

SHOEDES – New footwear designer qualifications for sustainable products that comply with the emerging demands of circular economy

UL05.5 ABOUT FOOTWEAR BUSINESS MODELS :

Which business/entrepreneurship models for a sustainable and circular economy in the footwear industry ?



Co-funded by the
Erasmus+ Programme
of the European Union

DEVELOPER PARTNER: CEDECS - TCBL and TASEV



Approach

- 1. An innovative model of a Shoe sector Business model applied to circular economy developed by TASEV**
- 2. Inspired by the previous model, key factors for a sustainable and circular economy business model in the footwear sector based on inquiries synthesized by CEDECS-TCBL**



Key Factors

1. Results of a survey carried out among around seventy shoe companies from 5 different countries (Turkey, Romania, Italy, France, Portugal)
2. Key factors for a sustainable and circular economy business model in the footwear sector
3. How to develop a sustainable business / entrepreneurship in the footwear sector ?



1. Results of a survey carried out among around shoe companies from 5 different countries (Turkey, Romania, Italy, France, Portugal)

Questionnaire results based on responses from **77 shoe companies in total**

Turkey : 22

Romania : 20

Italy : 18

France : 10

Portugal : 7



Characteristics of the surveyed companies

from 5 different countries (Turkey, Romania, Italy, France, Portugal)

- **84% manufacturers / 16% subcontracting brands** (but only 30% manufacturers among the French companies)
- **63% founded after 1999, 43% founded after 2009**
- **25% specialised in sneakers**
- **64% with an annual turnover under 5 millions € / 17% with a turnover between 5 and 20 millions € / 10% with a turnover above 100 millions €**
- **55% with a medium-high to luxury price levels / 42%**

having a medium-high positioning (versus 26% medium-of

the range and 19% very accessible)



SHOEDES SURVEY

1) What is your current level of maturity in terms of sustainable development ?

For each line in the following table, tick the degree of maturity you feel is appropriate for your situation (only one box ticked per line). The possible levels of maturity are :

DON'T KNOW, COMPLIANT with current regulations (AGEC law, etc), EXEMPLARY or PIONEER.

TODAY	Current level of maturity	Don't know	Compliant	Exemplary	Pioneer
PRODUCT Where do you stand in the footwear market in terms of ...?	Eco-design of products				
	Quality and durability				
	Distribution				
	Recycling				
	Other, please specify :				
SOURCING To what extent are you helping to develop responsible practices throughout the value chain?	Traceability of raw materials				
	Use of responsible raw materials (natural, recycled, animal)				
	Environmental impact of production or subcontractors (carbon, energy consumption, water, waste, chemicals)				
	Human rights, working conditions				
	Code of conduct, supplier charte				
	Other, please specify				
LOGISTICS Are you taking steps to reduce the environmental footprint of your logistics operations?	Environmental impact of transport				
	Environmental impact of packaging				
	Waste management				



1) What is your current level of maturity in terms of sustainable development ?

For each line in the following table, tick the degree of maturity you feel is appropriate for your situation (only one box ticked per line). The possible levels of maturity are :

DON'T KNOW, COMPLIANT with current regulations (AGEC law, etc), EXEMPLARY or PIONEER.

TODAY	Current level of maturity	Don't know	Compliant	Exemplary	Pioneer
CUSTOMERS Have you developed ways of sharing the experience of a sustainable and responsible approach with your customers?	Transparent sourcing				
	CSR commitments (contribution to CSR projects, company labels such as B Corp)				
	Transparent information on production, players and costs				
	Assessment and dissemination of the carbon footprint of each product				
	Promoting responsible consumption, particularly through pre-ordering or second-hand goods				
	Other, please specify :				
EMPLOYEES How involved are your employees in sustainable development issues, depending on their activity / department?	· Design / Style				
	· Production				
	· Purchase				
	· Commercial				
	· Finance				
	· HR				

2) Overall, do you feel that your company is working towards sustainable and responsible change in the footwear industry?

- Yes, absolutely
- Yes, rather
- Not really
- Not at all



3) Using the same items, what priority areas for improvement have you identified for your company in terms of sustainable development?

For each line, tick the level of priority you feel is appropriate for your business (only one box ticked per line). The levels of priority for the future are : Low, Medium or High.

TOMORROW	Level of priority for the future	Low	Medium	High
PRODUCT What priority do you give to your company's next actions in the footwear market ?	Eco-design of products			
	Quality and durability			
	Distribution			
	Recycling			
	Other,please specify :			
SOURCING What level of priority do you give to possible responsible practices throughout the value chain?	Traceability of raw materials			
	Use of responsible raw materials (natural, recycled, animal)			
	Environmental impact of production or subcontractors (carbon, energy consumption, water, waste, chemicals)			
	Human rights, working conditions			
	Code of conduct, supplier charte			
	Other, please specify			
LOGISTICS Do you have any plans to reduce the environmental footprint of your logistics operations?	Environmental impact of transport			
	Environmental impact of packaging			
	Waste management			
	Other, please specify :			



3) Using the same items, what priority areas for improvement have you identified for your company in terms of sustainable development?

For each line, tick the level of priority you feel is appropriate for your business (only one box ticked per line). The levels of priority for the future are : Low, Medium or High.

TOMORROW	Level of priority for the future	Low	Medium	High
CUSTOMERS What ways would you like to develop to share the experience of a sustainable and responsible approach with your customers?	Transparent sourcing			
	CSR commitments (contribution to CSR projects, company labels such as B Corp)			
	Transparent information on production, players and costs			
	Assessment and dissemination of the carbon footprint of each product			
	Promoting responsible consumption, particularly through pre-ordering or second-hand goods			
	Other, please specify :			
EMPLOYEES What level of involvement do you expect your employees to have in sustainable development issues, depending on their activity / department within the company?	· Design / Style			
	· Production			
	· Purchase			
	· Commercial			
	· Finance			
	· HR			

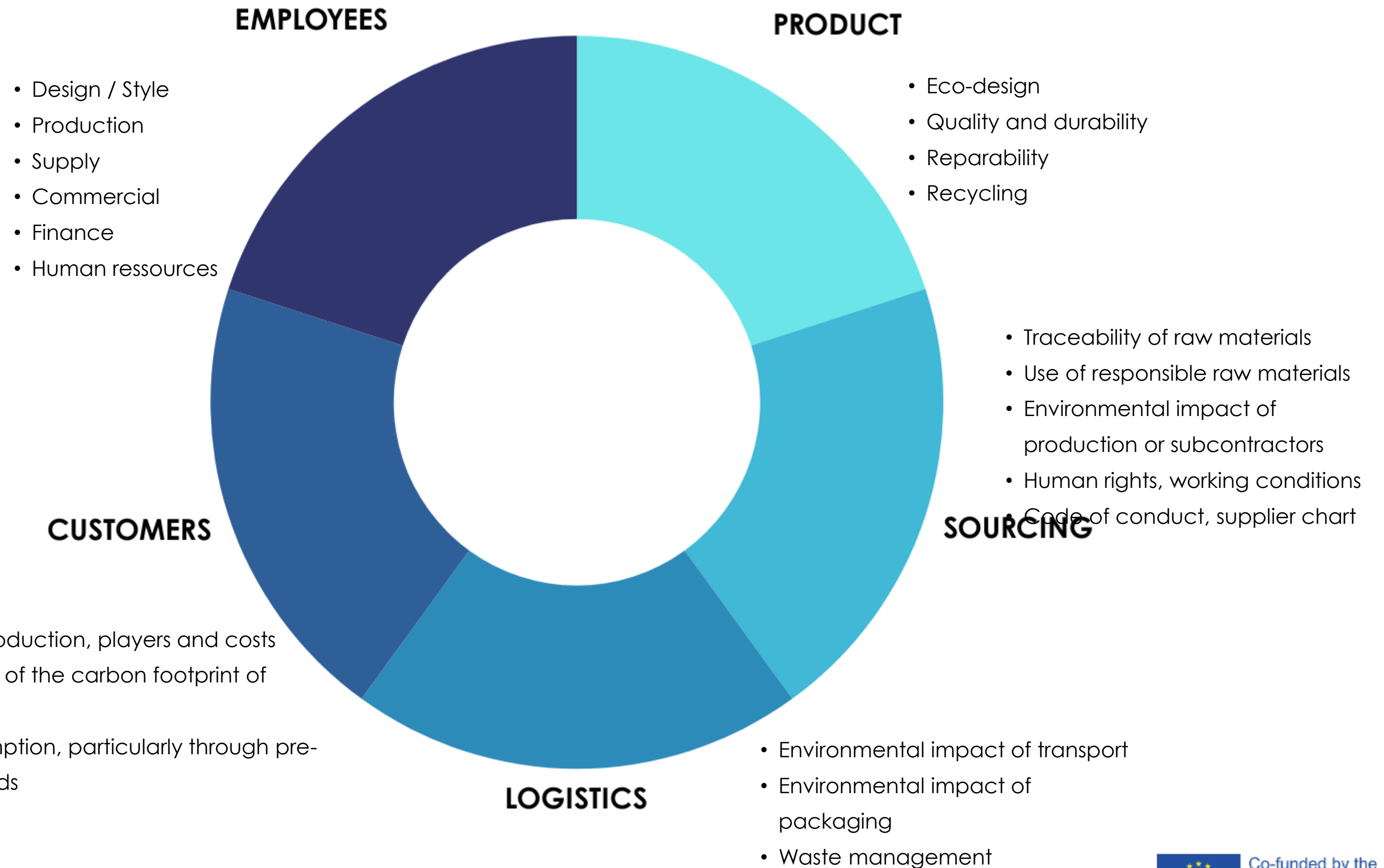


**4) What are the main obstacles to your sustainable development actions?
(tick a maximum of 3 of the following reasons)**

