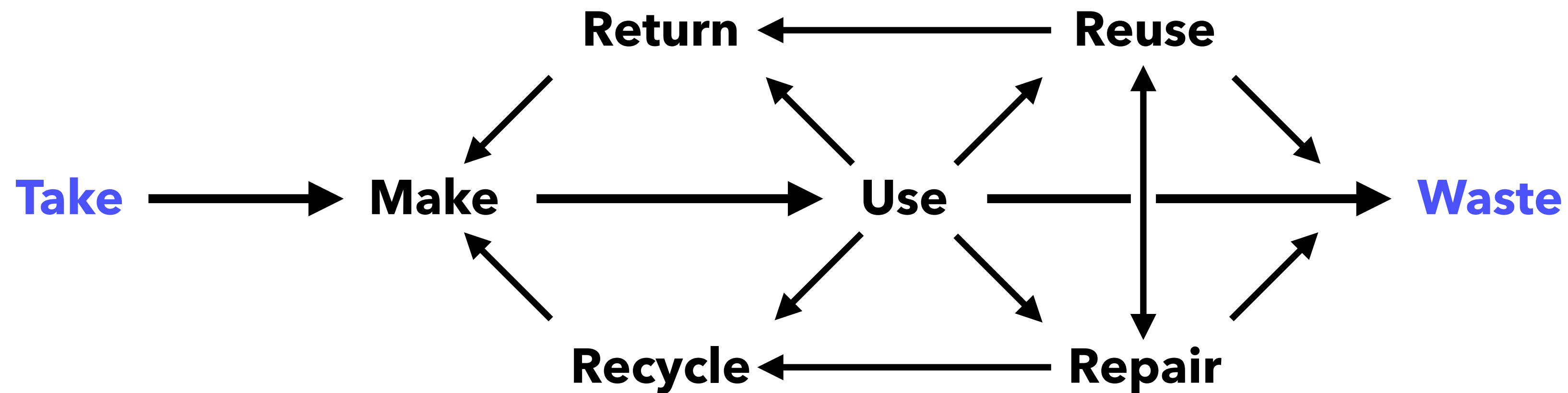
A traditional product flow is called linear.

Companies **take** scarce resources from the environment, design and **make** product so they can be shipped to clients. Often these products are **used** for a limited amount of time before they end up as **waste** on a landfill.

This can and should be improved!

Follow the loops, join the circular economy

to limit what you take and the waste created, while creating value for all.

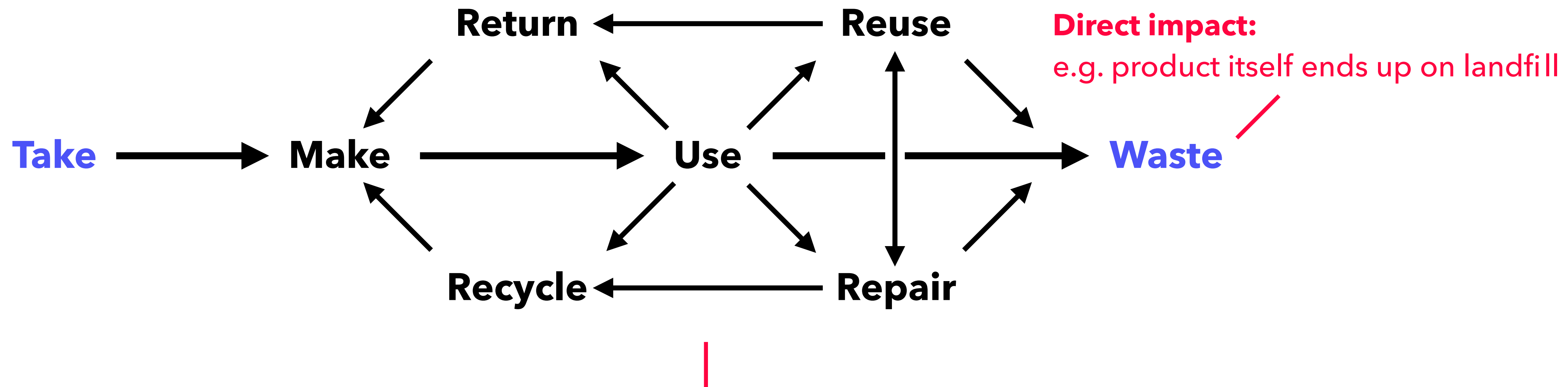


Framework: The Circular Business Loops

This can and should be improved!

Follow the loops, join the circular economy

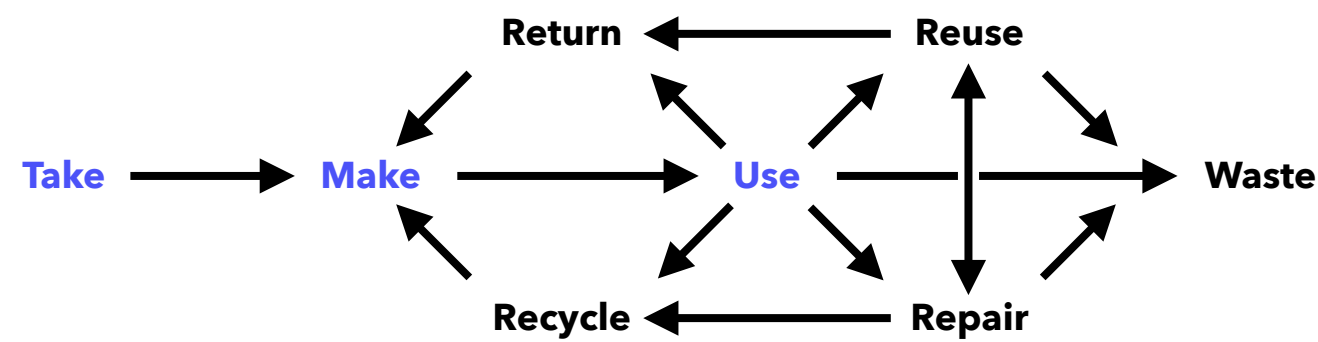
to limit what you take and the waste created, while creating value for all.



Direct impact:
e.g. product itself ends up on landfill

Indirect impact, at ever stage:
e.g. Fuel used to transport goods, waste water of production.

3 main types of players in the circular economy:

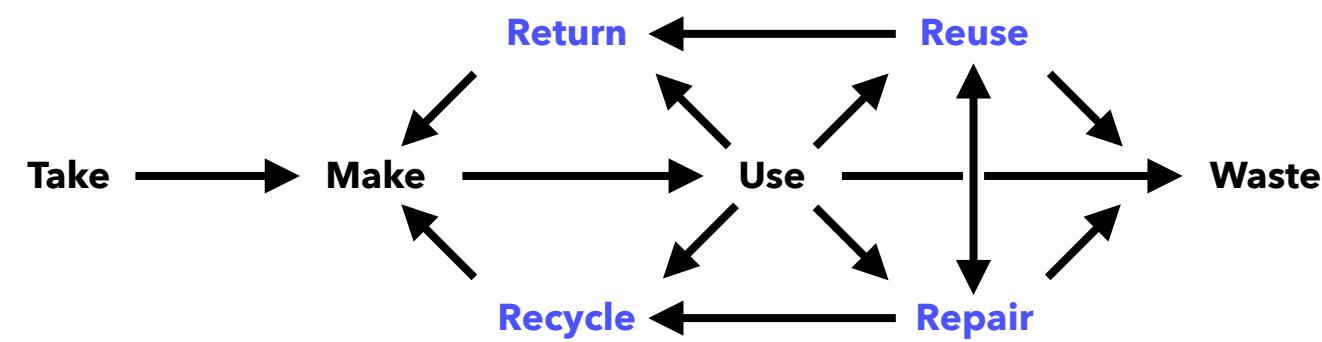


A. PRODUCT BUSINESSES

Companies with hardware/physical products that aim to **evolve from a traditional linear model to circular business models.**

Designer of the product already decides of 80% of the circular impact.

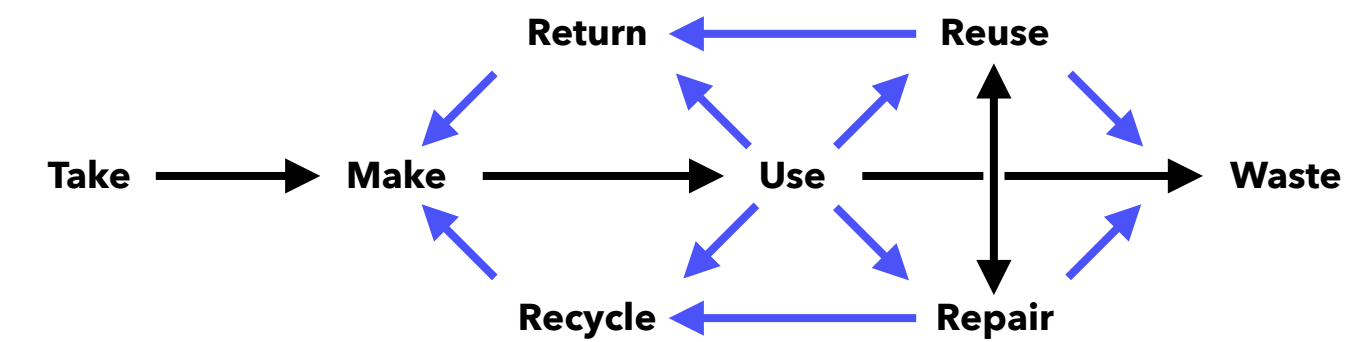
e.g. Adidas, Philips, Volvo



B. SOLUTION PROVIDERS

Solutions providers with a **specific focus** on a single stage to help TYPE A companies transition to the Circular economy.

e.g. Reseller of refurbished products, Recycler



C. FACILITATORS

Organization that provide services for support the whole ecosystem or a significant part of a value chain.

e.g. Data brokers, Government platforms

D. OTHER (LESS RELEVANT)

Regular service business (e.g. HR services, hotels, sports business)

Different types of players + different business models

ALL CREATE CIRCULAR IMPACT



SWAPFIETS

= an alternative business model to subscribe on a bike-service

= This company tries to minimize the impact of its own products, controls lifecycle

- Broken bikes are repaired instantly, or replaced
- The company has strong incentives to create durable bikes that are easy to repair

TYPE A



PROTIX

= traditional business model with circular procurement

sells protein & ingredients in bulk to be used in food production and B2C

Takes food waste + breed black fly larvae:

- Provides 'circular' raw materials for downstream companies
- Helps companies to get rid of food waste
- Protix creates a circular link between 2 different value chains

TYPE B → TYPE A



BUILDING AS MATERIAL BANK

= a data platform business model

- Offers a data-passport for materials in the building industry
- Aim is to support transition of the building industry from linear to circular by letting users identify value potential throughout the building cycle

TYPE C

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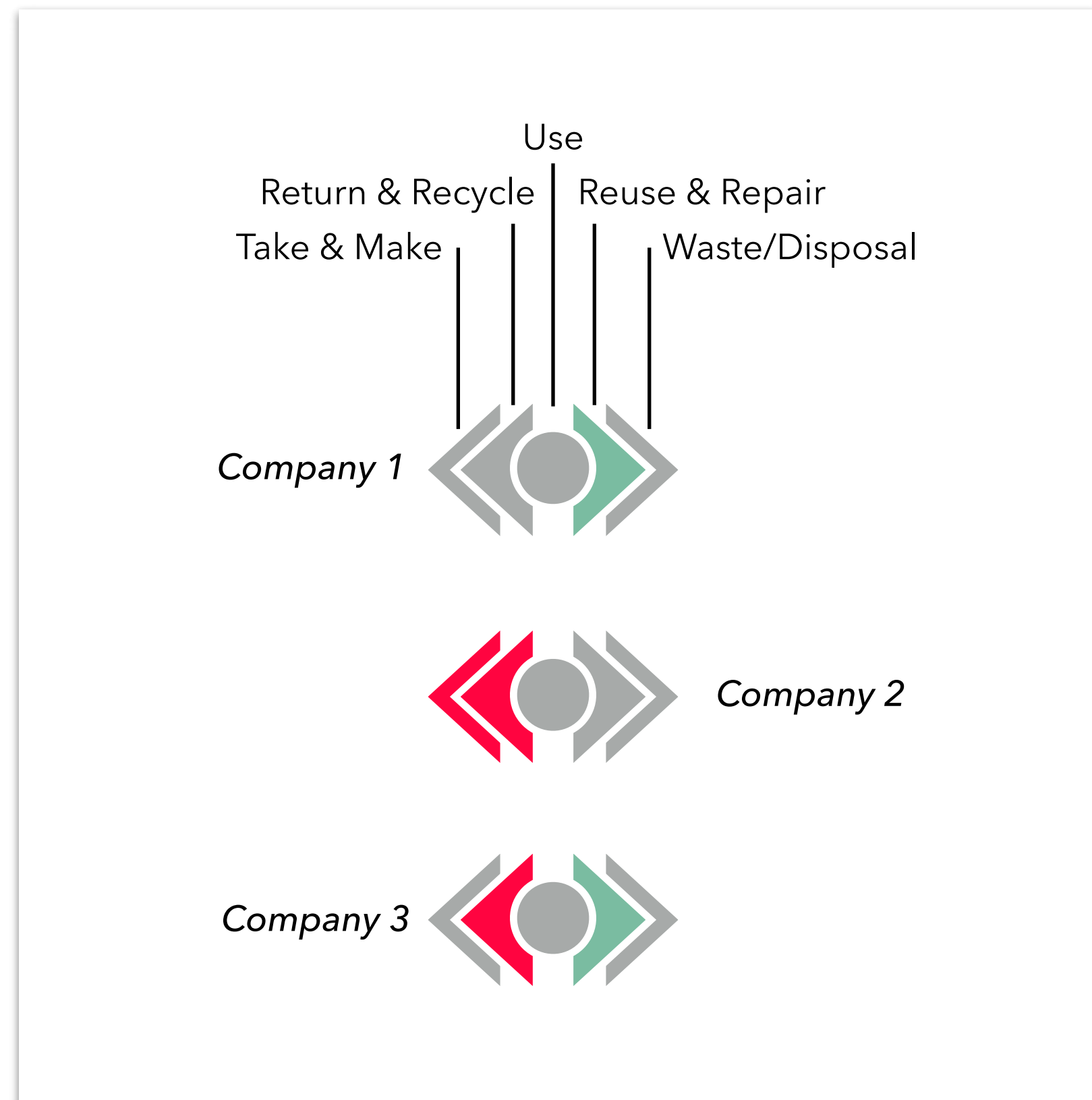
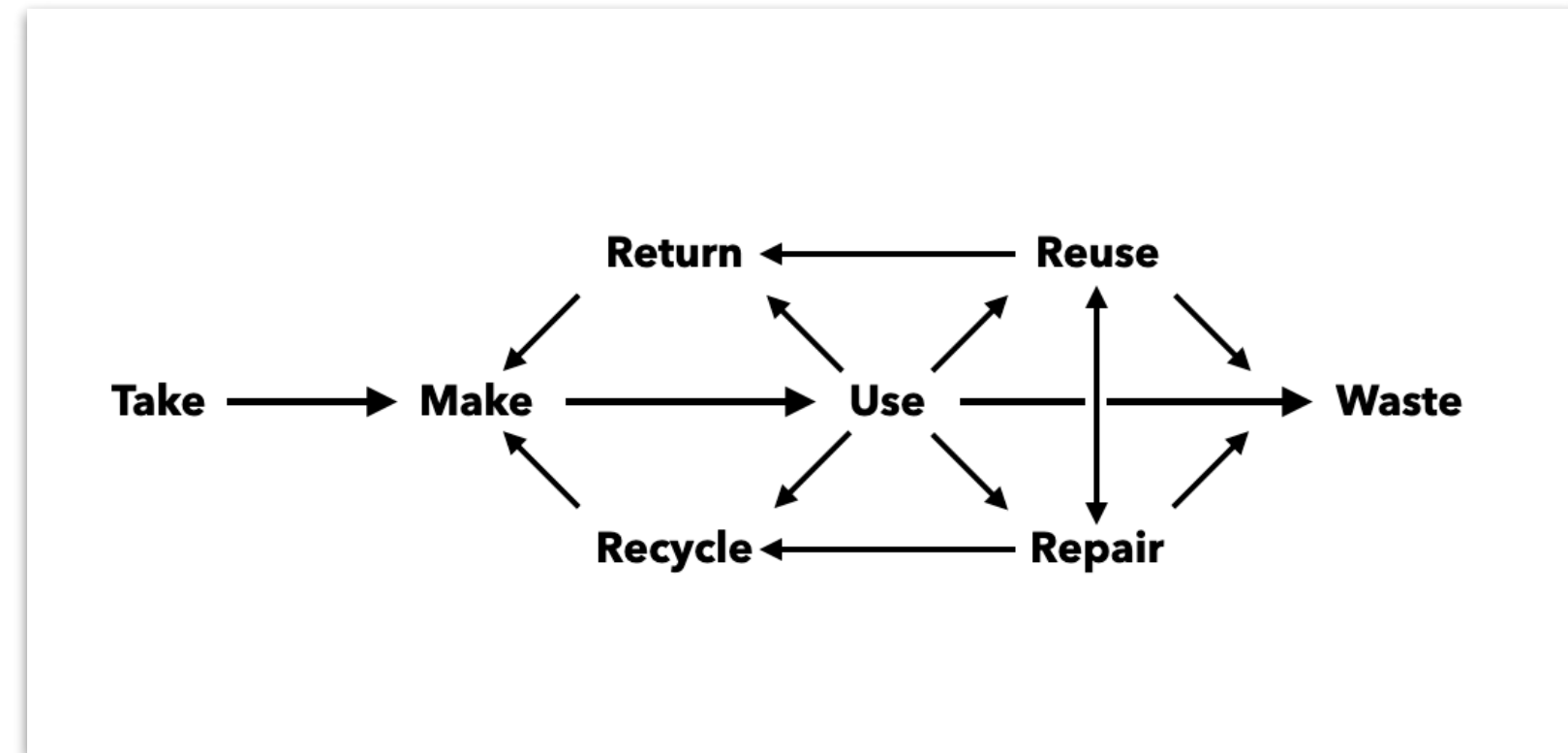
Setting KPIs + examples

Comparing companies

Most relevant for "Type A" companies
(physical product business)

We created a simplified visual icon system to
evaluate circular impact & spot opportunities.