- ☐ Lack of financial resources / Insufficient profitability of the business
- ☐ Lack of reliable information on materials, components and manufacturing processes
- ☐ Lack of technical resources, particularly IT resources
- ☐ Lack of in-house skills
- ☐ Lack of expert footwear suppliers
- ☐ Insufficient support/information from industry bodies (federations, CTC, BPI, etc.)
- ☐ Lack of motivation because our customers are not interested
- ☐ Other, please specify :

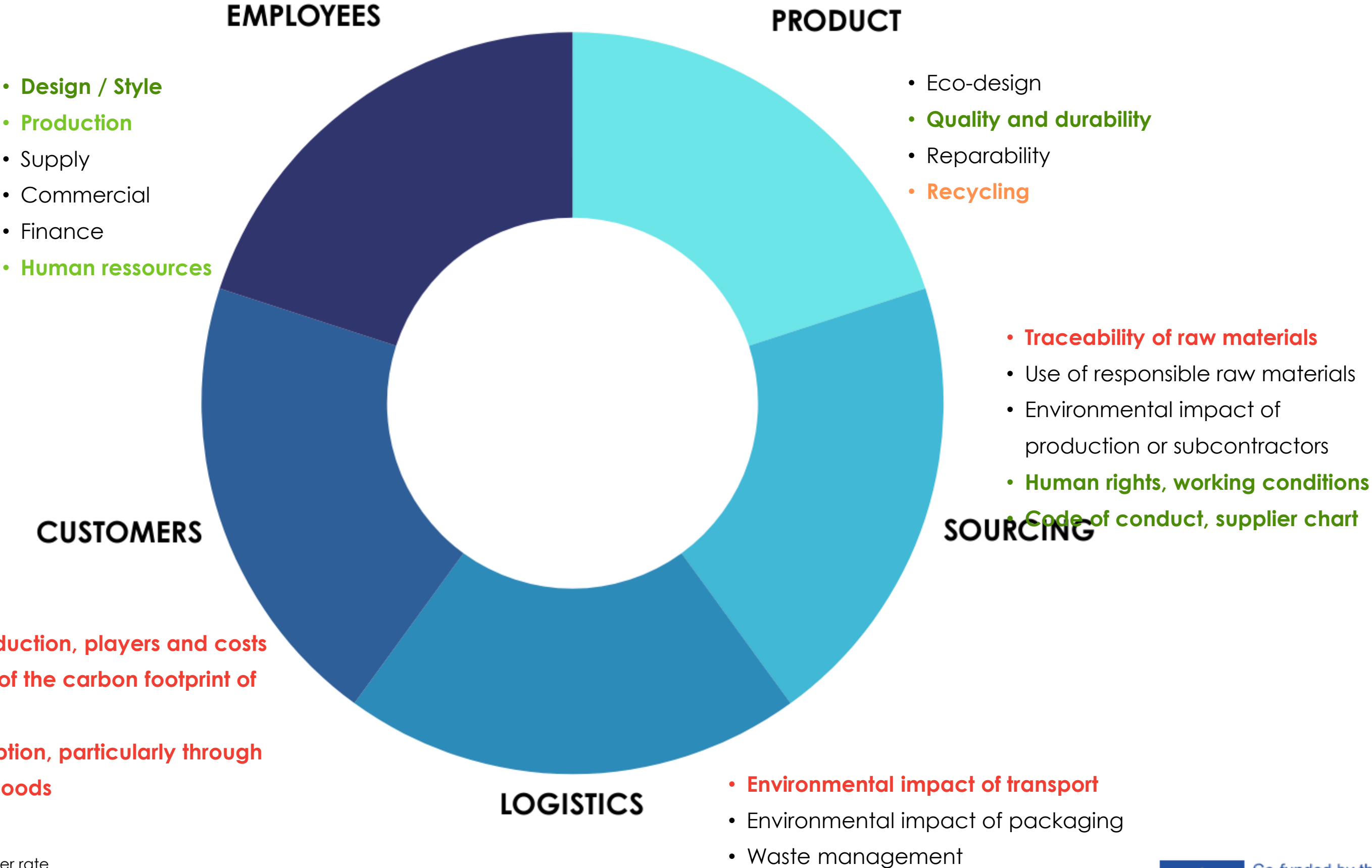
5) What sustainable and responsible development action taken by your company are you most proud of ? (open question)

**THANK YOU FOR YOUR INVALUABLE CONTRIBUTION TO THE SHOEDES
PROJECT**





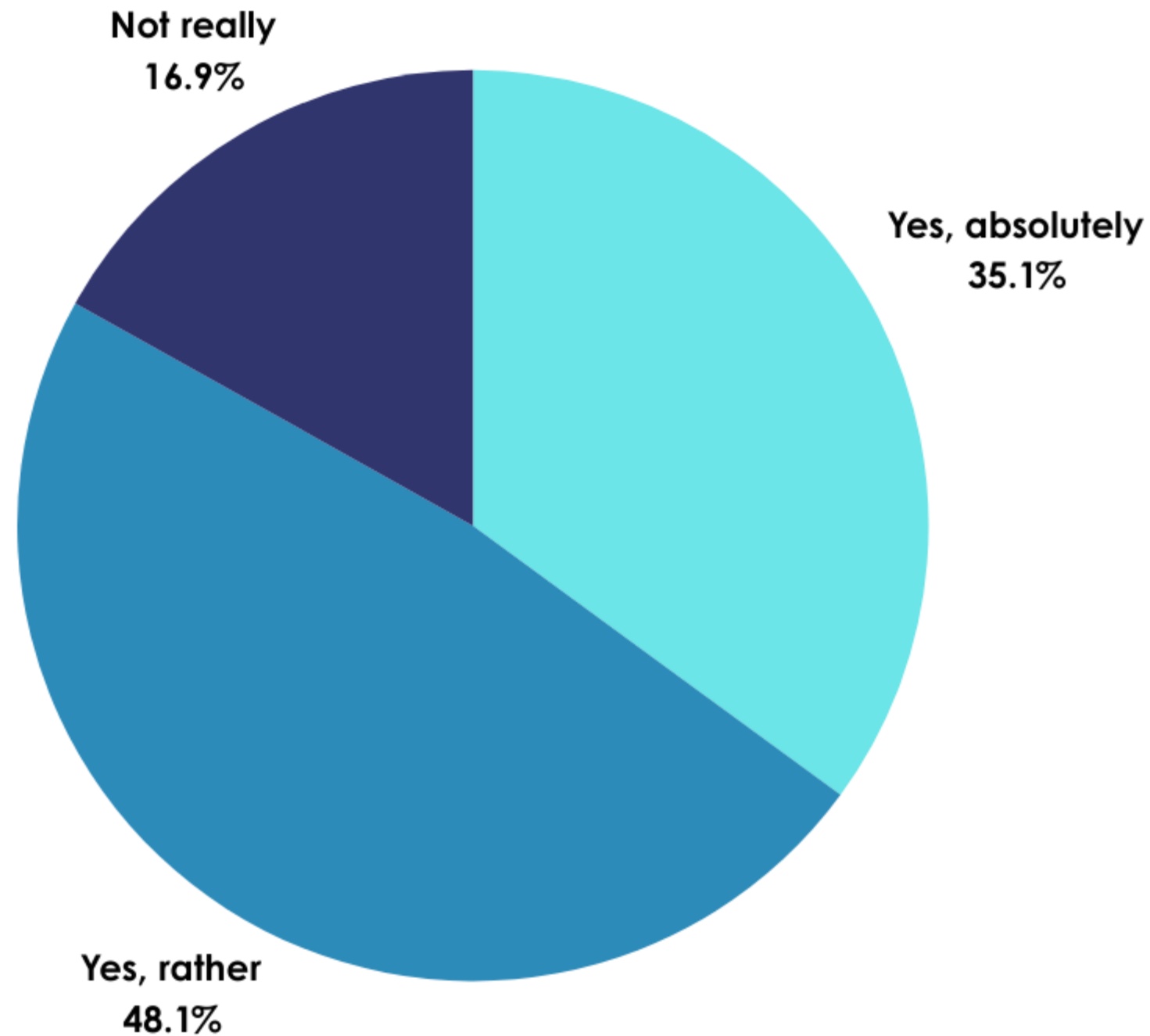
Today



- High Exemplary / Pioneer rate
- Above average Exemplary / Pioneer rate
- Lower than average Exemplary / Pioneer rate
- Very low Exemplary / Pioneer rate



2) Overall, do you feel that your company is working towards sustainable and responsible changes in the footwear industry?



Most companies (83%) declare that they are rather or absolutely working towards sustainable and responsible changes in the footwear industry.



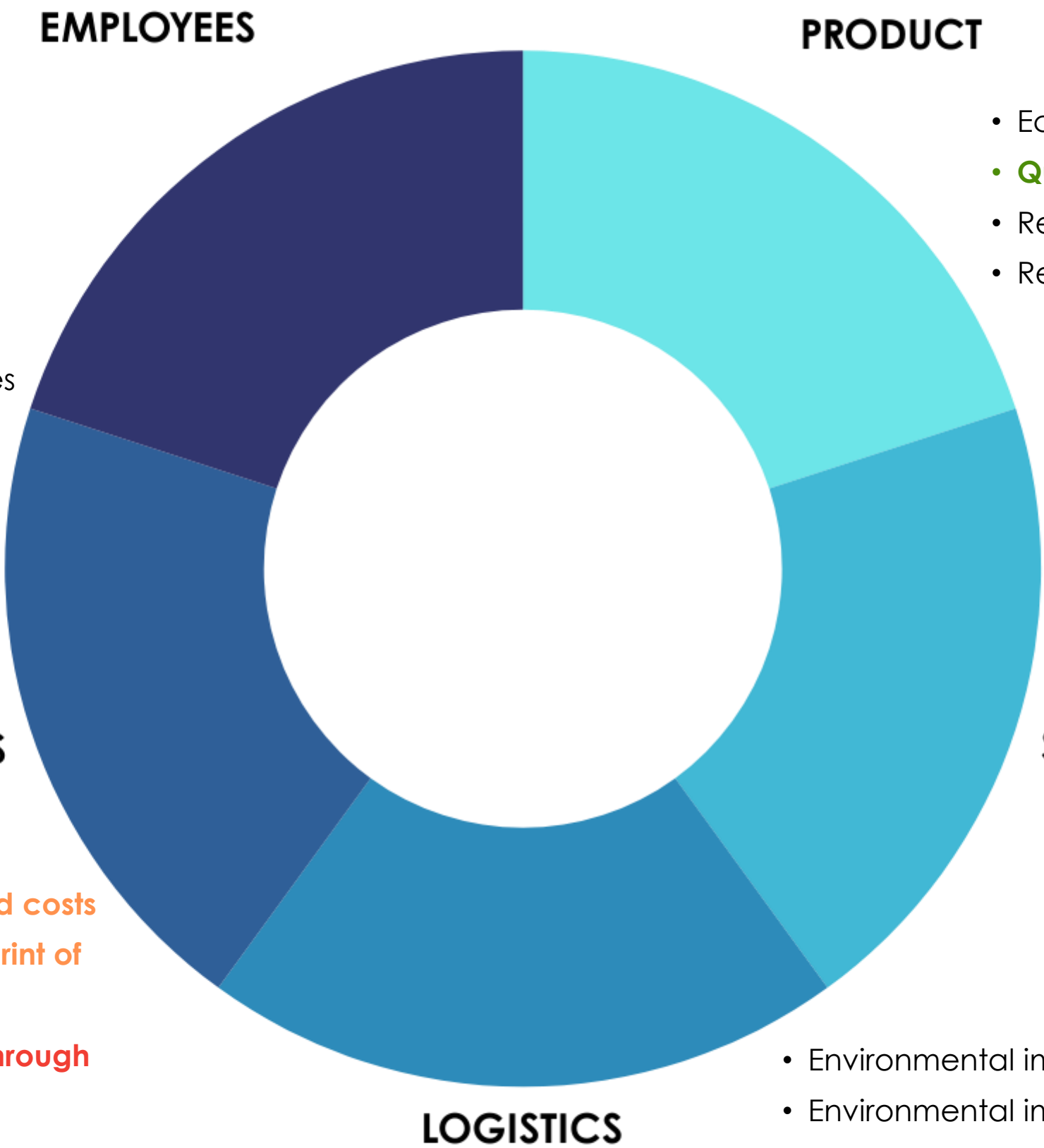
Tomorrow

- Design / Style
- Production
- Supply
- Commercial
- Finance
- Human ressources

CUSTOMERS

- Transparent sourcing
- CSR commitments
- Transparent information on production, players and costs
- Assessment and dissemination of the carbon footprint of each product
- Promoting responsible consumption, particularly through pre-ordering or second-hand goods

- High "High" rate
- Above average "High" rate
- Lower than average "High" rate
- Very low "High" rate



- Eco-design
- Quality and durability
- Reparability
- Recycling

- Traceability of raw materials
- Use of responsible raw materials
- Environmental impact of production or subcontractors
- Human rights, working conditions
- Code of conduct, supplier chart

- Environmental impact of transport
- Environmental impact of packaging
- Waste management



What are the main obstacles to your sustainable development actions?

1. Lack of financial resources / Insufficient profitability of the business (for 58%)
2. Lack of reliable information on materials, components and manufacturing processes (for 52%)
3. Lack of technical resources, particularly IT resources (for 36%)
4. Lack of expert footwear suppliers (for 35%)
5. Insufficient support/information from industry bodies (federations, CTC, BPI, etc.) (for 35%)
6. Lack of in-house skills (for 34%)
7. Lack of motivation because our customers are not interested (for 25%)



2. Key factors for a sustainable and circular economy business model in the footwear sector



Today's key factors for a sustainable and circular economy business model

Internal factors

1. Top management's convictions and vision in circular economy and CSR matters
2. Direct to consumers distribution channels (not excluding other distribution channels)
3. Sufficient financial and human resources
4. A specialization in sneakers or mono-products
5. Good internal knowledge/skills in footwear design and close partnerships with the production resources/subcontractors

External factor

6. Involvement of teams from all or most departments of the company
7. Availability of a local footwear circular economy from (still existing for most stages of the processes in Italy, Portugal, Romania, Turkey but very reduced in France)



2 major sustainable and circular economy business models

1) Established large companies with strong CSR commitments manufacturing medium-high to luxury shoes/brands

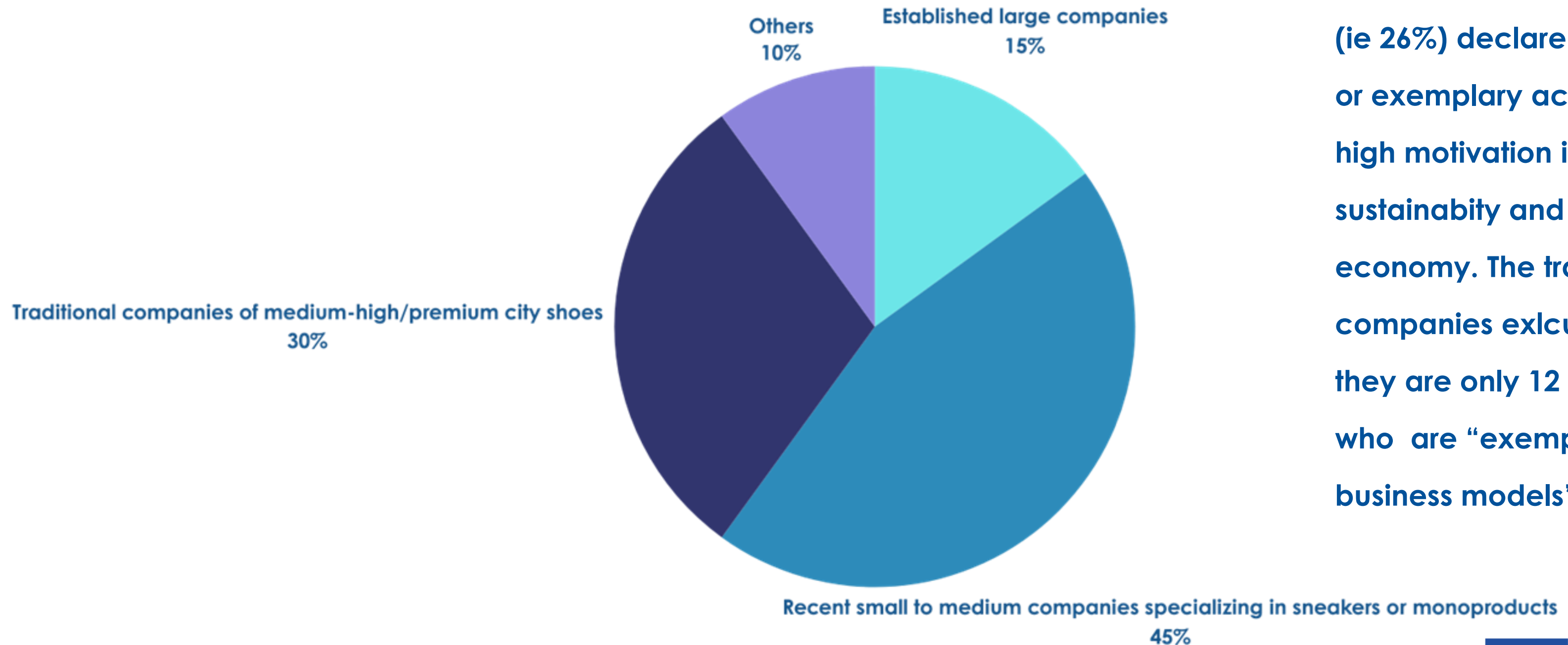
2) Recent and small to medium companies with a DNA and purpose focusing on sustainability, most specialised in sneakers or monoproducts