- **Positive circular impact**
- **Neutral impact**
- **Negative circular impact**
Traditional, linear approach

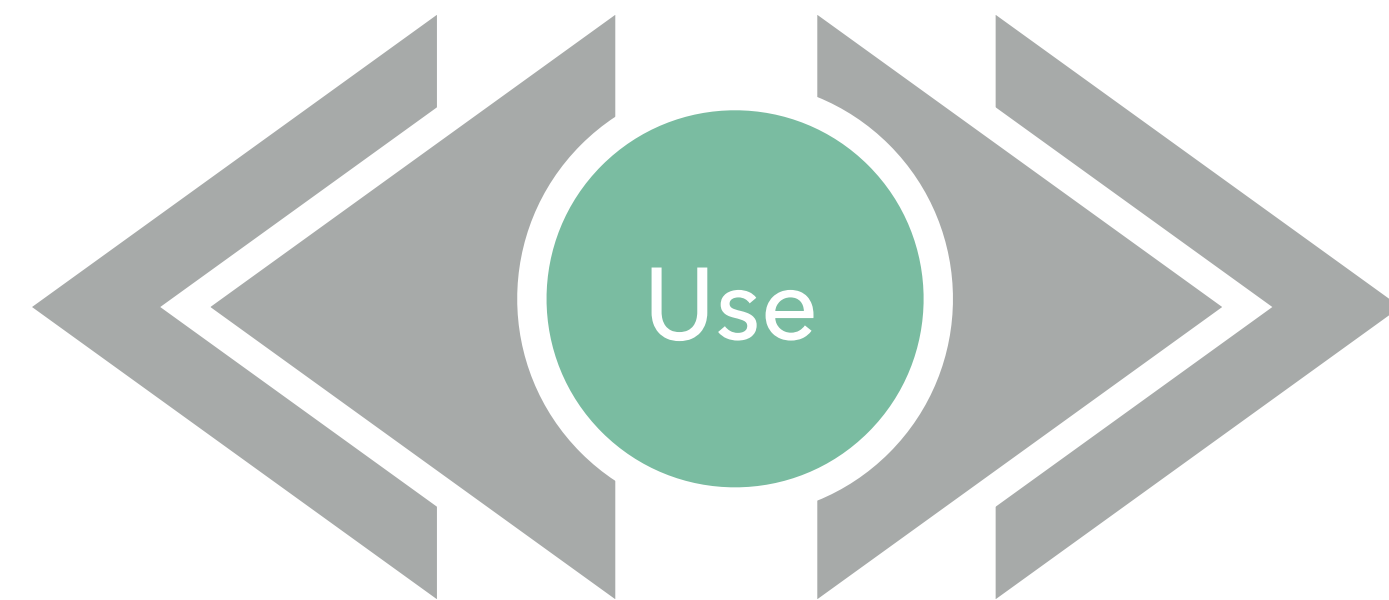
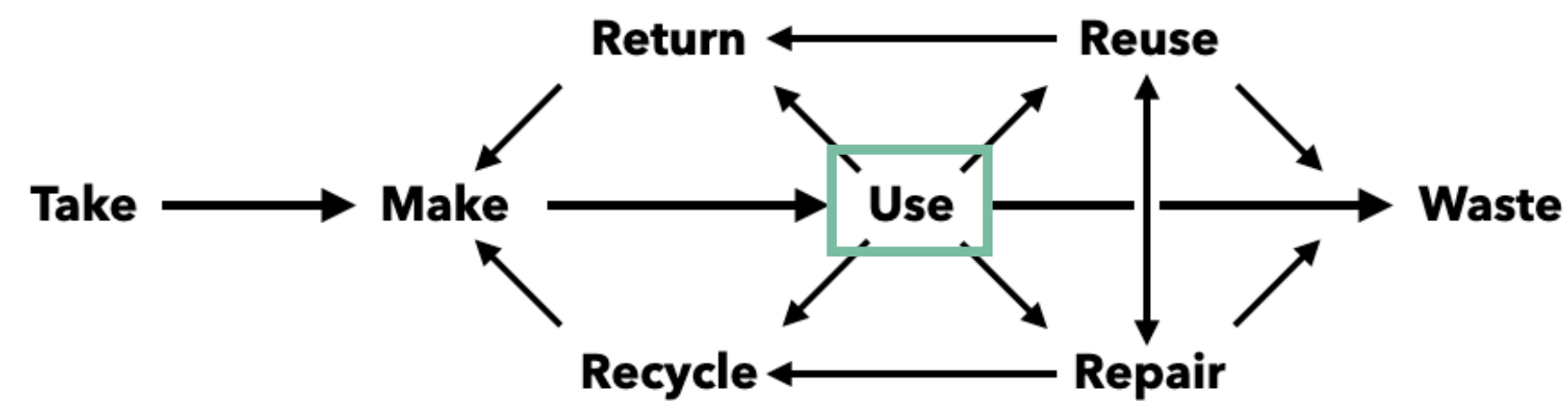


The **visual** rating system helps you spot circular economy opportunities in value chains



**Each stage explained
with 2 examples**





Phase: Use

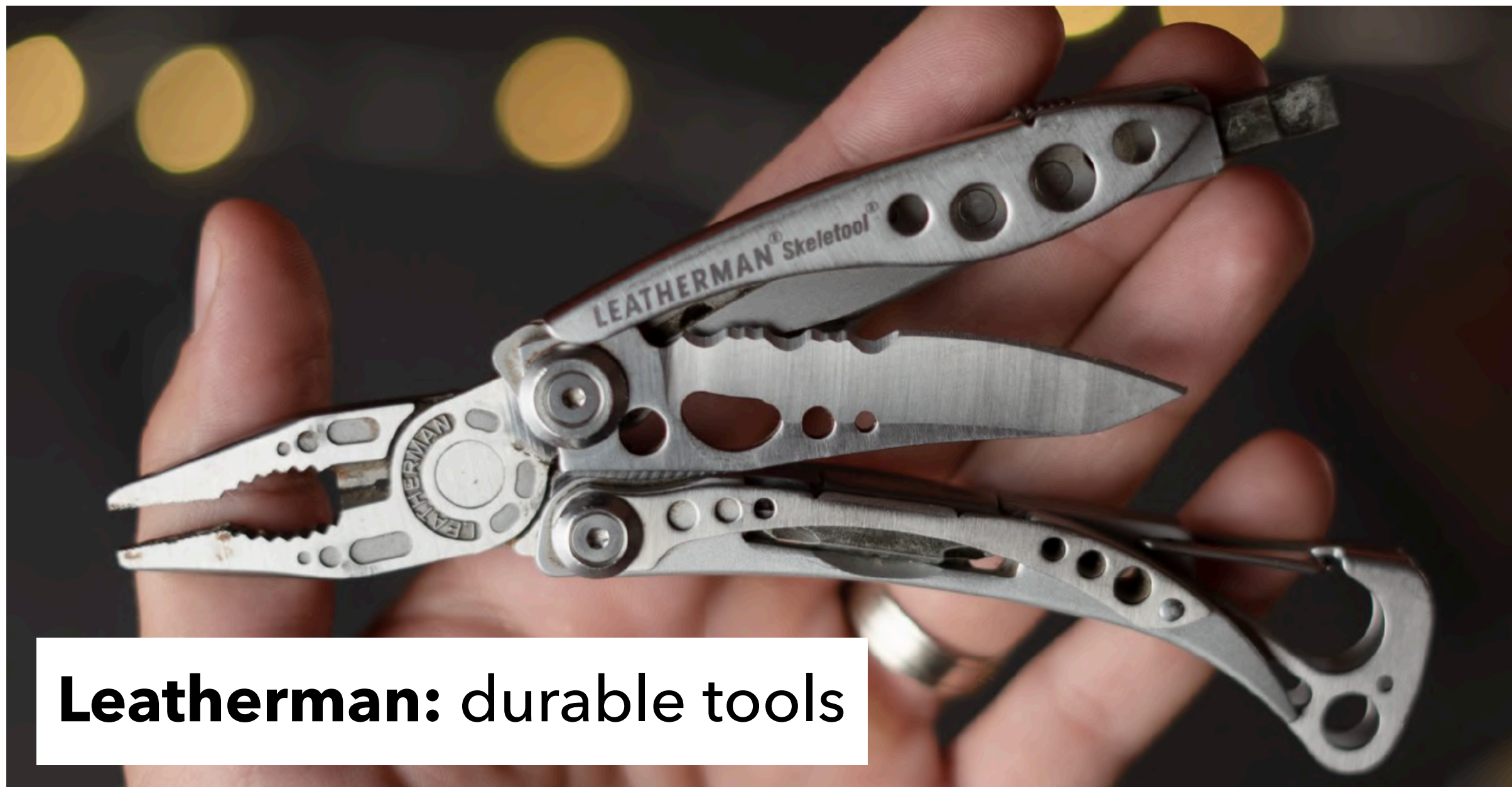
Are you making products that can last a lifetime?

Ideally, the Use-phase, should be as long as possible, but very few businesses are doing this.

Conflict with revenue & profit target.



Packbags: durable bags



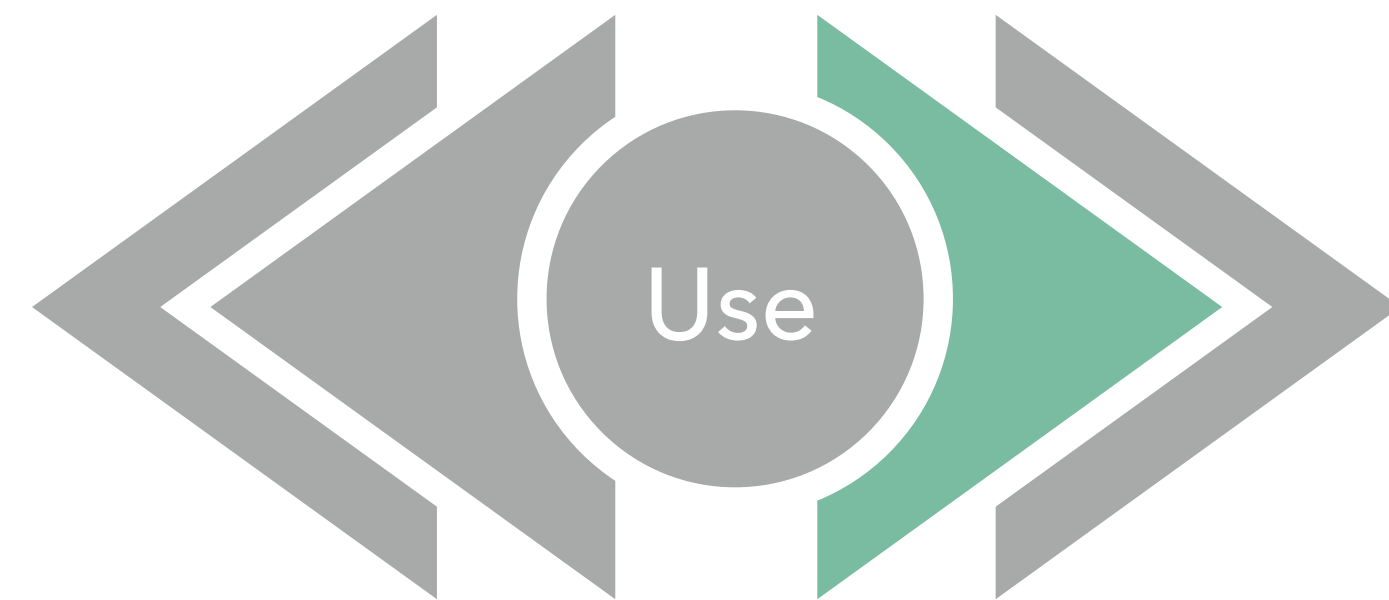
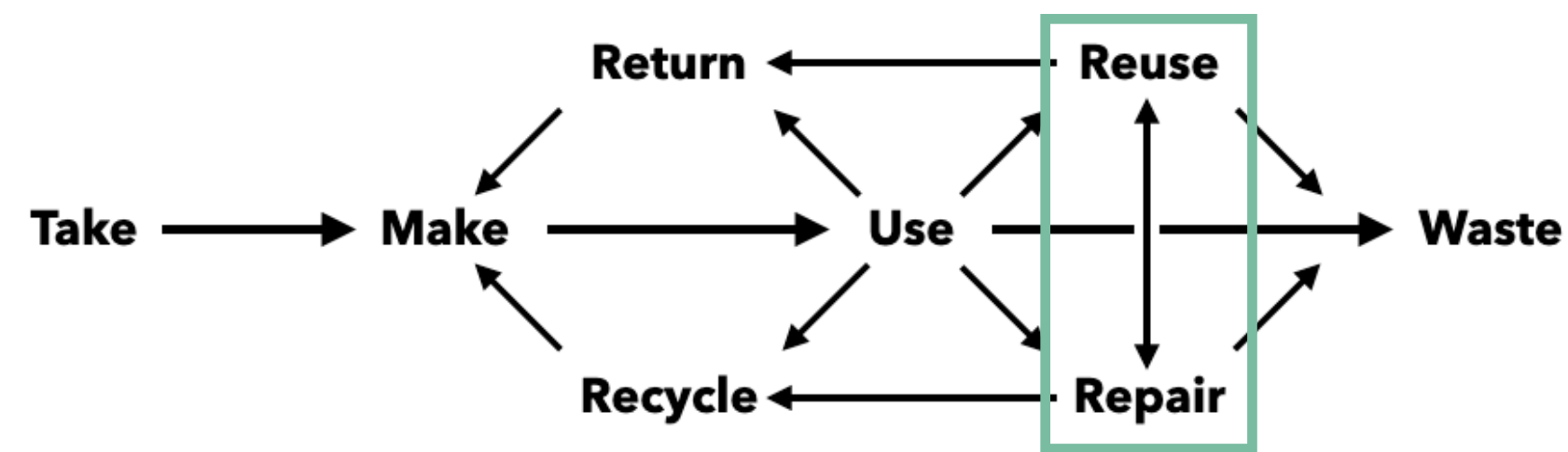
Leatherman: durable tools

Phase: Use

Are you making products that can last a lifetime?

Ideally, the Use-phase, should be as long as possible, but very few businesses are doing this.

Conflict with revenue & profit target.



Phase: Reuse & Repair

Next best thing to extend life cycle:
Offer options to reuse product (e.g. via after market, find new users) or make sure to offer repair options.

Again, very few businesses are taking this phase seriously.