3) To be mentioned but not as an “exemplary business model” :

Traditional companies with a solid know-how in the design and manufacturing of medium-high/premium city shoes which focus their efforts on the quality and durability of the products and on the proximity of sourcing or subcontracting



Sustainable business models among the interviewed companies



Out of 77 companies, 20 (ie 26%) declare pioneer or exemplary actions and high motivation in sustainability and circular economy. The traditional companies excluded, they are only 12 (ie 16%) who are “exemplary business models”.



Sustainable business models among the interviewed companies

Sustainable business models		
Romania	4 / 20	
Italy	1 / 19	(French survey = Geox)
Portugal	3 / 7	
Turkey	8 / 22	
France	4 / 9	+ Geox mentioned above
Total	20 / 77	26%

Exemplary business models		
Romania	2	
Italy	1	(French survey = Geox)
Portugal	1	
Turkey	5	
France	3	
Total	12/77	16%



GEOX



WOMAN



MAN



KIDS

Geox (Italy) is a representative example of a large company with strong commitments in sustainability and circular economy

- Founded in 1995
- A turnover of € 720 millions (year 2023)
- A brand established internationally (in 100 countries), mainly Italy, Austria, France, Benelux, North America : 70%
- 655 single-brand stores and 9000 other vendors all over the world
- Innovative mindset : 61 patents
- 90% of the outerwear collection is eco responsible with recycled products
- 3 major lines of shoes are eco-responsible recycled with plastic bottles
- Supplier's charter
- Transparency on CSR (as a brand listed on the MILAN Stock Exchange, Geox is required to have transparency on its CSR policy – see the Geox website: www.geox.biz)



<https://www.geox.biz/en/sustainability/innovation-sust.html>



A S P O R T U G U E S A S

Asportuguesas (Portugal) is another representative example of a brand which is part of a large company with strong commitments in sustainability and circular economy

- Founded in 2015 ?
- Owned by a company founded between 2000 an 2009
- Turnover of the company > € 500 millions



Our Steps Towards a More Sustainable Future



SUSTAINABLE MATERIALS

Our blend of rubber & 100% Natural Cork used in our soles, combined with the Sustainable & Recycled materials, allows us to use the least amount of natural resources as possible making ASPORTUGUESAS uniquely sustainable.



NEGATIVE CARBON FOOTPRINT

Cork is a natural CO2 retainer, able to capture 740 times its weight from the atmosphere. Since the entire ASPORTUGUESAS manufacturing process produces minimal emissions, our CO2 balance is negative, contributing to a much cleaner atmosphere.



MANUAL EXTRACTION

The process of extracting cork is an ancestral art, done exclusively by hand. Due to the delicateness of the procedure, workers are extensively trained and no power tools or mechanical tools are used.



STRONG LOCAL ECONOMY

All work is done exclusively by local workers, from the extraction to the manufacture of the footwear. This allows for more jobs to be created and maintained in more rural areas of the country, and for cork workers to be the highest paid in the Portuguese agricultural sector.



ZERO TREES CUT

The cork oak is the only tree whose bark is self-regenerating. This allows for it be extracted every 9 years. Thanks to this unique feature, cork can be harvested without damaging the cork oak, allowing it to live on average up to 200 years.



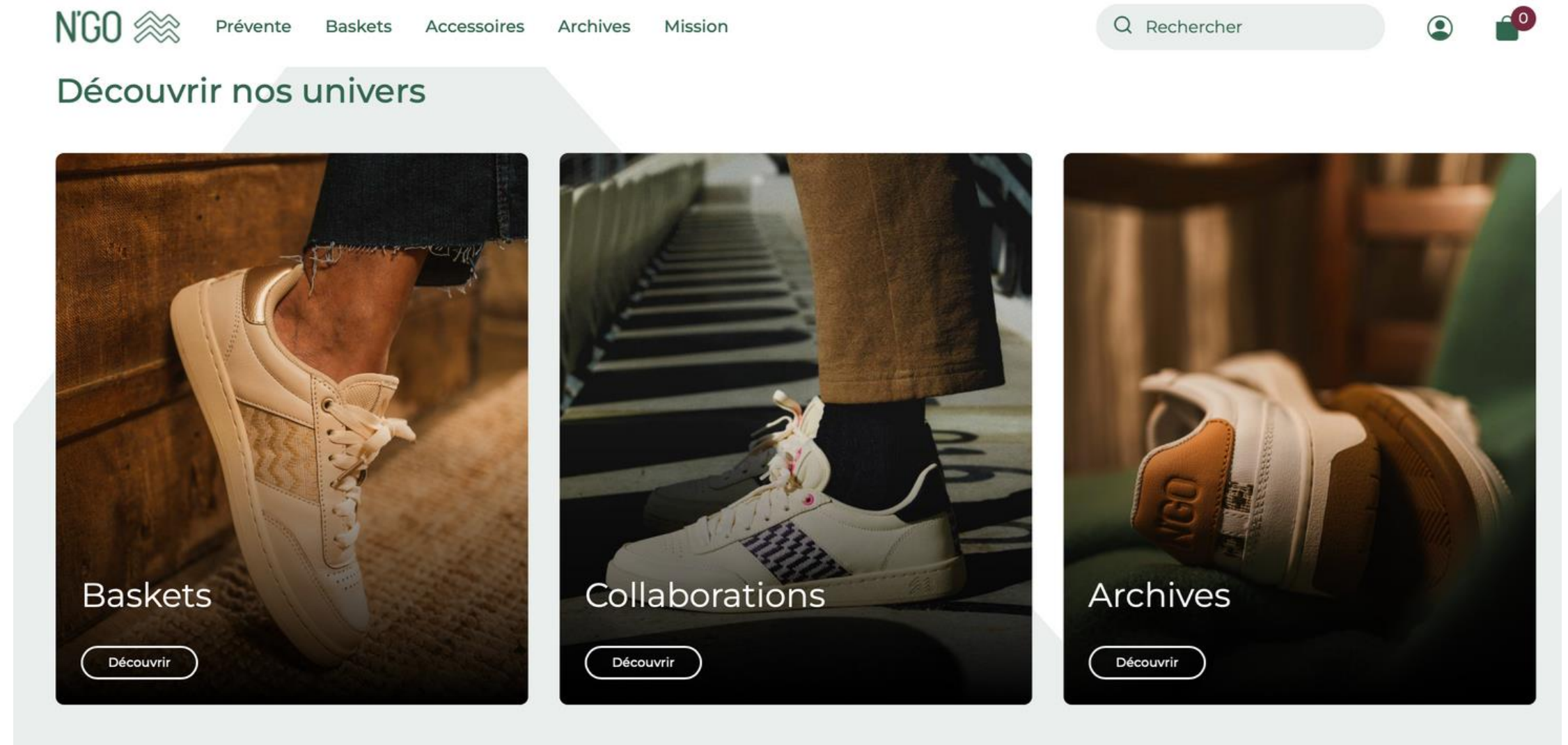
GREEN COMMUNICATION

In every collection we launch, we ensure that our displays, packaging and promotional materials are sustainable. Whenever possible, we use recycled or recyclable materials, with as little ink as possible.

<https://asportuguesas.shoes/pages/about-us>



N'GO



Ngo Shoes (France) is a representative example of business model of a small and young company with a strong CSR commitment.

- Founded in 2017
- Turnover of the company = € 1 million (2022)
- Specialized in sneakers
- Environmental labeling
- Societal commitments in Vietnam
- N'go shoes claim to be an “ethical and eco-responsible brand” in line with the successful VEJA brand (founded in 2005 - € 162 millions turnover in 2023)

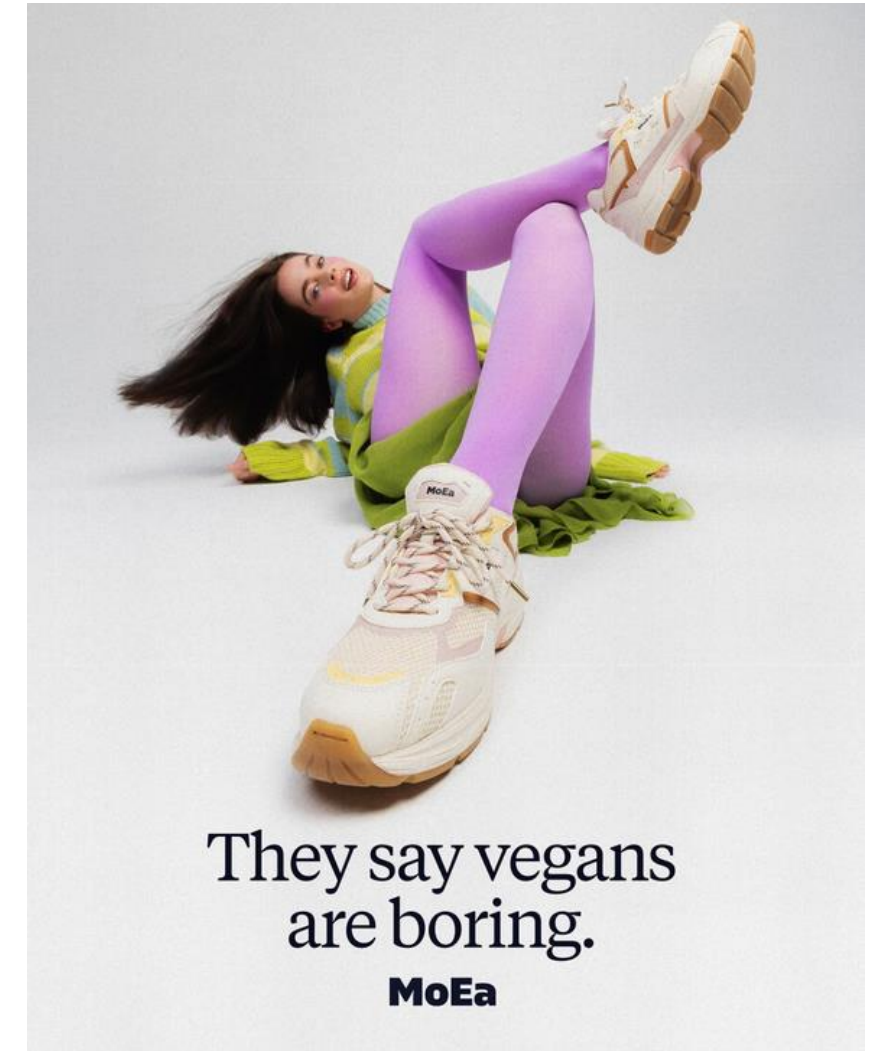




MoEa

MoEa (France) is a representative example of business model of a small and young company with a strong CSR commitment.

- Founded in 2021
- Turnover of the company < € 1 million
- Specialized in sneakers
- Sourcing and continuous improvement of bio-materials



WHAT WE DO

We pioneer and use bio-materials from fruits and plants to create low-carbon and vegan sneakers

SUSTAINABLE PARTNERS

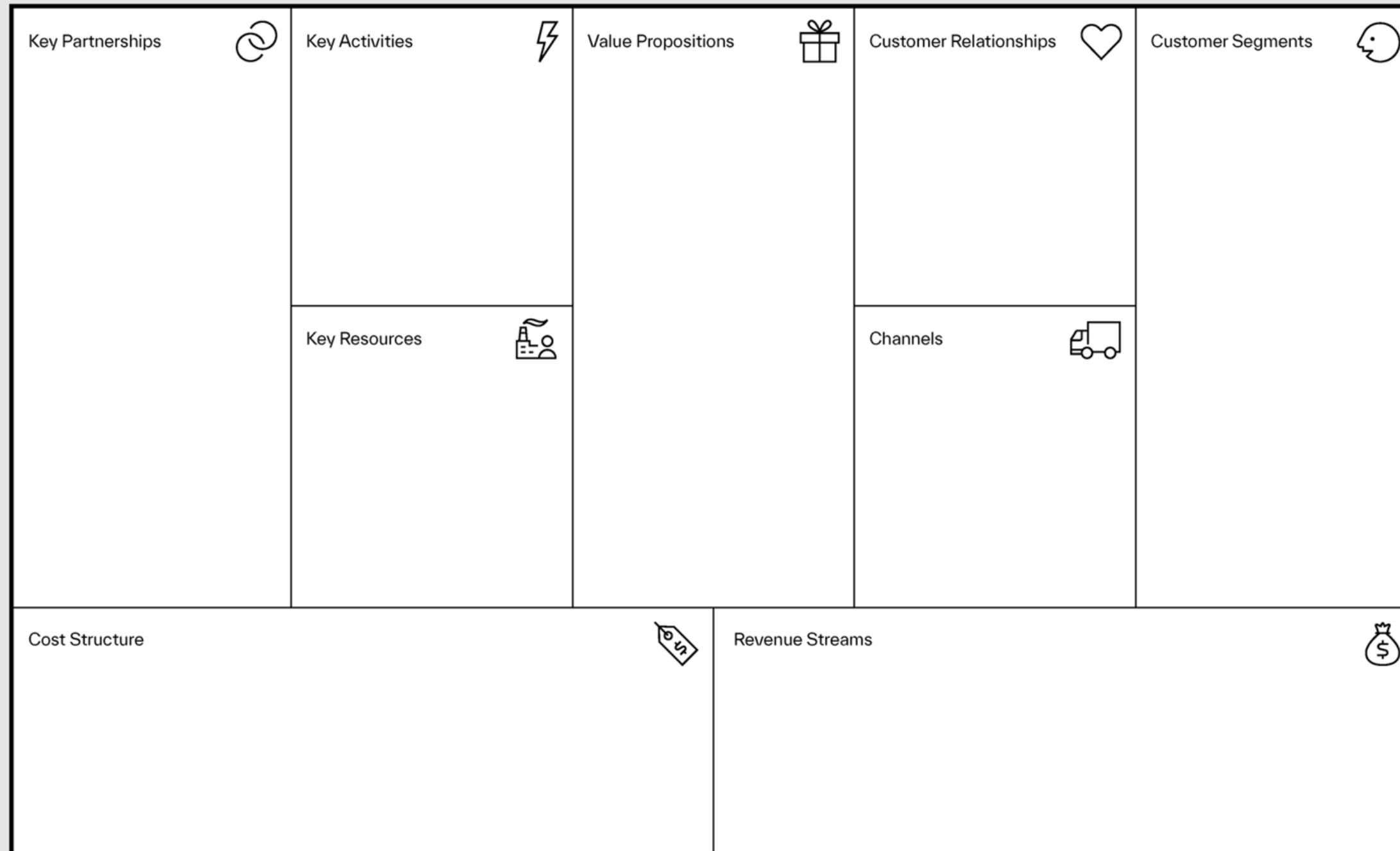




3. How to develop a sustainable business / entrepreneurship in the footwear sector ?

The Business Model Canvas

Designed for:	Designed by:	Date:	Version:
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The different steps

BUSINESS MODEL CANVAS

Business name

SOCIO-ENVIRONMENTAL COSTS				SOCIO-ENVIRONMENTAL BENEFITS		
12				13		
RAW MATERIALS & ENERGIES	KEY PARTNERSHIPS	KEY ACTIVITIES	VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS	END OF LIFE
9	8	7	2	3	1	5
		KEY RESOURCES	CHANNELS			
		6	4			
COST STRUCTURE				REVENUE STREAM		
10				11		