Re-pello model 16: repairable bike



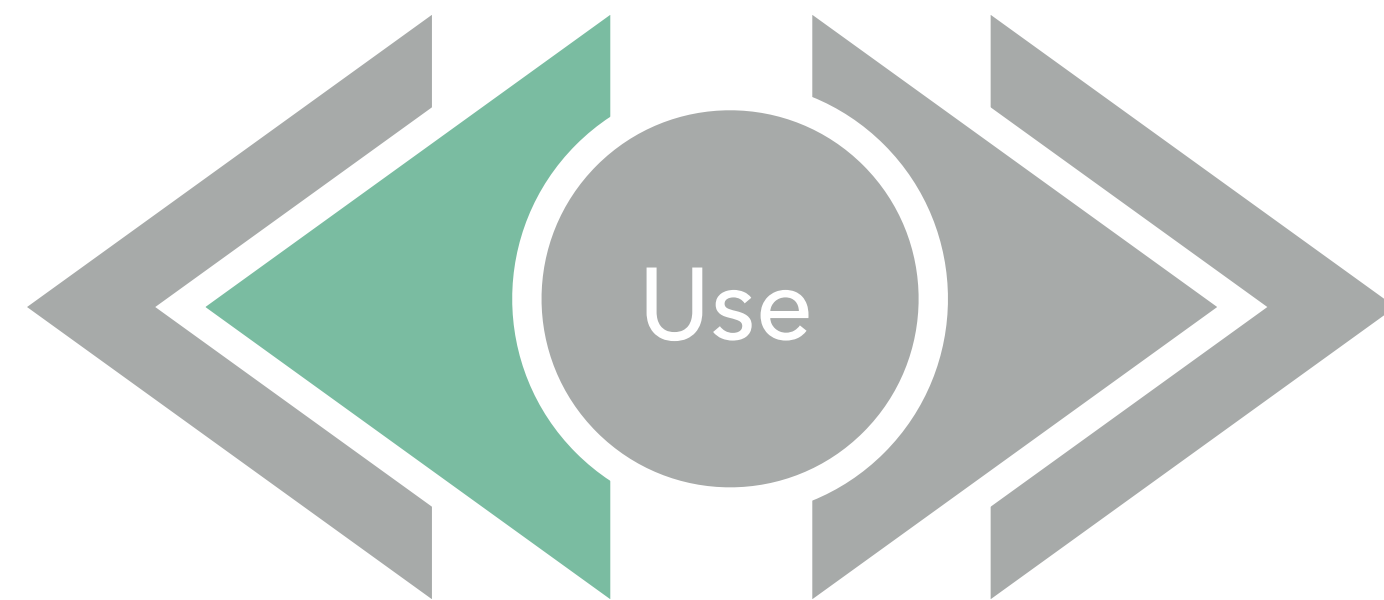
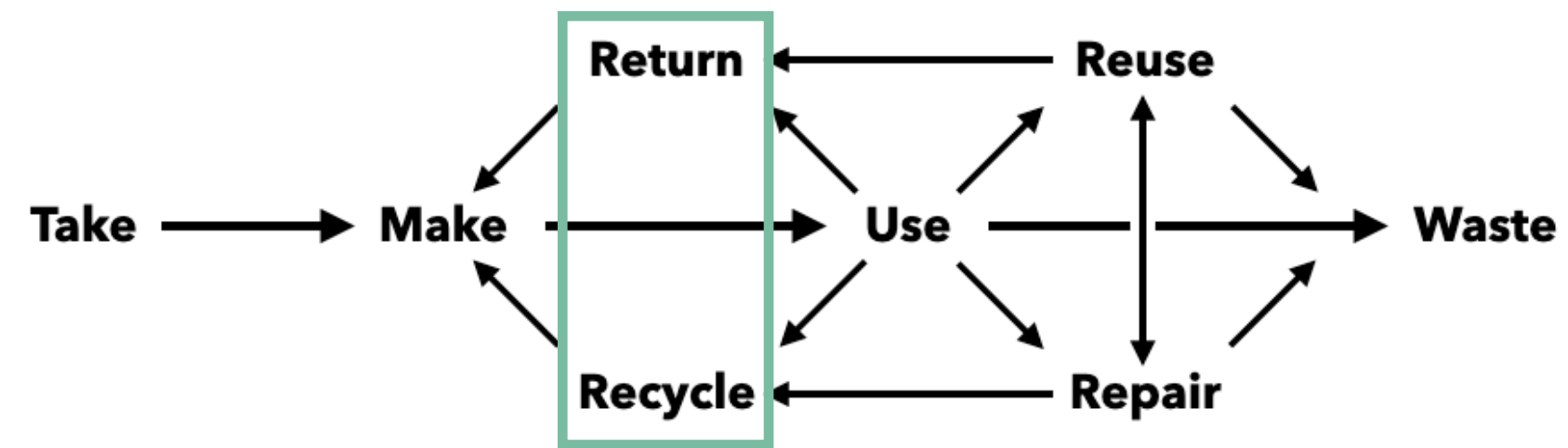
Skanska Norway: reusable concrete decks

Phase: Reuse & Repair

Next best thing to extend life cycle: Offer options to reuse product (e.g. via after market, find new users) or make sure to offer repair options.

Again, very few businesses are taking this phase seriously.

Phase: Return or Recycle



Gradually, some companies switch to a service model where they remain the owner of products and remain responsible for the return & recycling.



Vanderlande: baggage-handling as a service



DOW: PU mattress recycling

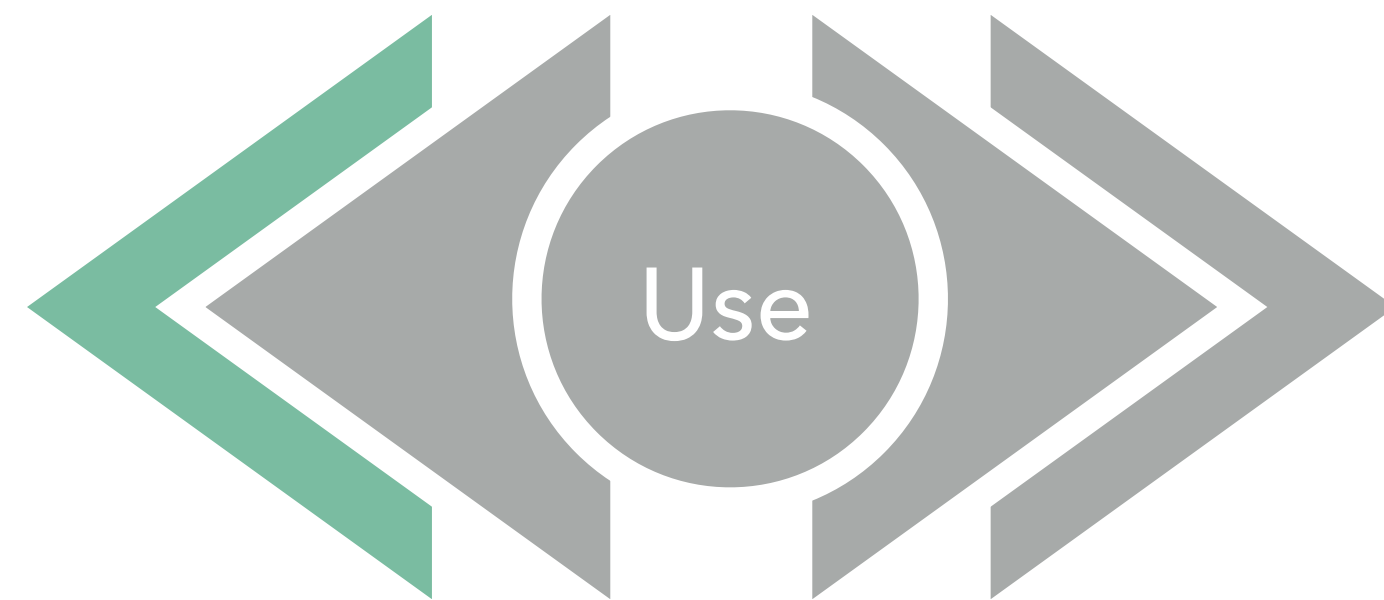
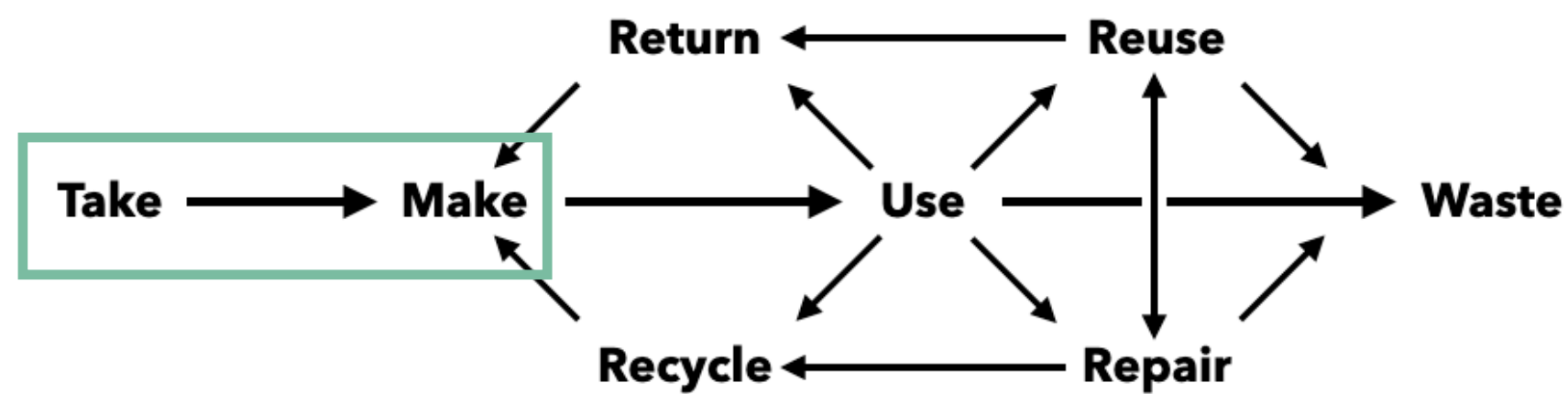
Phase: Return or Recycle

Gradually, some companies switch to a service model where they remain the owner of products and remain responsible for the return & recycling.

Phase: Take & Make

When companies invest in the circular economy, they often start here: sourcing of recycled materials and reduction of resource consumption in the production process.

It's a great start, but creating a product with 80% recycled materials that still ends up on a landfill is not good enough.





SAPPI: Paper-based alternative to plastic

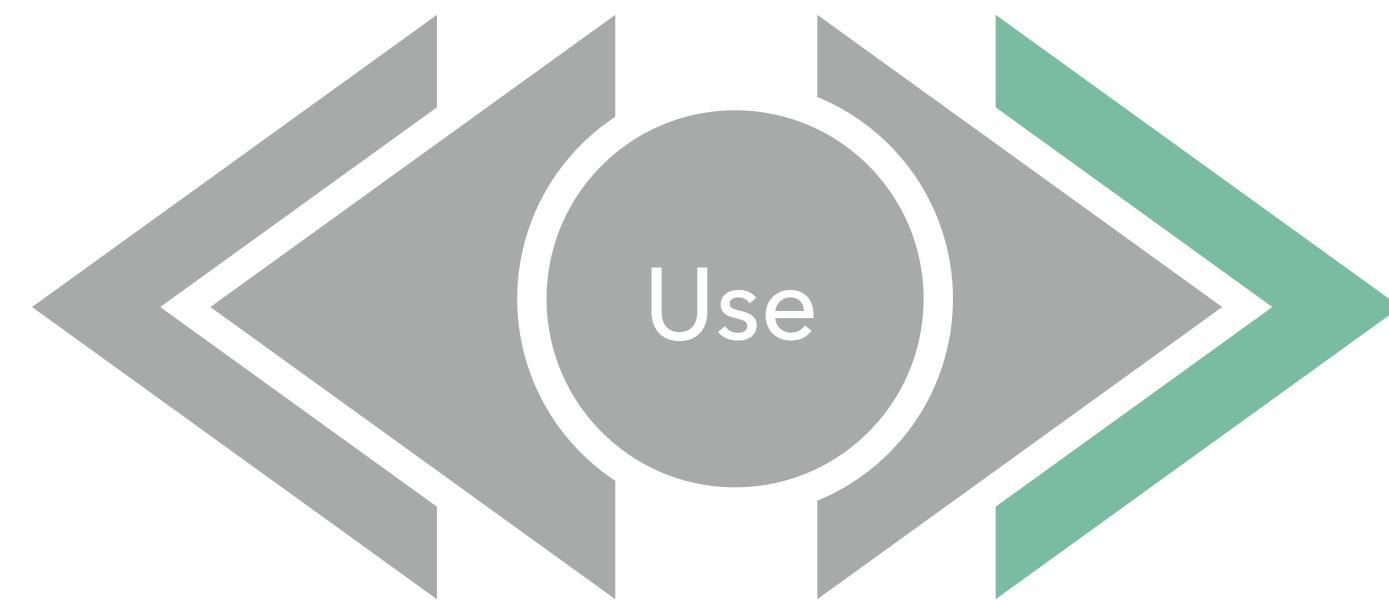
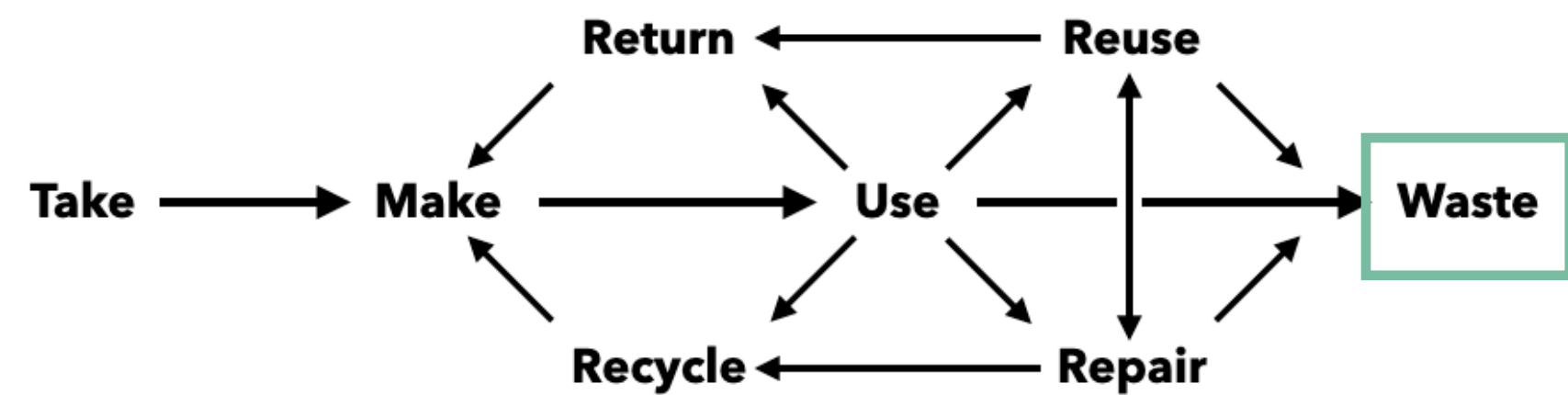


Kenoteq: Brics from construction waste

Phase: Take & Make

When companies invest in the circular economy, they often start here: sourcing of recycled materials and reduction of resource consumption in the production process.

It's a great start, but creating a product with 80% recycled materials, that still ends up on a landfill is not good enough.



Phase: Waste & Disposal

When no more options are left, products are disposed. Not many companies take active ownerships off this final stage.

Waste from one industry can often be used in another as raw material.

(* waste from side-streams are not limited to the final stage of the product itself)



DELL: Biodegradable mushroom packaging



UPS: Offset carbon footprint

Phase: Waste & Disposal

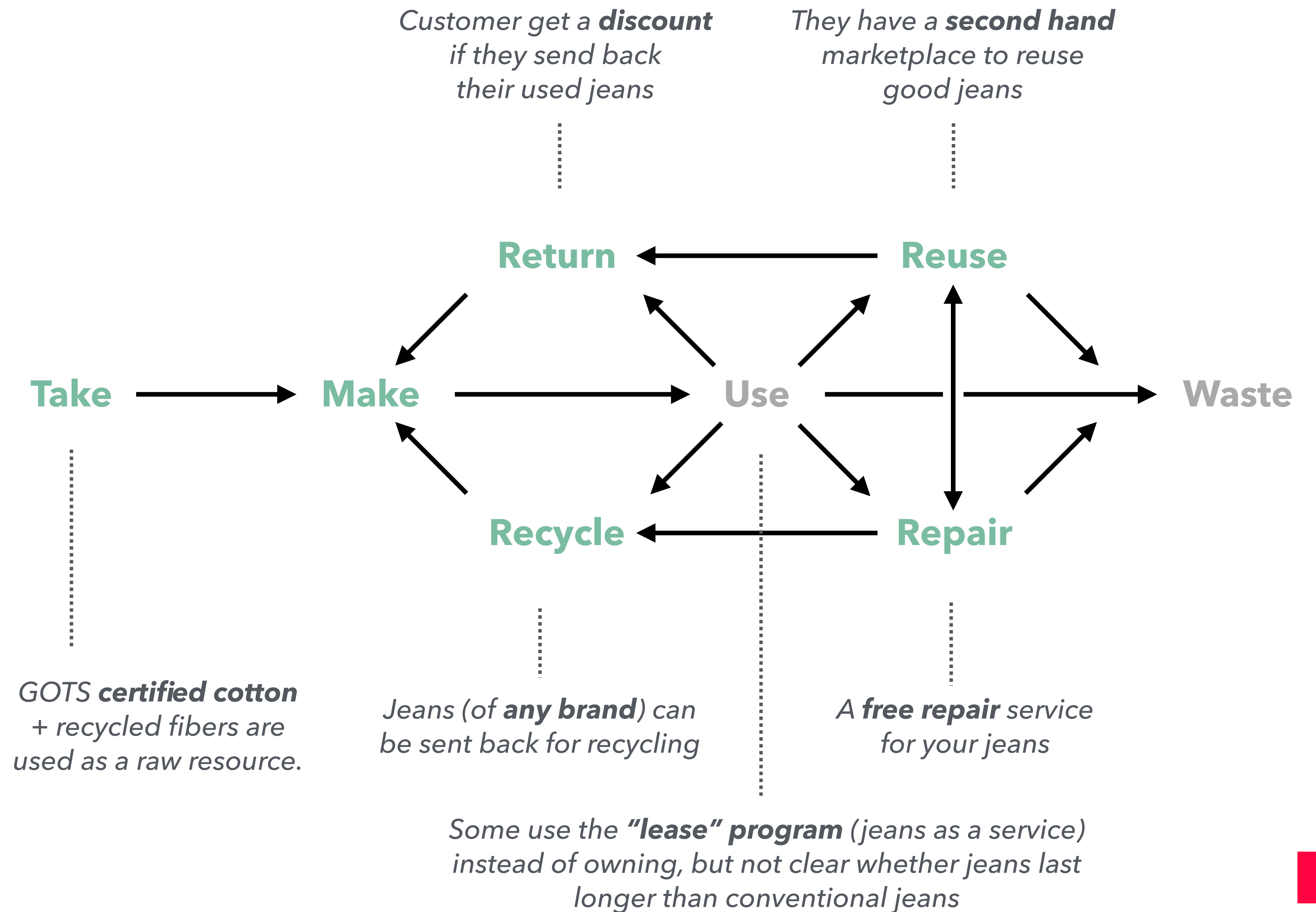
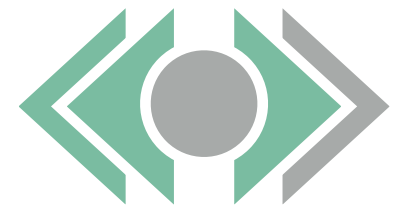
When no more options are left, products are disposed. How can you limit the negative impact? Not many companies take active ownerships off this final stage.