The major focuses

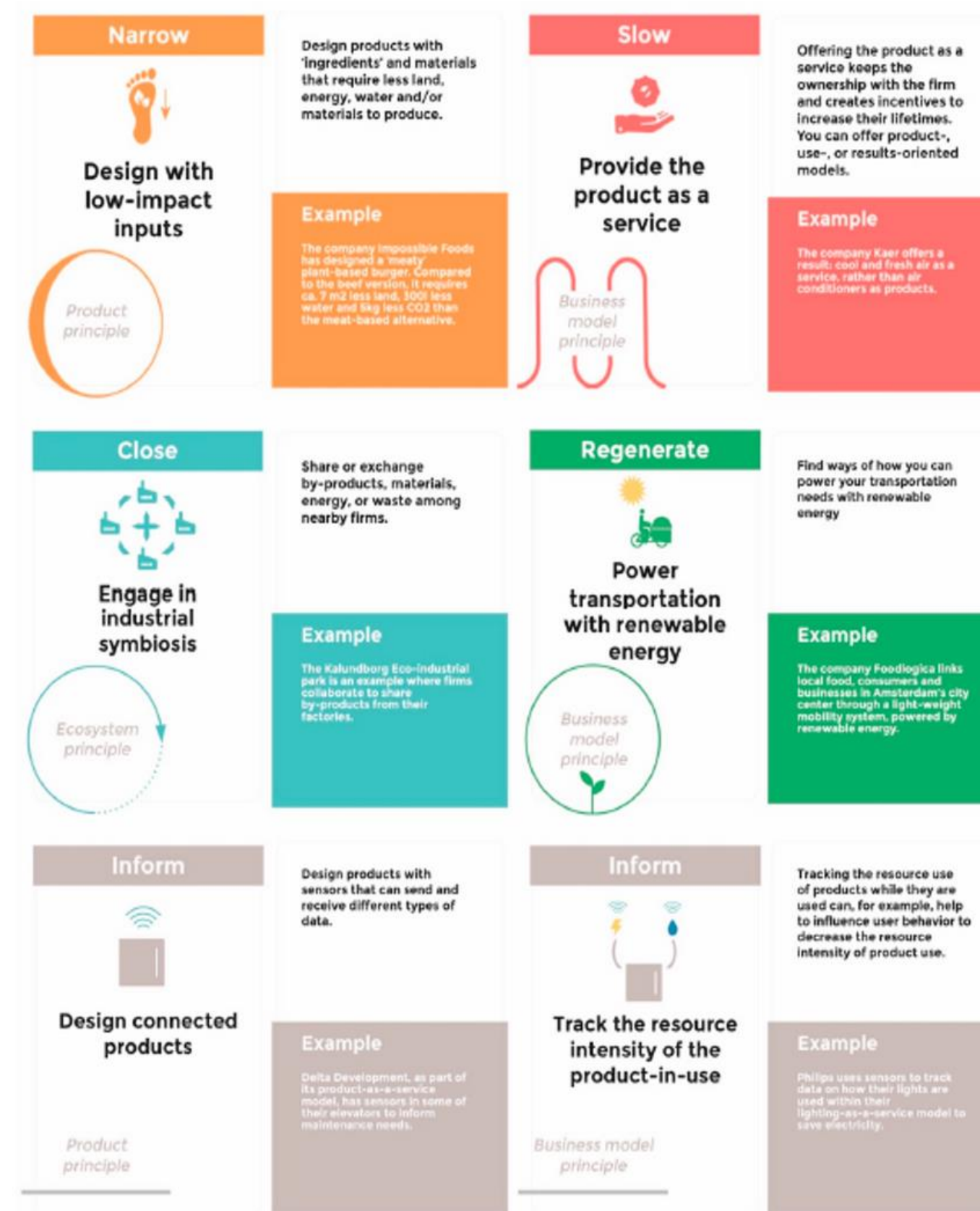
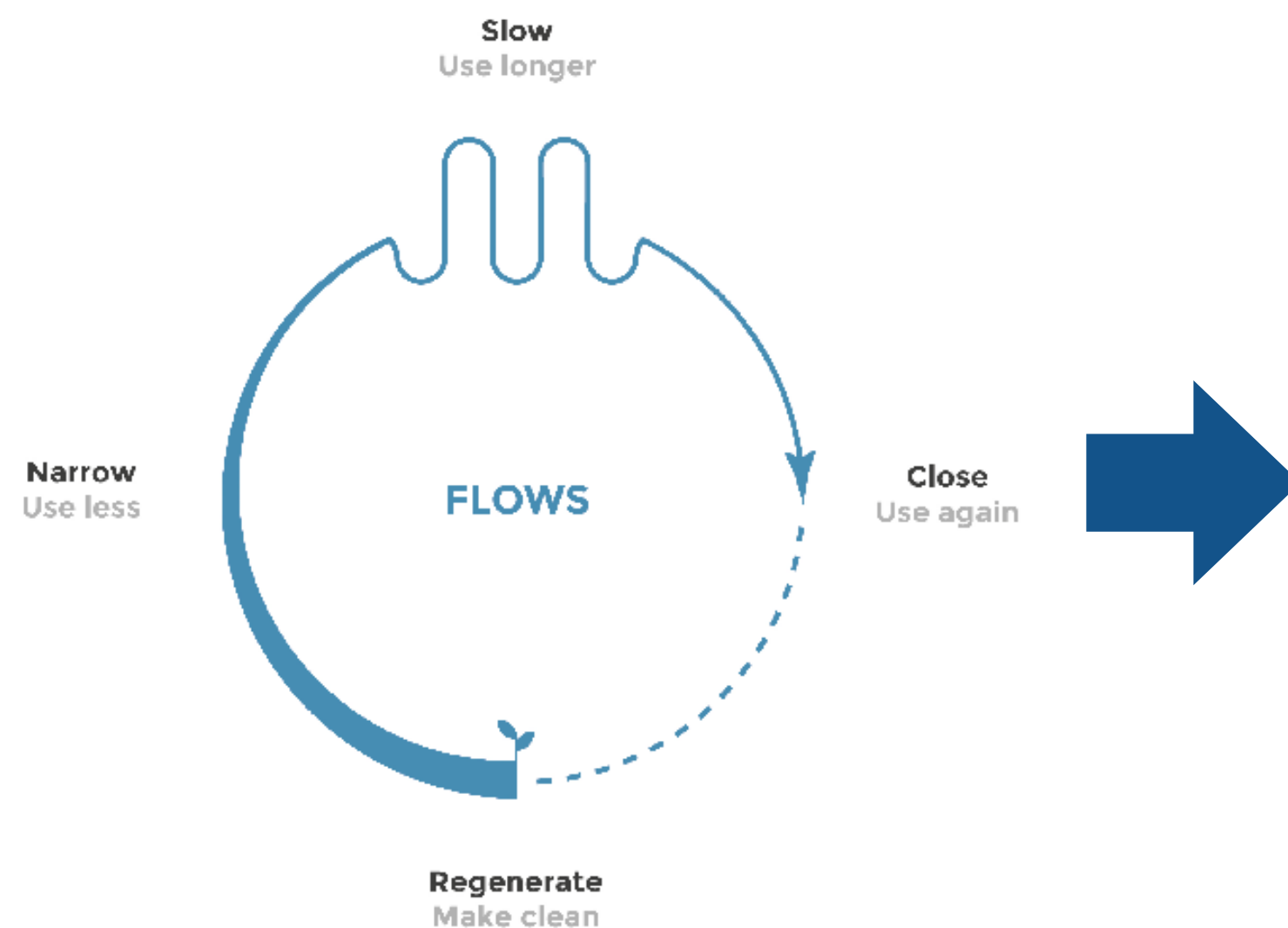
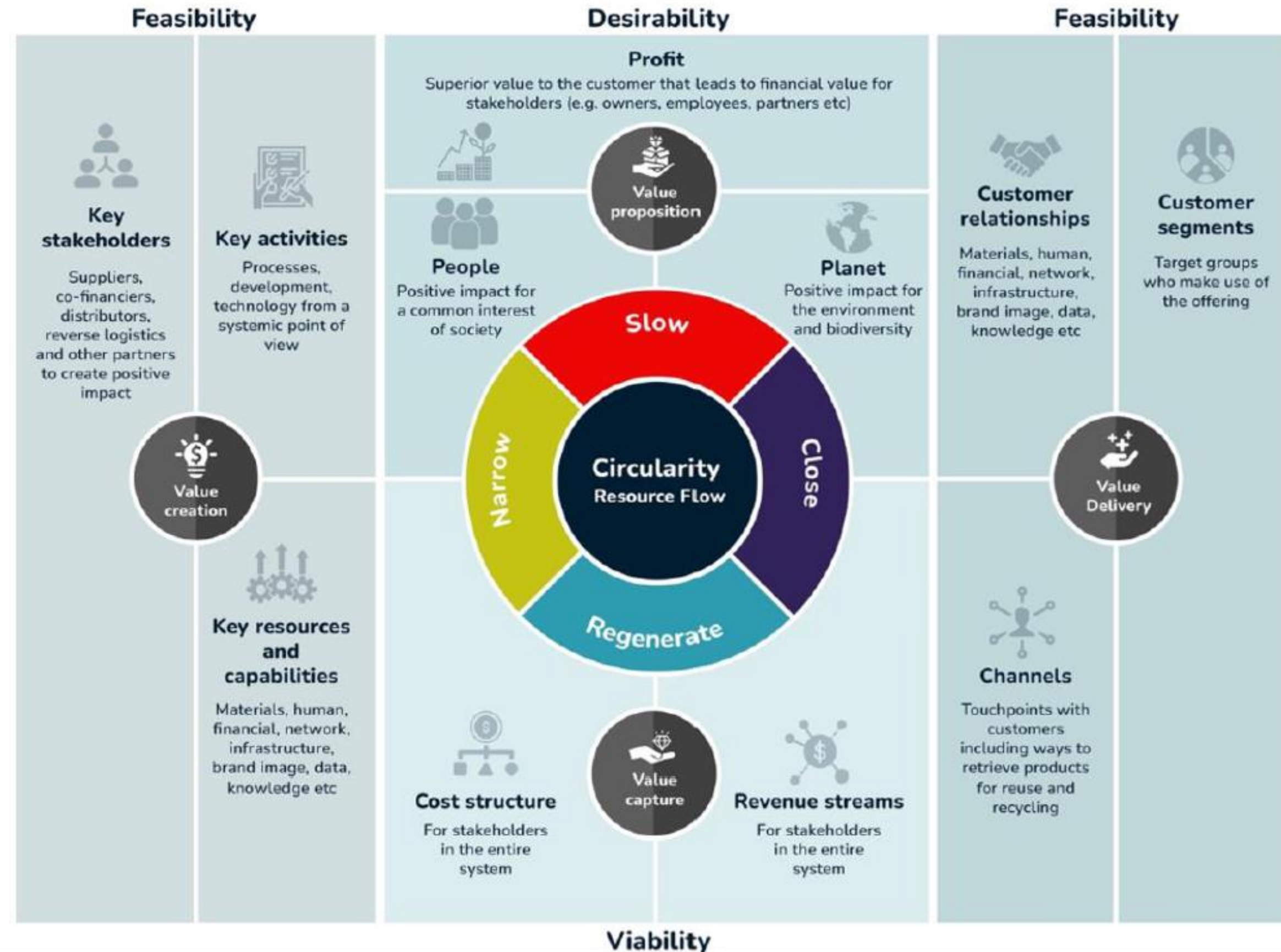