(* waste from side-streams are not limited to the final stage of the product itself)

**Visual rating of all stages to
compare businesses**

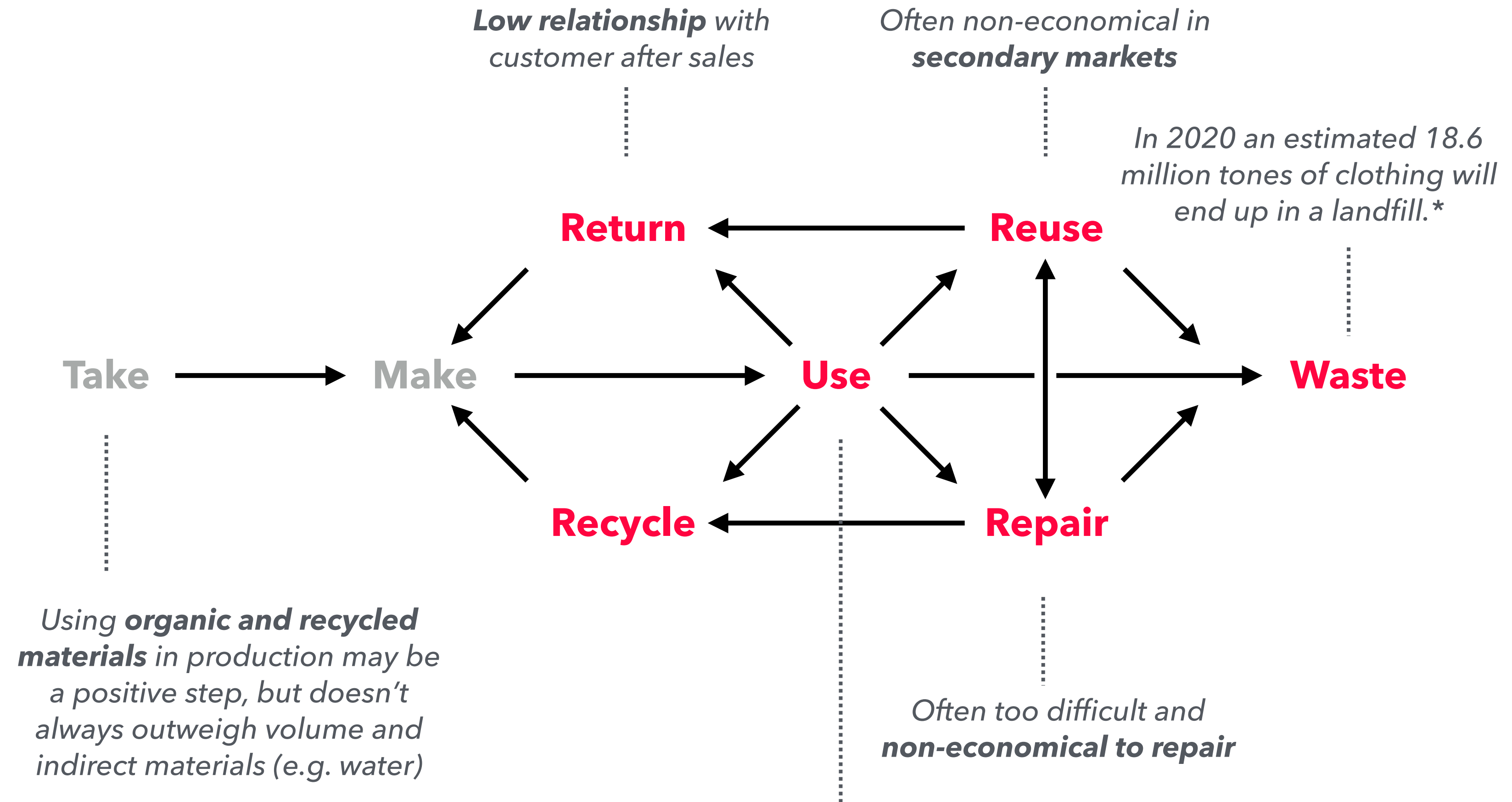
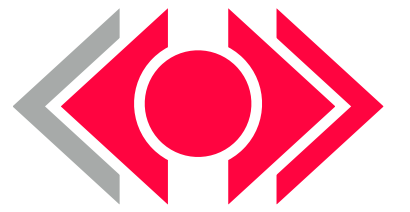


MUD Jeans: circular denim



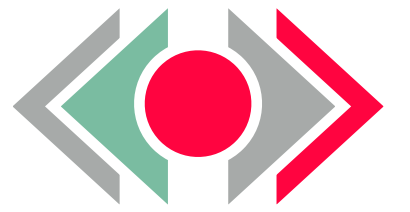


Fast-fashion brands with sustainable sourcing



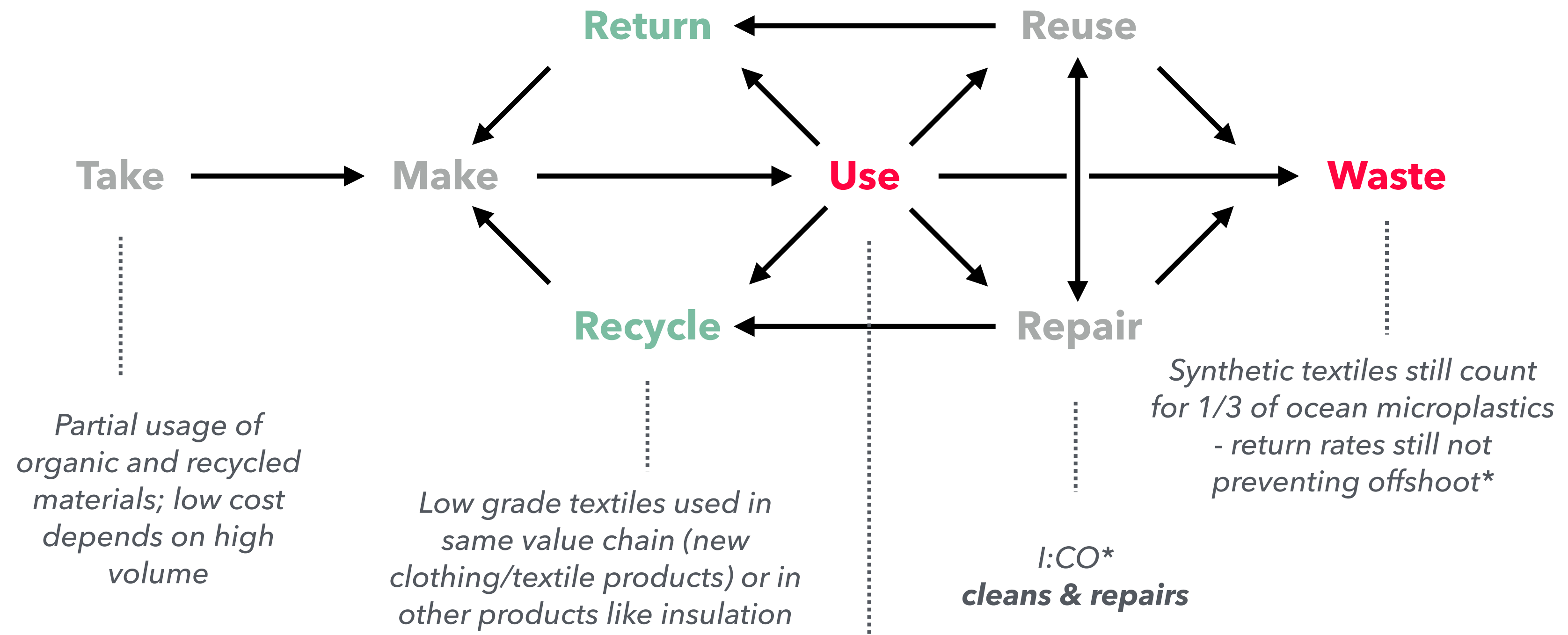
Fast fashion - **not-so-durable clothing**. Clothing often lasts less than 1 year.*

H&M in partnership with I:CO*



Clients are offered **discounts to return clothing**, and sorted based on re-use vs. recycle

I:CO* triages clothing to be sold on secondary markets

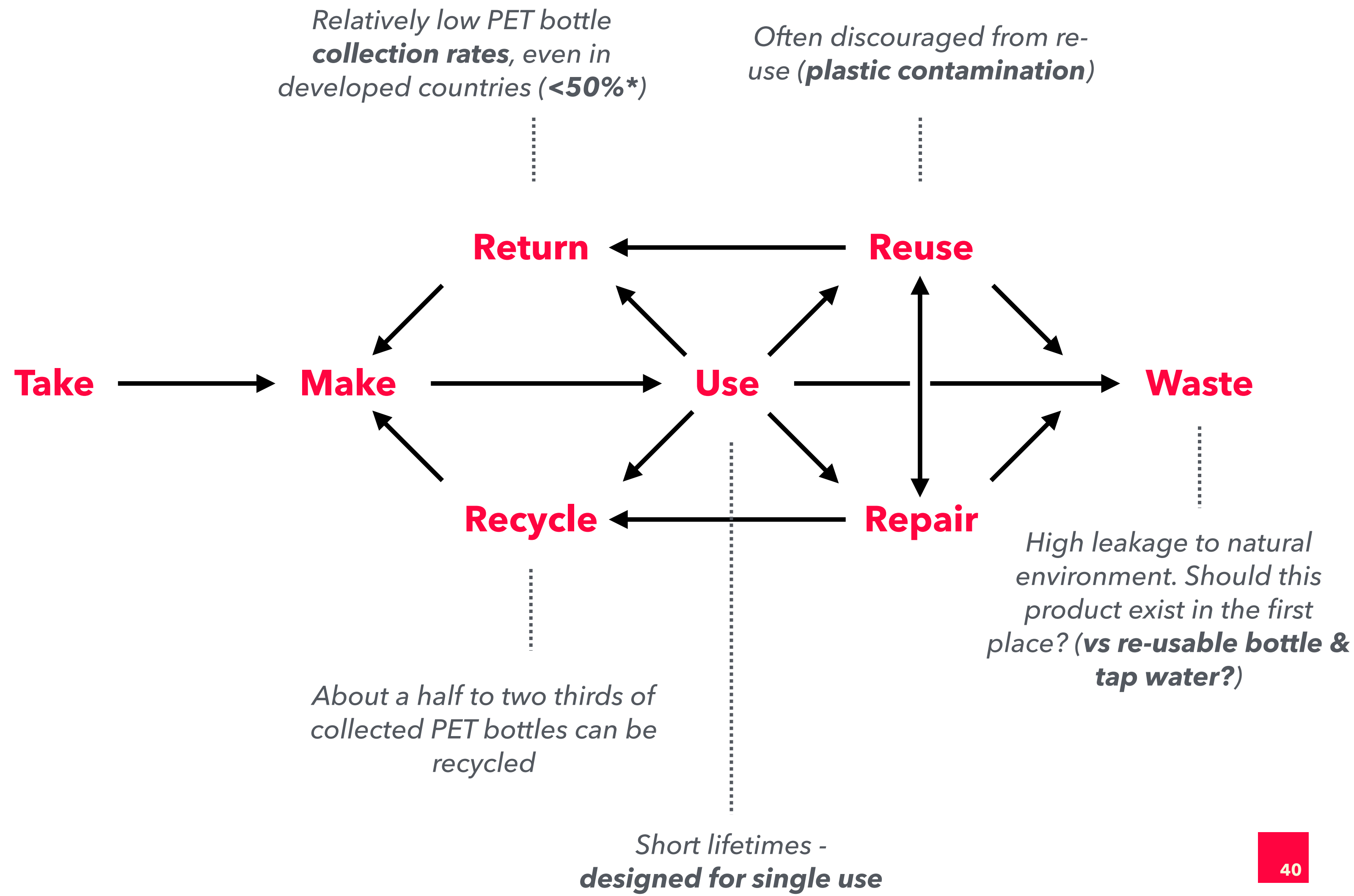
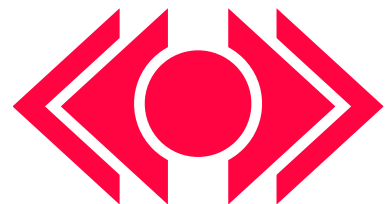


Low clothing lifetime not impacted.
Still a 'fast fashion' model

Partnerships are essential
to build a circular economy



Bottled water player

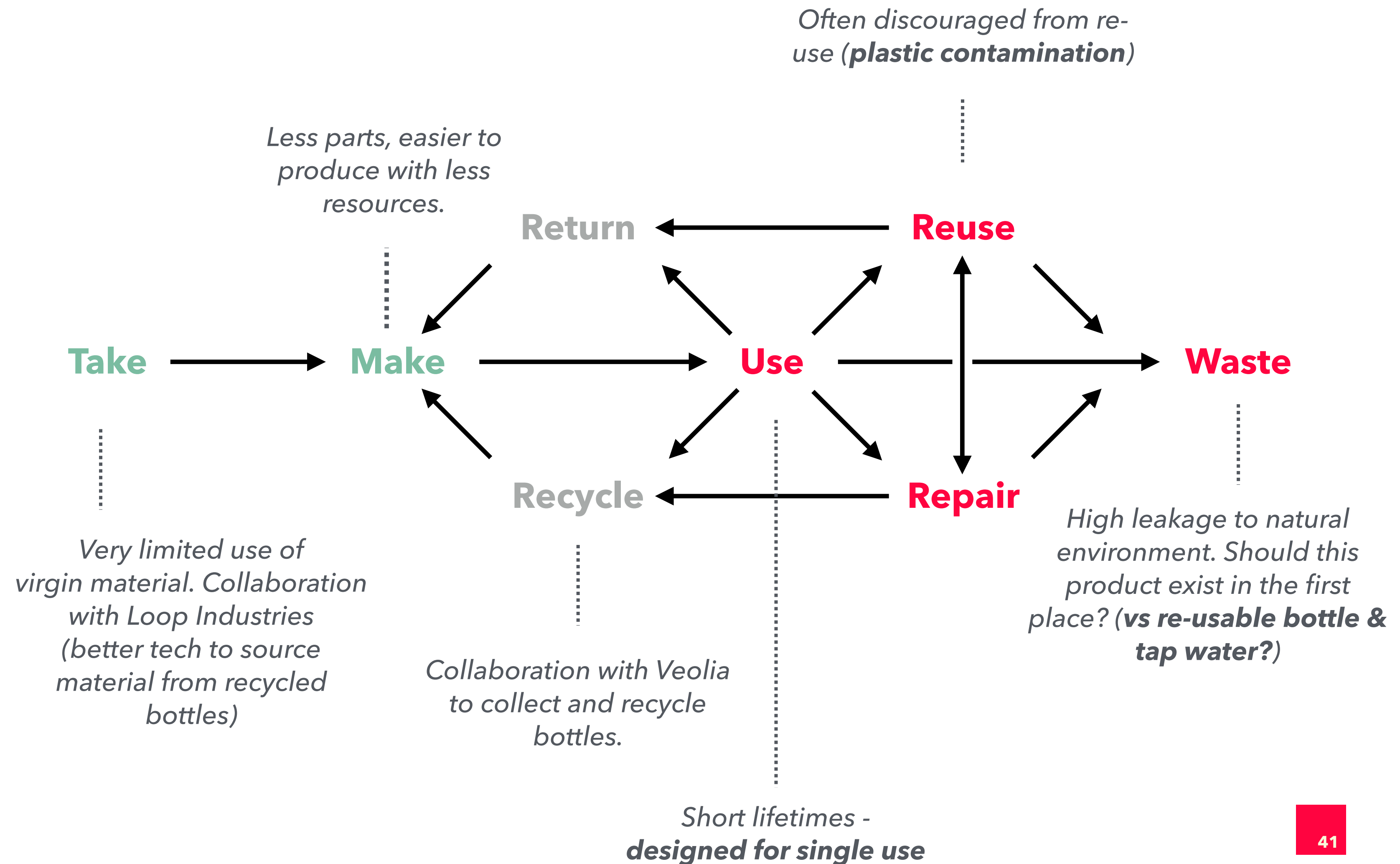


*Source: Statista



Evian (Danone)

NEW LABEL-FREE BOTTLE DESIGN FROM RECYCLED PLASTICS



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Circular economy is all about **value chains & ecosystems.**

No single business is the entire economy.

To create the biggest impact, companies will need to work together.



2 very different angles to innovate ecosystems:

Follow 1 value chain of a product:

Limit the impact of 1 product line. Redesign how value can be created for all stakeholders involved (factory, distribution, retail)

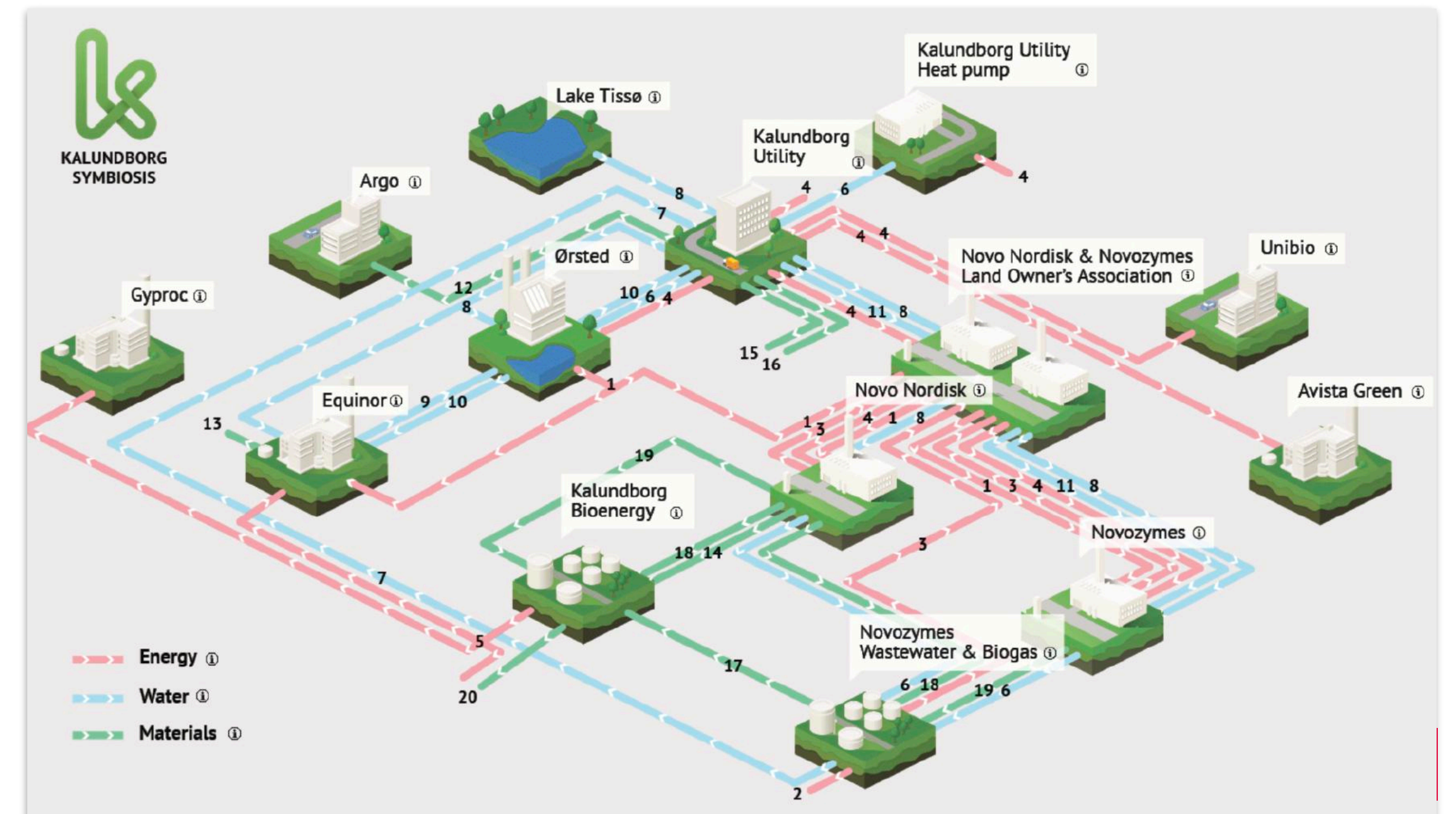
e.g. Mudjeans value chain



Mix value chains of different products

Companies, often close-by, can work together to exchange resources to limit their impact while each producing very different products.

e.g.: Kalundborg industrial region Denmark



3 principles for Circular Business Models & Ecosystems

**source from the economy,
not ecological reserves**

**add value to existing products
and materials**

**create valuable inputs for businesses
beyond your customer**

Innovate alone or together with other partners?

1. Easiest, but impact is limited

Focus on your own product & business model.

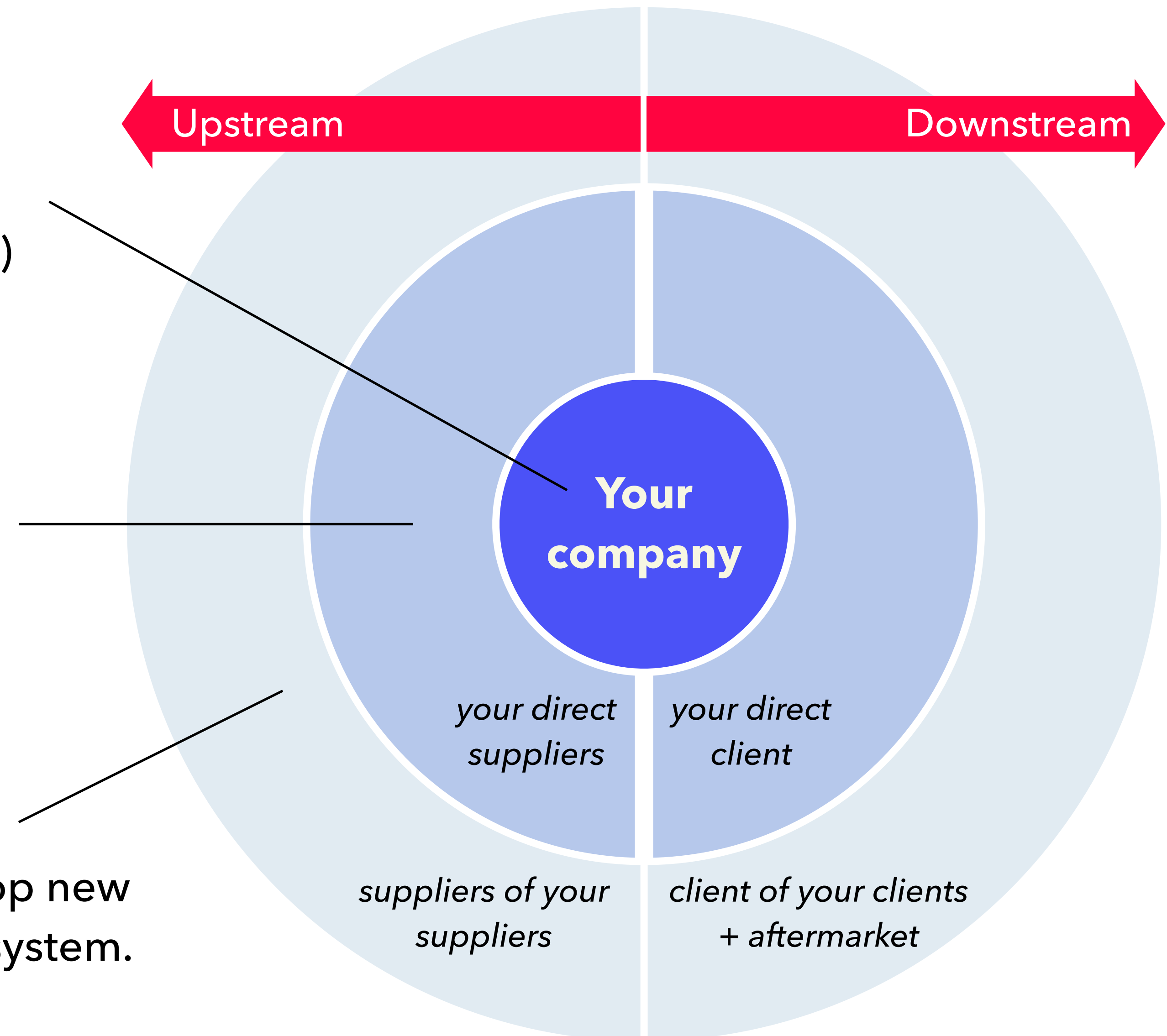
(e.g. sourcing of alternative raw materials)

2. Co-create with direct stakeholders

Use your existing relations to develop circular businesses to create value for all.

3. Challenging, but biggest impact

Go beyond your direct contacts to develop new circular business models within your ecosystem.



How to make links between organisations.

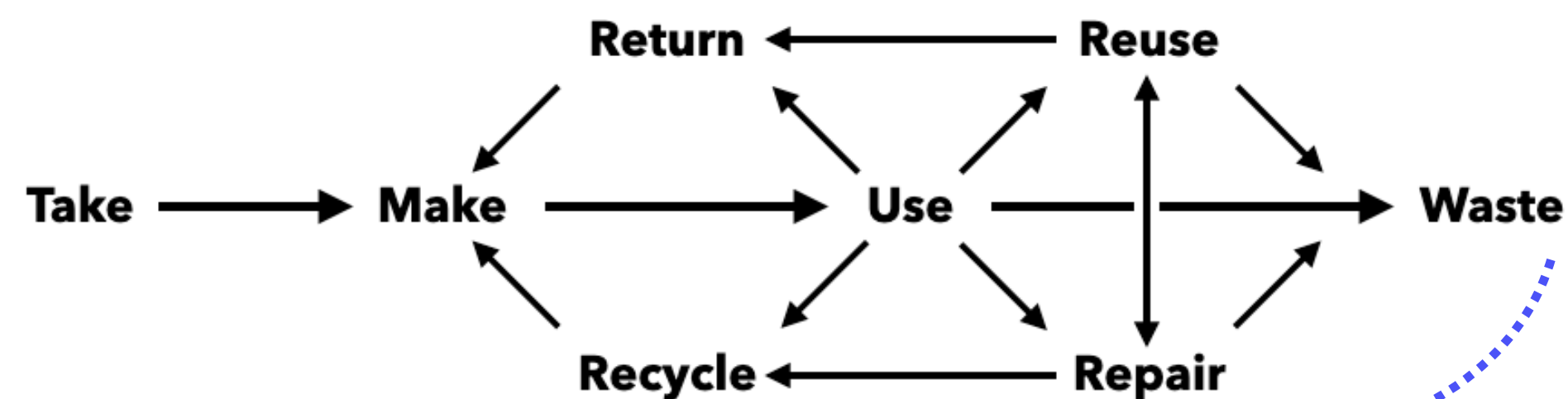
SOMETIMES YOU NEED TO SWITCH BETWEEN VALUE CHAINS

STAY WITHIN THE SAME VALUE CHAIN

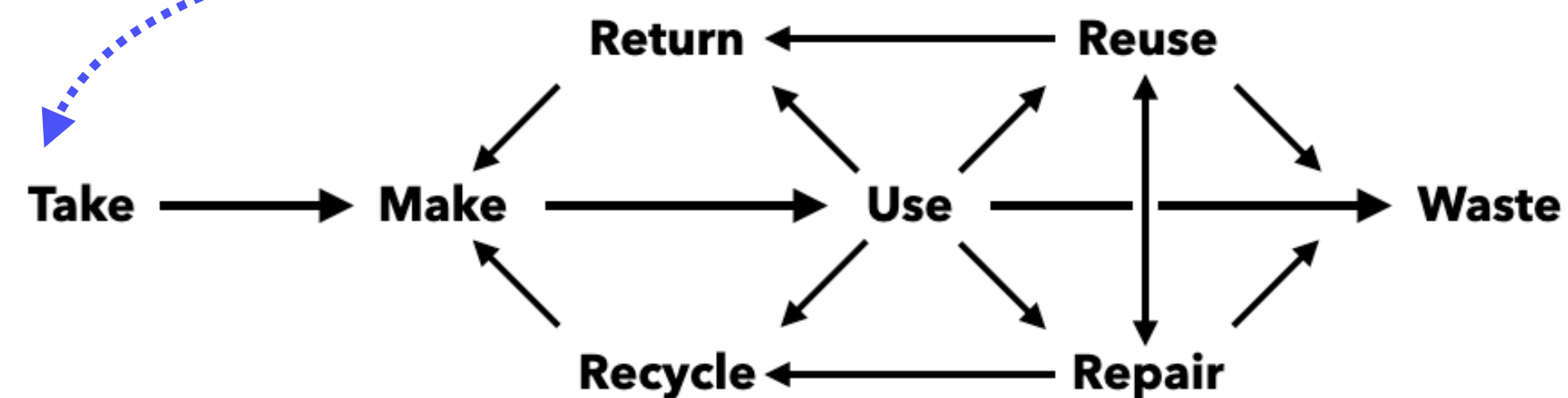
e.g. Aluminum drinking cans can be collected to be recycled to new drinking cans.

LINKING DIFFERENT VALUE CHAINS

e.g. The waste of one industry can be used as a resource for another.

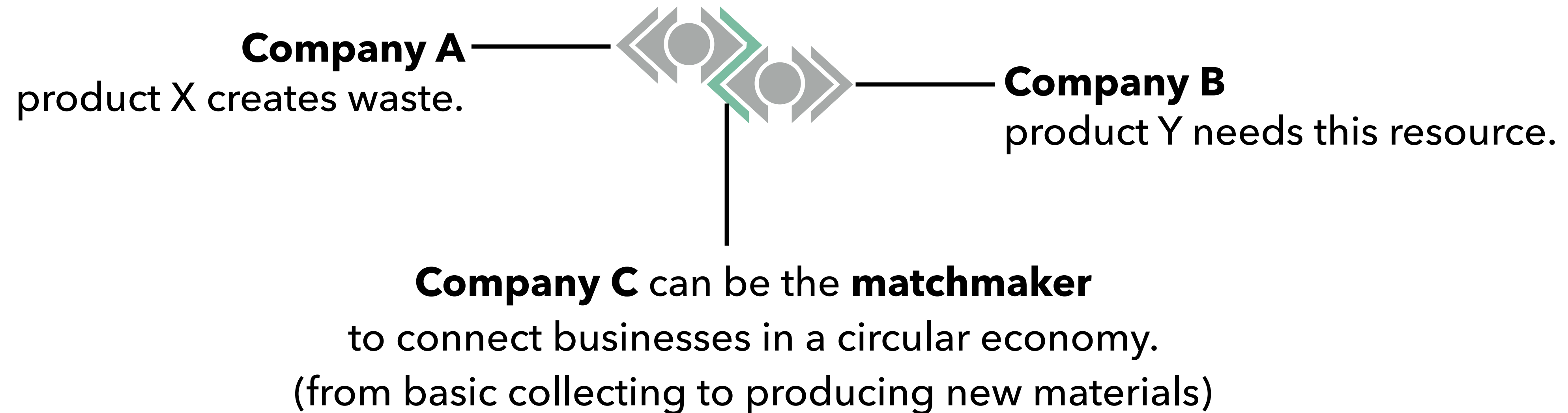


E.g. The waste of a fashion brand can be used as resource for insulation in the construction business.



Alternative way to visualise:

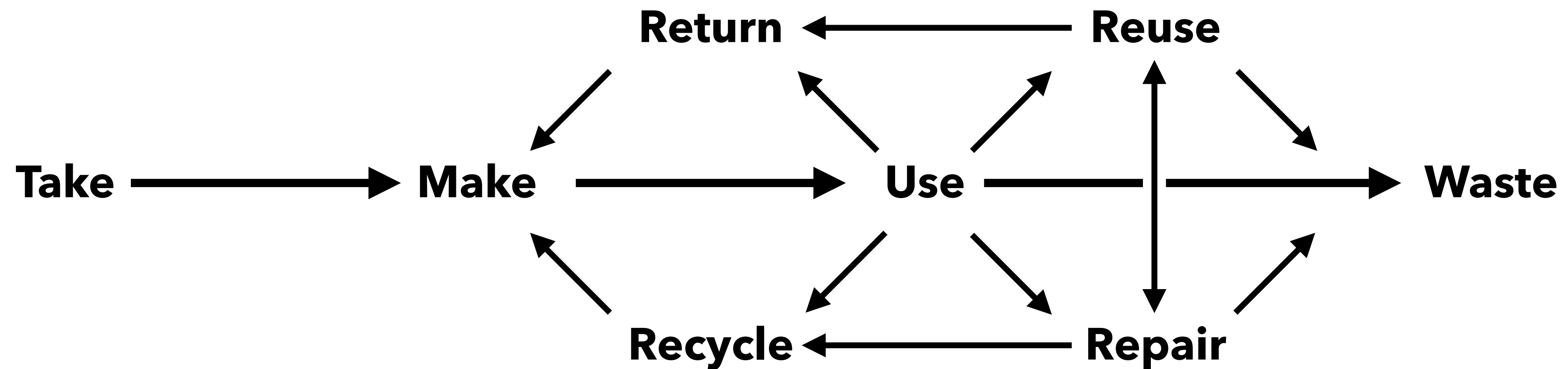
Even when you connect 2 organisations, very often a third player is needed to facilitate this transaction.



How to create value for more players?

Product design defines
80% of the circular potential


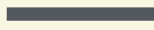



But without the right business model, for all parties involved, all this potential will be lost.