Figure 4. Example cards from the Circularity Deck.





The implementation
of the major focuses
to the business model

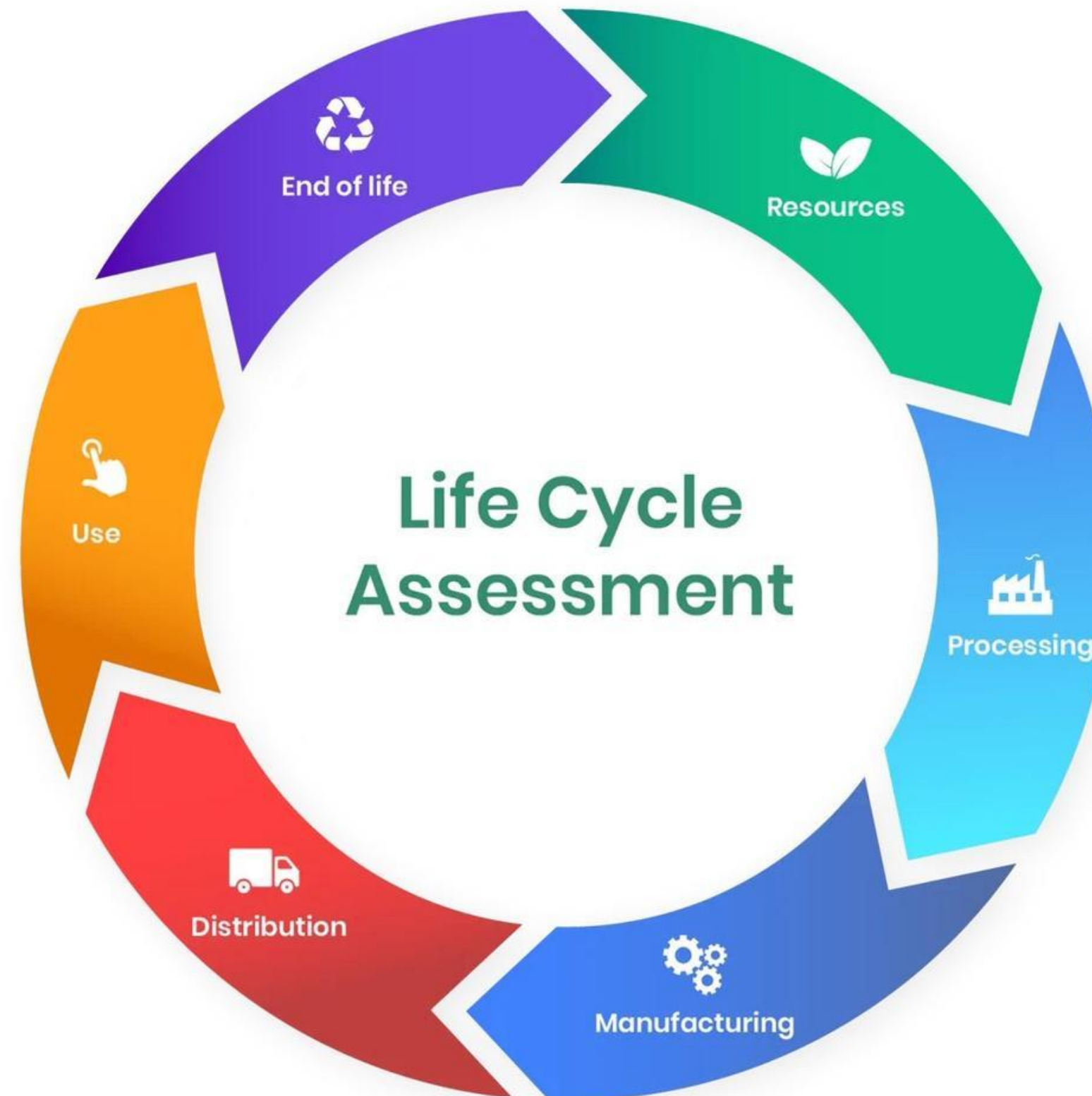


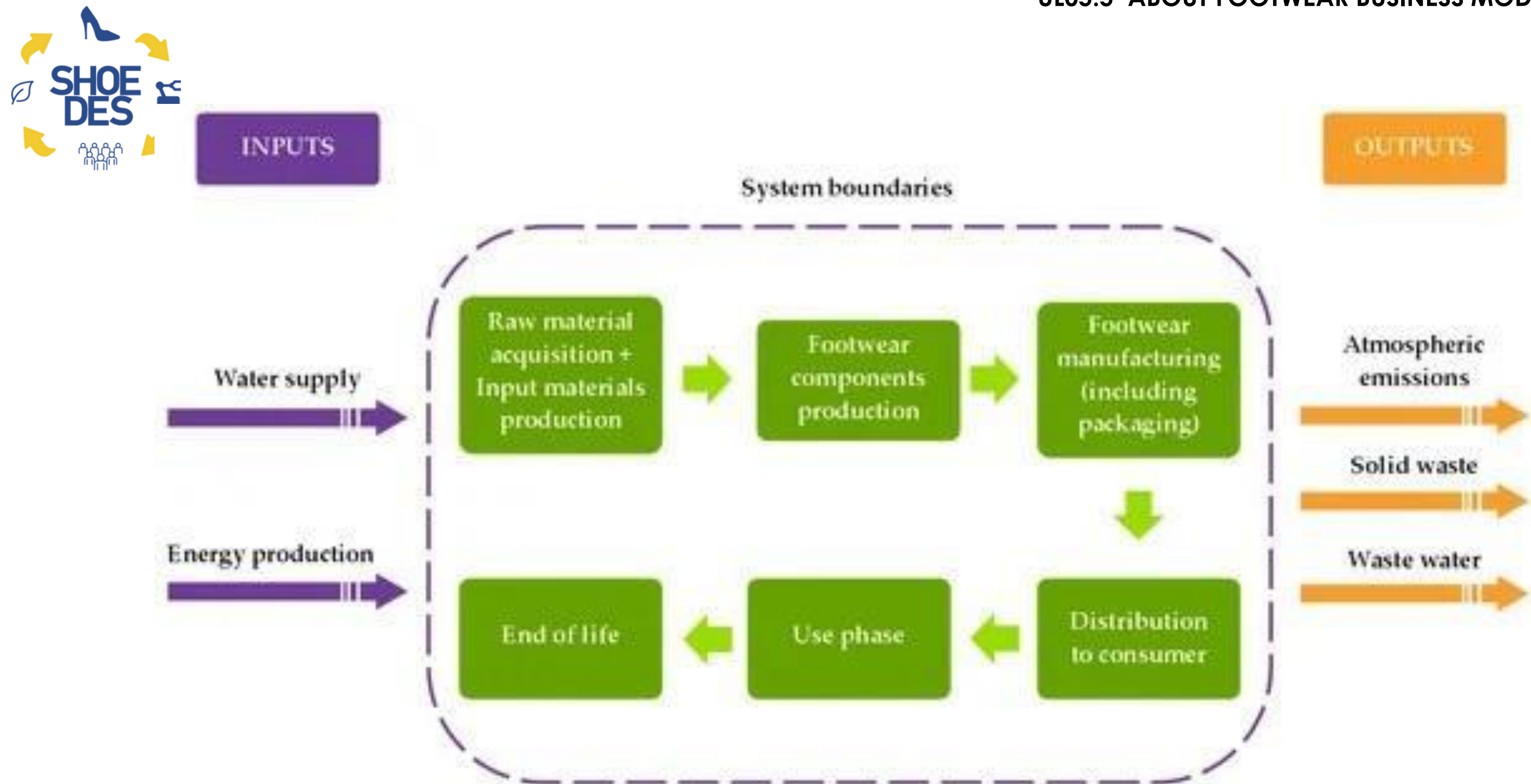
Source : "Circular business model canvas" developed from Osterwalder & Pigneur (2010),