Tool: Ecosystem value analysis for a product

List all relevant features of your offering:
product, business model, etc

Add features, specifically to create circular value

-  Positive value
-  Neutral
-  Negative value
-  Mixed
-  Circular value

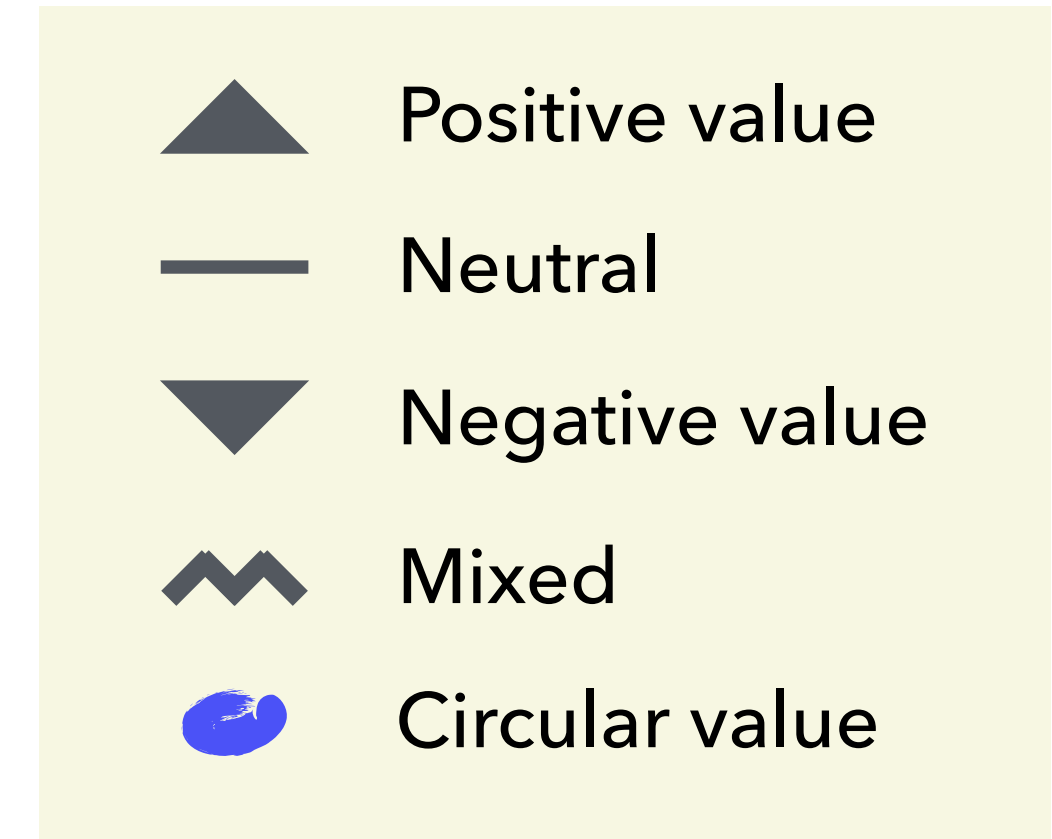
	Key Supplier	Client Segment 1	Retailer
Feature A	—	▲	—
Feature B	▼	▲	▼
Feature C	—	▼	▲
Feature D	▲	⋈	⋈
Feature E	—	—	▲



TOOL

Ecosystem value analysis

FAIRPHONE 3



	Key Supplier	Client Segment 1	Repair shop
Made to last	▼	▲	—
Modular design: repairable	—	▲	▲
Ethically sourced materials	▲	▲	—
Fair branding	▲	⋈	⋈
Modern performance specs	—	▲	—



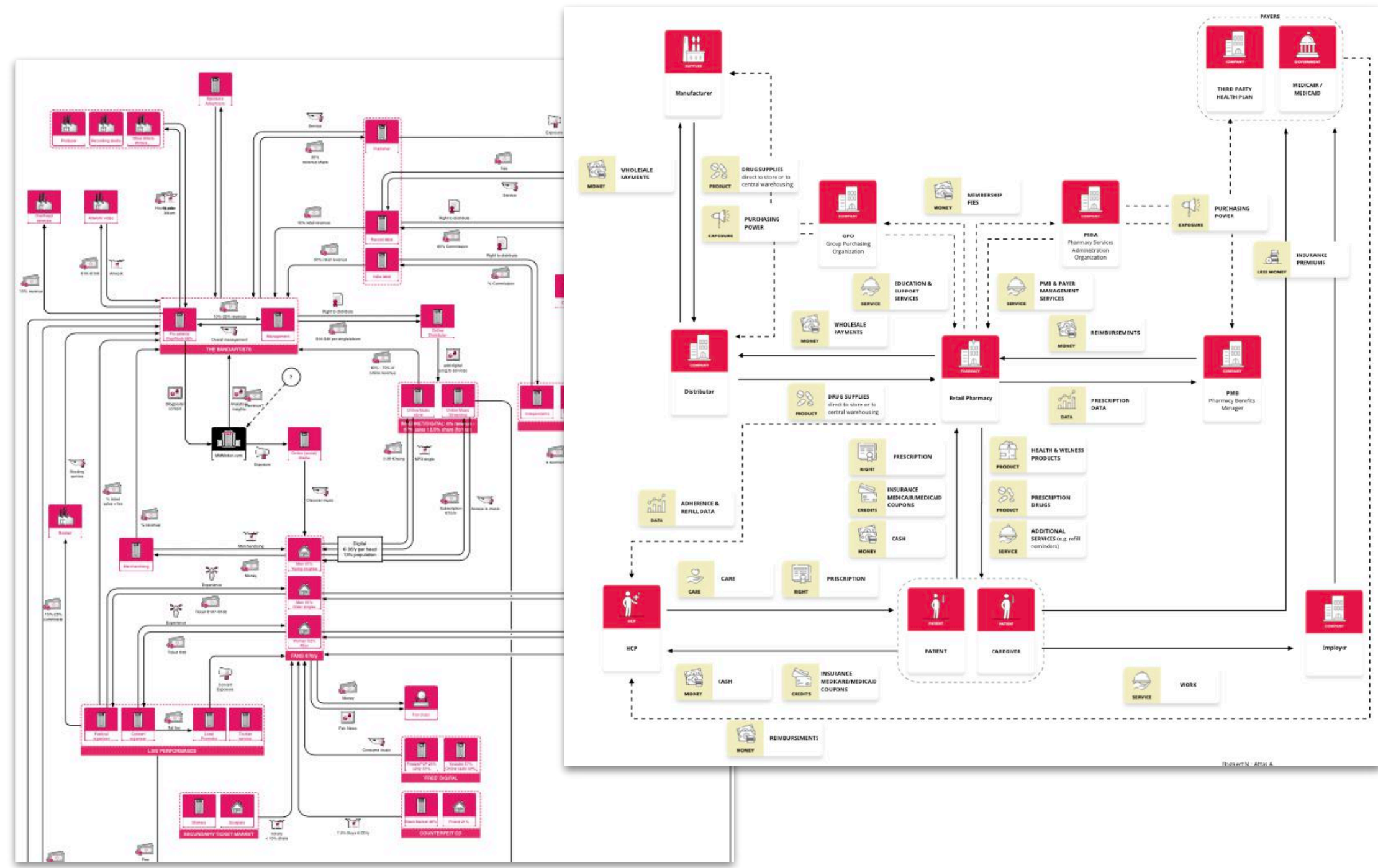
TOOL

How to redesign your business model?


TOOLS: Business Model Kit

MAPPING OF VALUE TRANSACTIONS BETWEEN STAKEHOLDERS

Ecosystem mapping



Start with a helicopter view on the full ecosystem to understand the complexity.



Ecosystems of products can look very different
e.g. Industrial engine (B2B) vs Consumer toy (B2C)

Framework to compare the complexity of ecosystems

	Criteria	B2B (industrial context)	B2C (physical goods)
NETWORK TYPOLOGY	Number of players & stakeholders		
	Depth of value chain		
	Power balance (small vs big players)		
	Local vs international (spread)		
CIRCULAR MATURITY	Interconnected network (loose, close...)		
	Volume of products, parts & resources		
	Severity of the problem (urgency?)		
	Existing regulation in place		
	Existing communication channels (data exchange)		
AGILITY	Financial health (overall profitability)		
	Openminded culture		

TOOL

Framework to compare the complexity of ecosystems

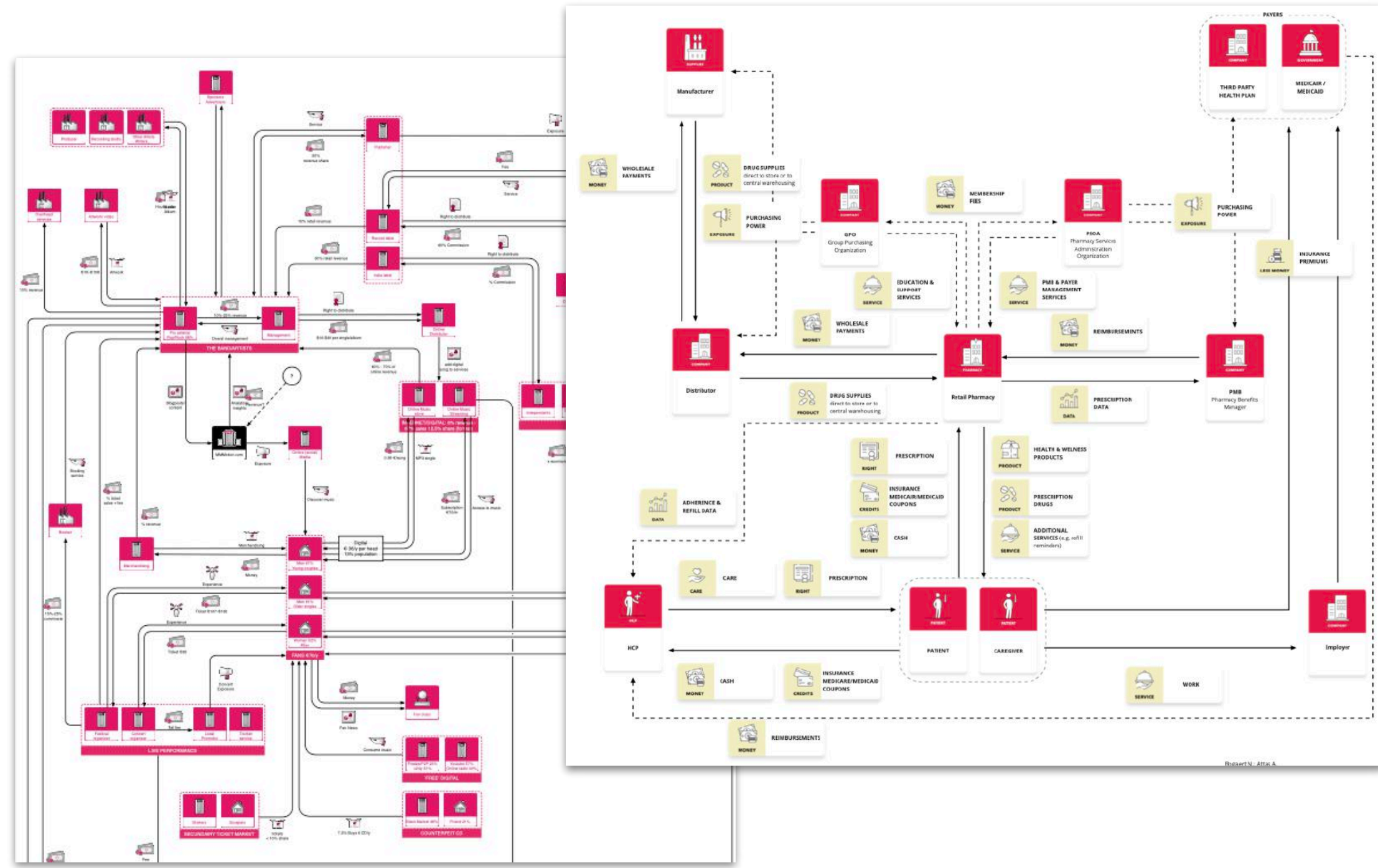
	Criteria	B2B (industrial context)	B2C (physical goods)
NETWORK TYPOLOGY	Number of players & stakeholders	E.g. 100 clients	E.g. Millions of consumers
	Depth of value chain	E.g. Limited number of suppliers & partners to work with.	E.g. Scattered distribution/retail network with numerous smaller players
	Power balance (small vs big players)	Players are similar in size	A few big brands dominate
	Local vs international (spread)	Organised per continent	Globally spread out
CIRCULAR MATURITY	Interconnected network (loose, close,...)	Strong relations, based on trust	Loose, informal relations
	Volume of products, parts & resources	Limited volumes, but complex parts	Mass volumes, limited parts
	Severity of the problem (urgency?)	Limited (take back programs, maintenance in place,...)	Urgent, most product end up as waste
	Existing regulation in place	Limited	Limited
	Existing communication channels (data exchange)	Existing channels to exchange product data	No data flows
AGILITY	Financial health (overall profitability)	Company specific	Company specific
	Openminded culture	Company specific	Company specific

TOOL

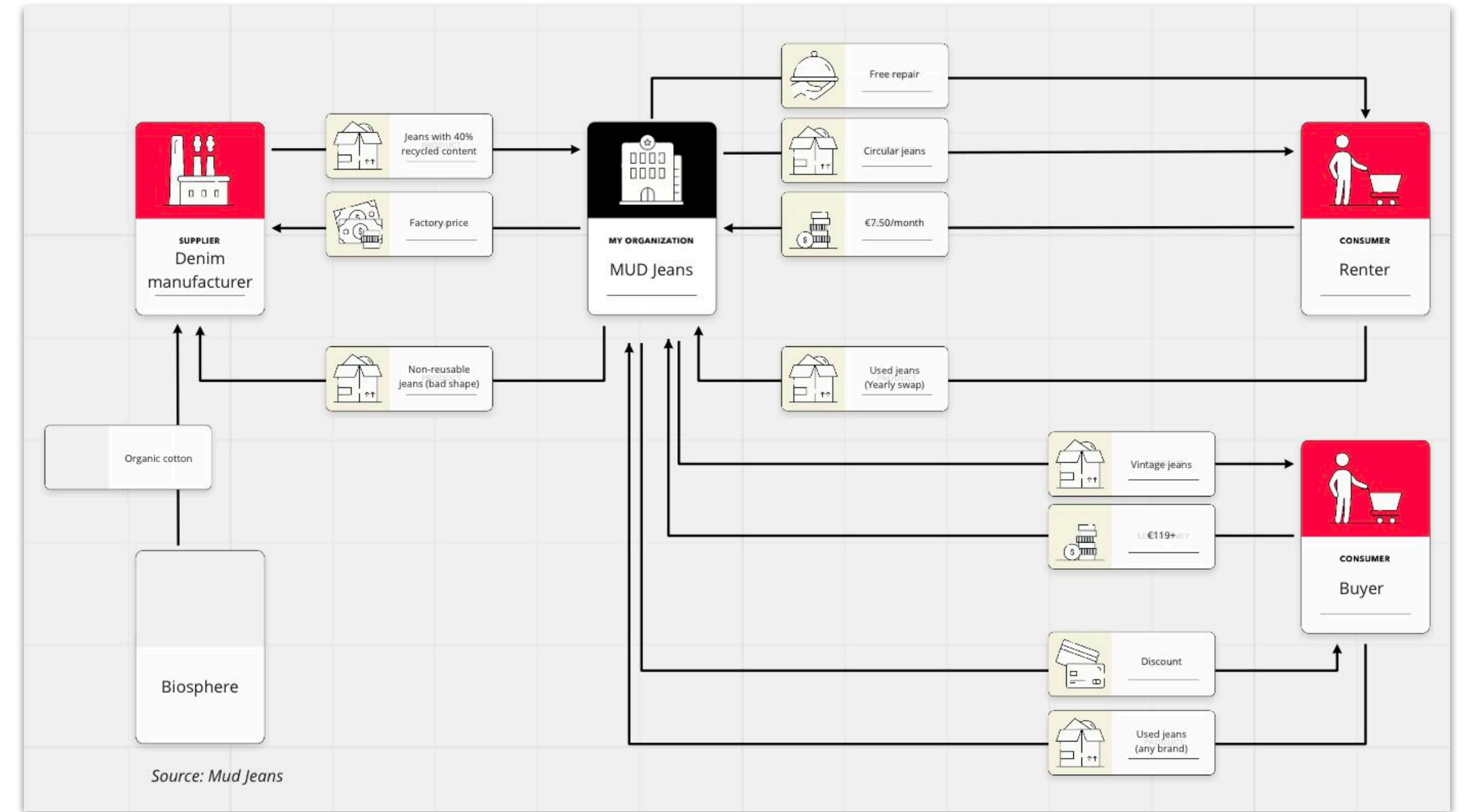
TOOLS: Business Model Kit

MAPPING OF VALUE TRANSACTIONS BETWEEN STAKEHOLDERS

Ecosystem mapping



Single business model mapping



Ingredients for Business Model Design

**1. Players &
Stakeholders**

**2. Incentives &
Value transactions**

**3. Alternative Business
Models**

(inc. revenue models)

1. Players & Stakeholders

A. PRODUCT BUSINESSES

B. SOLUTION PROVIDERS

C. FACILITATORS

X. CONSUMERS

Y. NON-PROFITS

Z. OTHERS

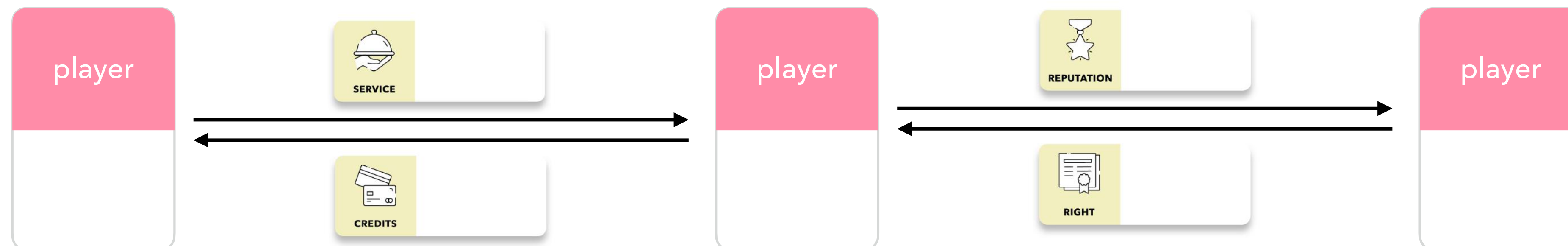
Example template icons



2. Incentives & Value transactions

EXAMPLES USED IN THE CIRCULAR ECONOMY

- ▶ **Valorization of waste & side-streams**
 - Energy, water, raw materials
- ▶ **Reputation transfer**
 - Certification, branding
- ▶ **Data access**
 - Product passport, supply chain intel
- ▶ **Positive feeling/doing the right thing**
 - Play on conscience/guilt
- ▶ **Monetary kickbacks**
 - Vouchers, discounts, credits, etc
- ▶ **New market access**
 - Via partnerships



Example template icons

3. Alternative Business Models

EXAMPLES USED IN THE CIRCULAR ECONOMY

▶ Switch from Product to as-a-Service model

- Leasing concepts, subscription models

▶ Sharing business model

- Shared ownership (group-buy),
only pay per use, (consumption based)

▶ Swapping/ bartering models

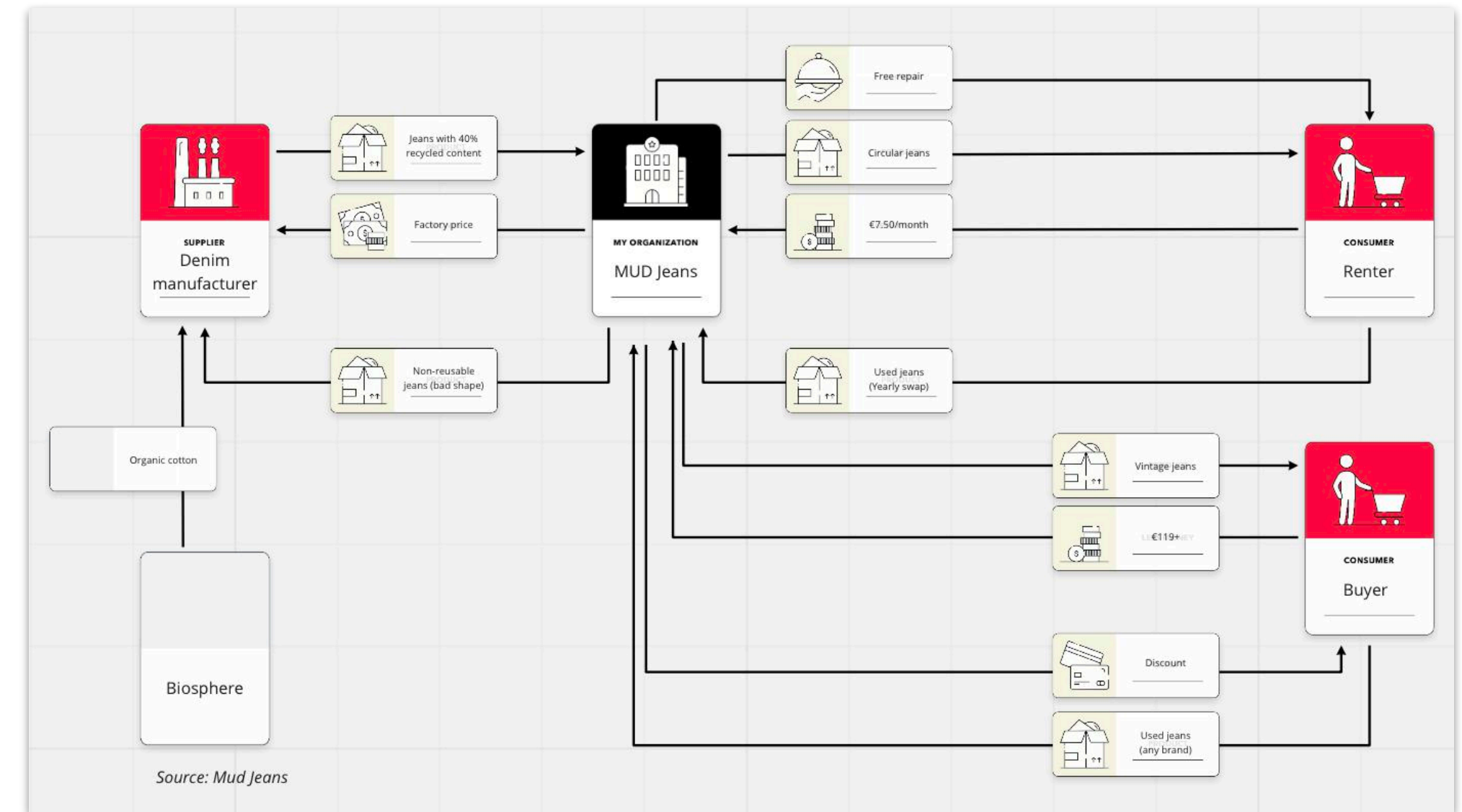
- Based on trading assets versus money

▶ Lock-in models

- Encourage product usage vs switching

▶ Product-Service-Systems

- Mixed models, often includes different supplier



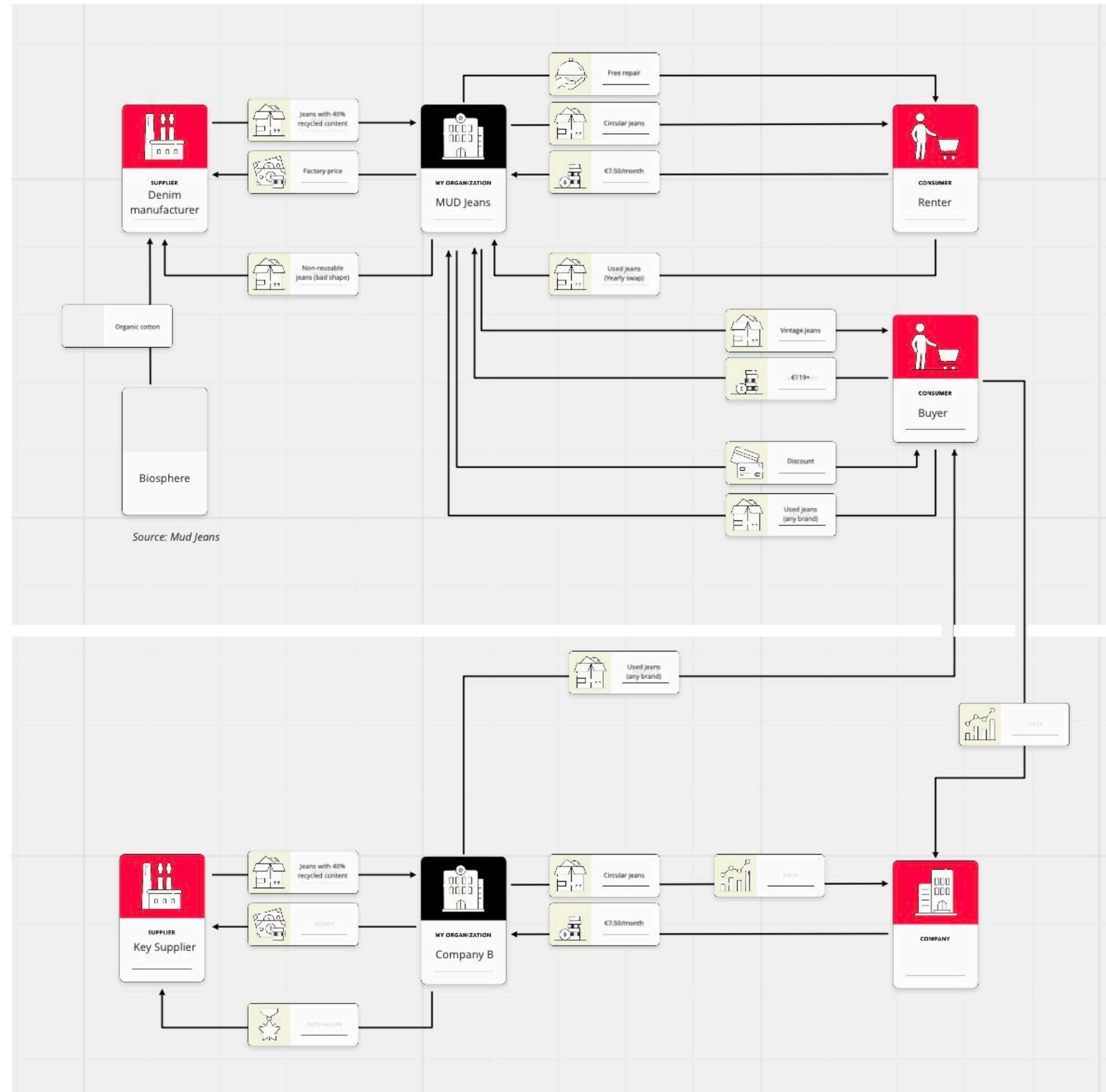
Example template model

If possible, try to co-create business models with partners to close all circular flows.

**Business Model
Company A**

+

**Business Model
Company B**



IN THIS DOCUMENT

Intro to the Circular Economy

Context: why now?

Framework: Circular Business Loops

Building Better Business Models

Comparing circular businesses

Ecosystem & Business Design

Define your Strategy

▶ Scoping

Setting KPIs + examples

Get specific with your circular economy innovation focus

KEEP IT IN LINE WITH YOUR BUSINESS STRATEGY TO GIVE YOUR TEAMS GUIDANCE

Launch a new business to help packaging companies find alternative materials for single-use plastic

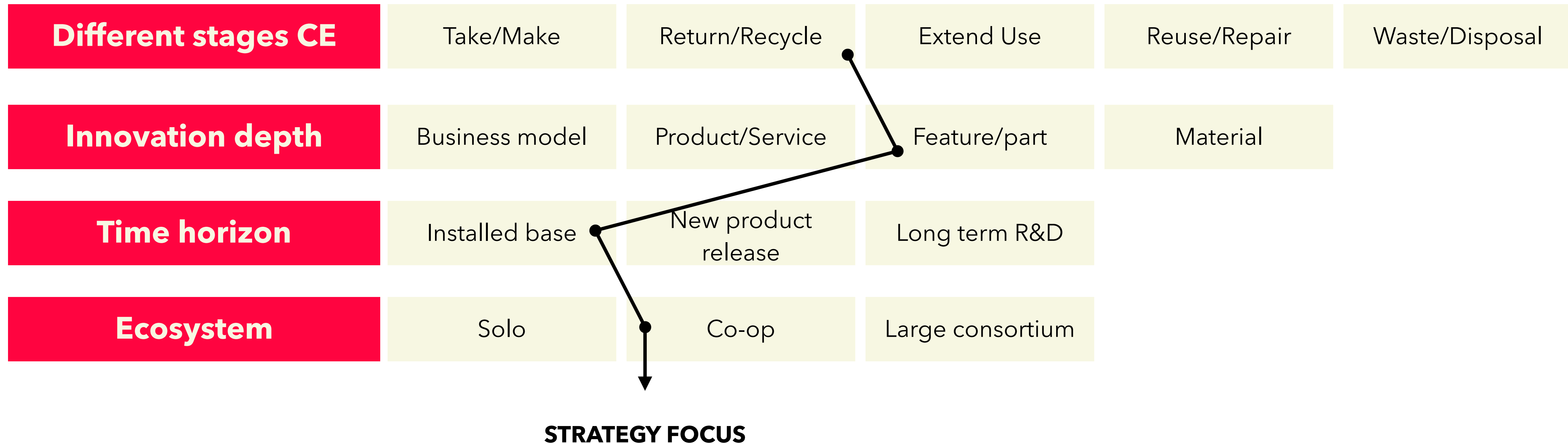
Set up a partnership with logistics companies to collect old products.

Redesign key parts of your product to make your product easier to repair.

Try to monetise energy side-streams to factories nearby.

Switch to a leasing business model instead of just selling your products.

Make your focus clear:



Tool: Scoping canvas

1 The challenge: how might we... Guidelines on framing your How Might We challenge <ul style="list-style-type: none">> The challenge is human and subjective. Understanding human behaviour is key to project success.> Project is geared towards discovery and not towards short term delivery.> Challenge does not dictate solution space or user needs/ problems space.> Challenge space is narrow enough to enable more depth than breath during discovery.			
2 Why this challenge? How did the team come up with this challenge? Why is this challenge important for the team? What are the strategic ambitions behind this challenge?	3 Customer segment Who do you want to create value for? Are there existing personas?	4 Assumptions What are the underlying assumptions/ hypothesis that lead us to do this project? We need to test the assumptions that ...	5 Goal/Success What is it you want to achieve with this project? What would be a successful outcome for you? We aim to [complete this field] with this project.
	6 Current situation What is the current customer journey? Any pains or problems? What are customer's alternatives and why are they not happy?	7 Questions What are some questions we want to address? What are some unknowns we want to find out more about?	
8 Related initiatives & resources Are there any projects which recently explored similar business areas/challenges? Do you have any market research/reports done which could help us out? What are some insights, facts we already know that can guide the team to better understand the challenge? Who should we speak to that's sitting on insights, expertise, experiences that are valuable for our challenge?			

DOWNLOAD ALL TOOLS: [BOARDOFINNOVATION.COM/TOOLS](https://boardofinnovation.com/tools)

**A bold, loft, long-term vision statement
is not enough to change something**

**Translate your strategy into
tangible **KPIs and measurable targets!****

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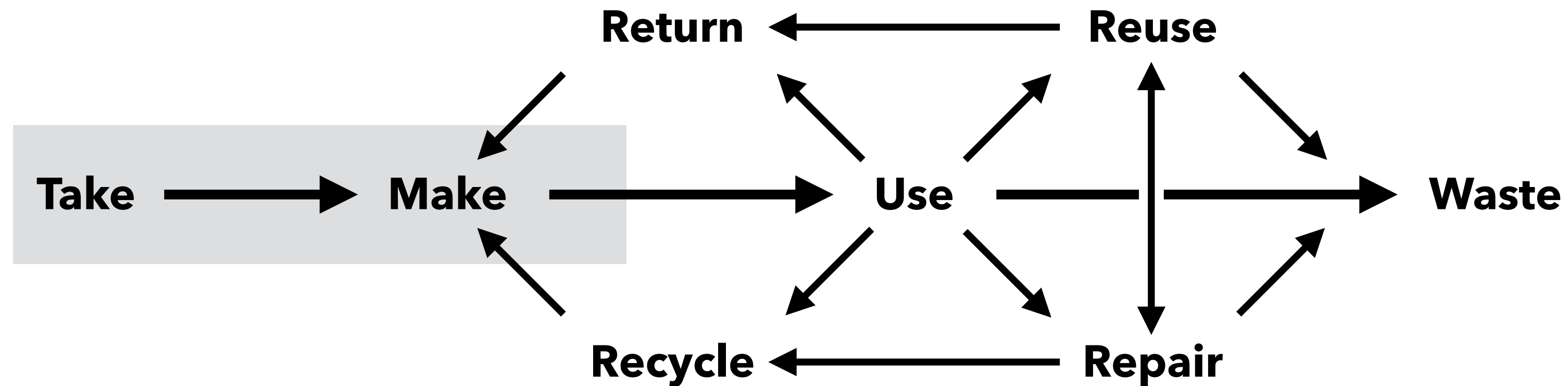
Ecosystem & Business Design

Define your Strategy

Scoping

▶ Setting KPIs + examples

Example circular impact KPIs to consider



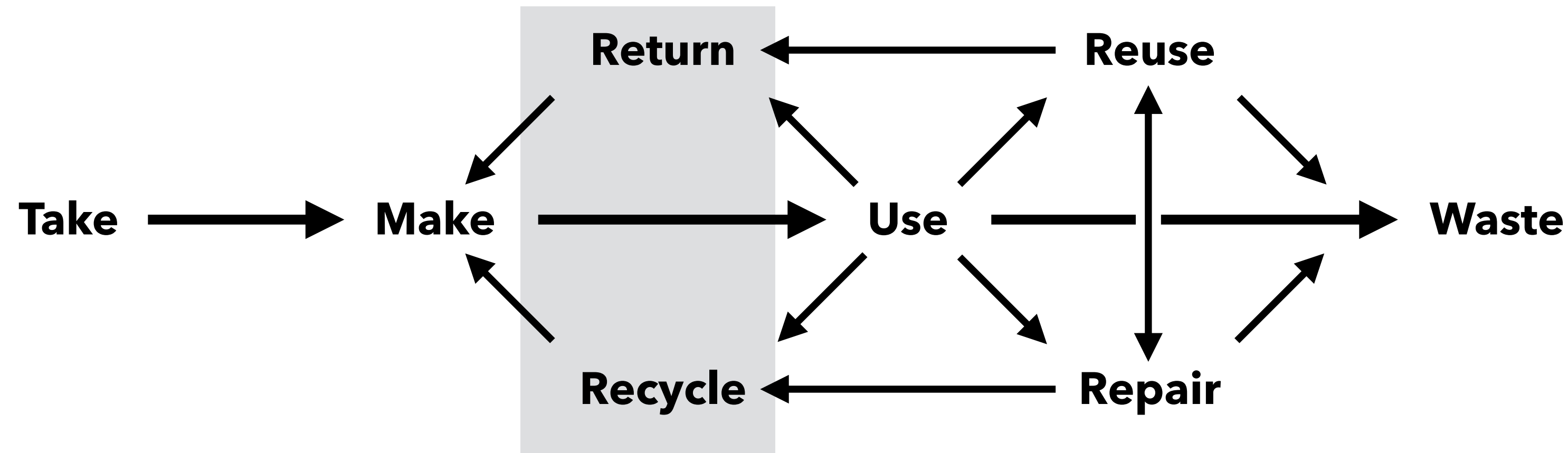
Increase:

- ▶ % renewable energy in production & distribution
- ▶ % products designed with recyclability/repairability in mind

Decrease:

- ▶ % or # kg virgin material input (sourced from the environment)
- ▶ % or # kg waste to landfill in manufacturing

Example circular impact KPIs to consider



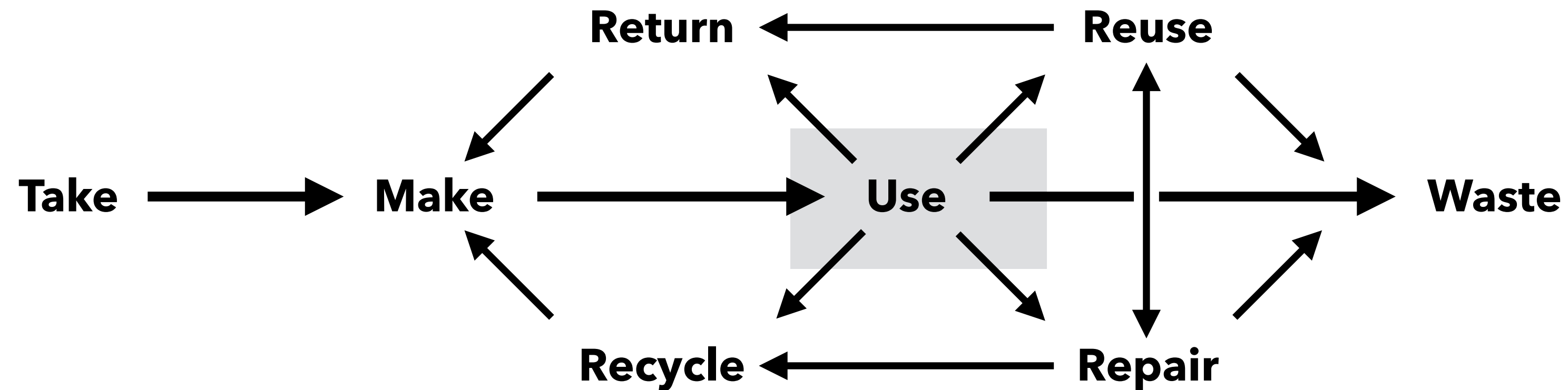
Increase:

- ▶ % compliance with local recycling regulations
- ▶ # kg products/materials collected
- ▶ € value of products/materials collected
- ▶ % purity of products/materials collected
- ▶ availability of return points
- ▶ % products with a take-back program

Decrease:

- ▶ # kg collected products to landfill or incineration
- ▶ \$ cost of return
- ▶ \$ cost and time sorting and processing

Example circular impact KPIs to consider



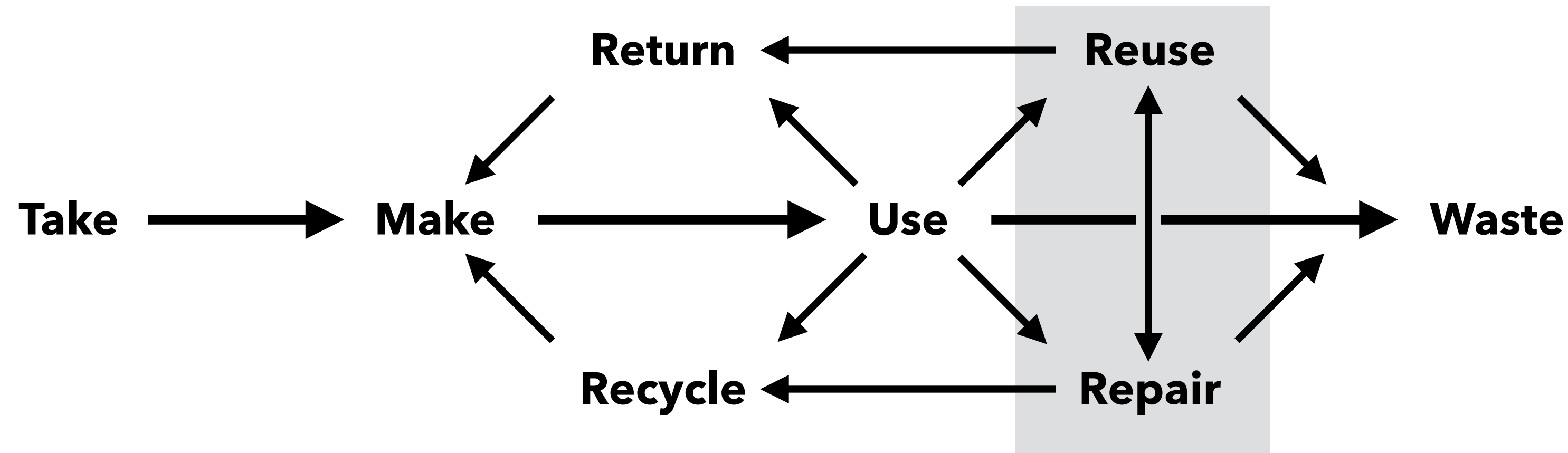
Increase:

- ▶ product lifetime (years)
- ▶ product utilization (%)
- ▶ # users sharing product

Decrease:

- ▶ \$ cost of maintenance/operating a product
- ▶ % year over year value depreciation
- ▶ % idle time
- ▶ # energy needed to operate
- ▶ emissions and environmental discharge
- ▶ # of products in the field (lower footprint)

Example circular impact KPIs to consider



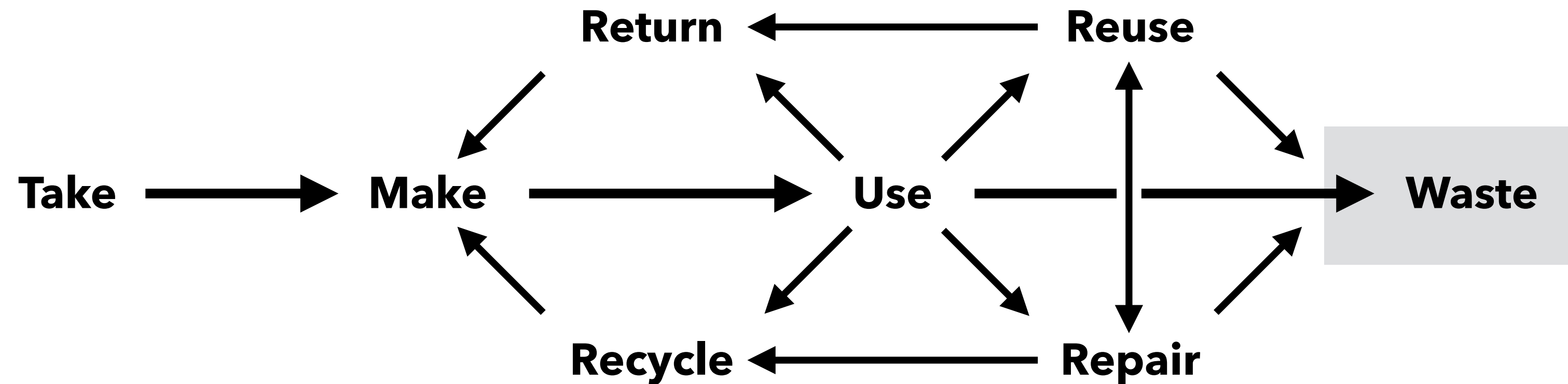
Increase:

- ▶ \$ value on secondary market
- ▶ % of products that can be upgraded to keep value over time
- ▶ # repairs executed (professional, consumer)
- ▶ availability of spare parts & repair information
- ▶ after sales service quality (NPS)

Decrease:

- ▶ \$ cost and time of repair
- ▶ # discarded products
- ▶ cost of spare parts (% compared to new)

Example circular impact KPIs to consider



Increase:

- ▶ % products captured as feedstock to downstream businesses
- ▶ \$ value of products as feedstock to downstream businesses
- ▶ % data available: information on where installed base (products) ends up

Decrease:

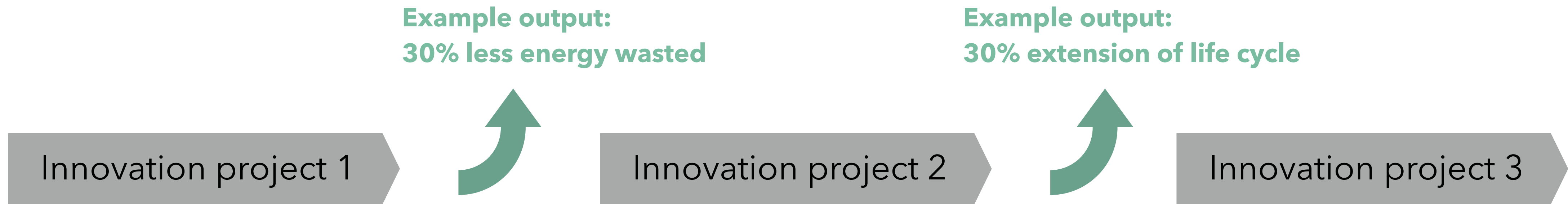
- ▶ % products ending up in landfill
- ▶ % products incinerated
- ▶ % products discarded to nature

Example circular impact KPIs to consider

	Take, Make	Return, Recycle	Use	Reuse, Repair	Waste
Increase	<ul style="list-style-type: none"> ▶ % renewable energy in production & distribution ▶ % products designed with recyclability/repairability in mind 	<ul style="list-style-type: none"> ▶ % compliance with local recycling regulations ▶ # kg products/materials collected ▶ € value of products/materials collected ▶ % purity of products/materials collected ▶ availability of return points ▶ % products with a take-back program 	<ul style="list-style-type: none"> ▶ product lifetime (years) ▶ product utilization (%) ▶ # users sharing product 	<ul style="list-style-type: none"> ▶ \$ value on secondary market ▶ % of products that can be upgrade to keep value over time ▶ # repairs executed (professional, consumer) ▶ availability of spare parts & repair information ▶ after sales service quality (NPS) 	<ul style="list-style-type: none"> ▶ % products captured as feedstock to downstream businesses ▶ \$ value of products as feedstock to downstream businesses ▶ % data available: information on where installed base (products) ends up
Decrease	<ul style="list-style-type: none"> ▶ % or # kg virgin material input (sourced from the environment) ▶ % or # kg waste to landfill in manufacturing 	<ul style="list-style-type: none"> ▶ # kg collected products to landfill or incineration ▶ \$ cost of return ▶ \$ cost and time sorting and processing 	<ul style="list-style-type: none"> ▶ \$ cost of maintenance/operating a product ▶ % year over year value depreciation ▶ % idle time ▶ # energy needed to operate ▶ emissions and environmental discharge ▶ # of products in the field (lower footprint) 	<ul style="list-style-type: none"> ▶ \$ cost and time of repair ▶ # discarded products ▶ cost of spare parts (% compared to new) 	<ul style="list-style-type: none"> ▶ % products ending up in landfill ▶ % products incinerated ▶ % products discarded to nature

**Get ambitious with your targets:
aim for 30% leap forward or don't bother**

We recommend working in innovation cycles with ambitious targets.



E.g. projects with a minimum ambition level to take a **30% leap forward** per innovation cycle. Tweaking anything below <5% often leads to mediocre, limited results.
Or worse: just a hollow PR statement.

Avoid circular economy innovation theatre

Common pitfalls of circular economy innovation

- ▶ **Vanity metrics**

E.g. Switching to 5% recycled materials, while creating 10% more products overall. Your net impact will still be very negative.

E.g. Making your products easier to recycle or repair without making sure they are recycled or repaired. You will need to integrate further in the value chain to make this happen.

- ▶ **“Less harmful” mindset** (not good enough!)

Be honest about the negative impact you still have on virgin resources, landfills and natural ecosystems.

- ▶ **“Single player” innovation**

Most circular innovation rely on partnerships and collaborations within an ecosystem. Alone you will not get far. Look for upstream & downstream partners in your value chain.

- ▶ **Ignorance is bliss**

Many companies have serious gaps in tracking their full circular economy impact. This disables evidence-based decision making and enables inertia

Conclusion

**What's holding back
the circular economy?**

Bottlenecks of the circular economy

Convenience

Single-use items, ignoring waste, etc. are often too convenient for consumers and companies to go for alternatives.



Trust issues

Collaborating in the value chain means sharing data & product info. Many companies are reluctant to do so.



Value perception

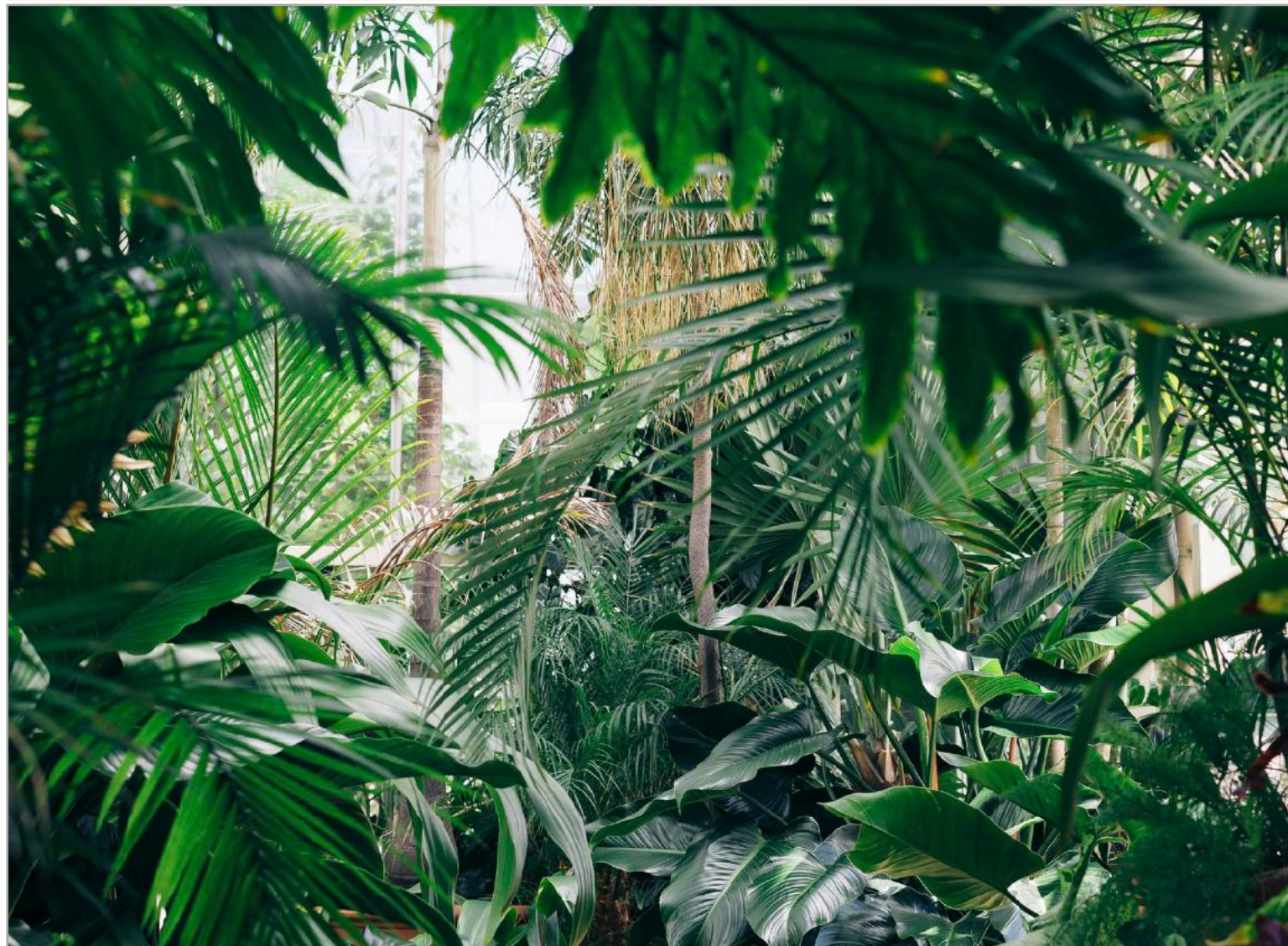
Most clients & consumers are not willing to pay extra for products, just because they are circular.



Bottlenecks of the circular economy

Friction for change

Switching to a new business model, negotiation new contracts etc. takes time and energy.



Profitability/ Viability

In many industries the tech or processes are not ready to create enough profit or cost-saving to justify investments.



Knowledge

While there are successful first movers, many businesses lack the blueprints to follow in their path.



Get in touch if you want to co-create your circular business strategy.

Contact us



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