Bocken et al. (2018), Bocken & Geradts (2022), Konietzko et al. (2020)

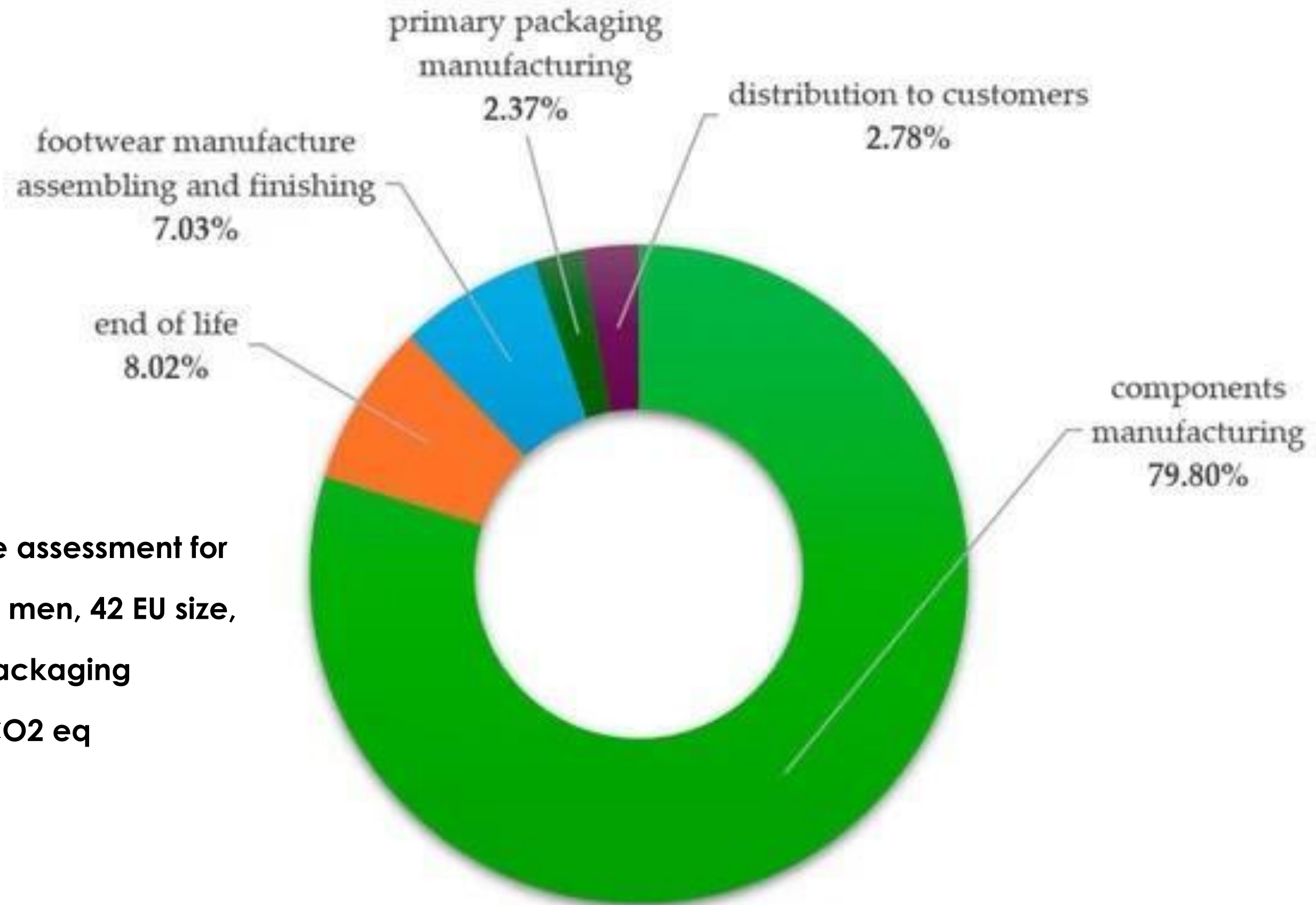


**How to measure the effectiveness
of the business model in terms of
circular economy ?**





Source : Environmental Impact of Footwear Using Life Cycle Assessment—Case Study of Professional Footwear.
Sustainability 2024, 16, 6094. <https://doi.org/10.3390/su16146094>



Example of the life cycle assessment for
a pair of safety boots, for men, 42 EU size,
and its primary packaging
= 18.65 kg of CO₂ eq



<https://miro.com/miroverse/the-circular-rebound-tool/>

The circular rebound tool : a design ideation tool that can guide business designers, entrepreneurs and consultants towards circular business models with lower environmental impact through increasing awareness around rebound effects.



 *Start Here!*

5 mins 



Step 1) Describe your challenge.
What problem do you want to solve?

Goal(s):

Post-it(s)





Step 2.1) Choose the strategy that fits your challenge in the impact scale.

2.2) Look at where you are in the scale. Can you think of ways of moving higher up with your current capacities?
(Goal: to become more aware of the impact scale and explore opportunities higher up)

2.3) Pick one strategy to work on in the next step.





Reuse

What is it? Putting a product through multiple use cycles by multiple consumers, while it retains its original function.

Positive Outcomes: Prolonging use extends product's useful lifetime by slowing the loop.

Capacity Requirements:
Materials: Loop often option to clean & reuseable products between users.
Knowledge: Creating a system that tracks materials where they are deployed in use with the consumers.
Disposal: Removal of option of manufacturing & repairing a damaged product, rather than

Business case:
[]

eg: Loop's clothing rental and resale platform for new-made goods.

Remanufacture

What is it? Reusing a product's parts and materials to create a new product, which is identical to the original and is as good as new.

Positive Outcomes: Prolonging use extends product's useful lifetime by slowing the loop.

Capacity Requirements:
Materials: High-quality system to collect used products.
- Facilities with space for disassembly, cleaning, and with accurate spare parts.
Knowledge: Understanding of how to disassemble and reassemble products to maintain quality & safety.
Disposal: Removal of option of manufacturing & repairing a damaged product, rather than

Business case:
[]

eg: International's clothing rental and resale platform for new-made goods.

Repair

What is it? Repair and maintenance of a product so it can be used with its original function.

Positive Outcomes: Extends product's useful lifetime by slowing the loop.

Capacity Requirements:
Materials: The product's repair parts are available and quality.
- Repair services are offered to the user with the product, or in a nearby location.
Knowledge: The user's knowledge of the product's repair parts.
Disposal: Removal of option of manufacturing & repairing a damaged product, rather than

Business case:
[]

eg: Loop's clothing rental and resale platform for new-made goods.

Recycle

What is it? Processing waste materials into new objects with similar properties to the original product.

Positive Outcomes: Extends product's useful lifetime by slowing the loop.

Capacity Requirements:
Materials: Access to good quality raw materials.
Knowledge: Understanding of how the materials are going to be recycled, and how they will be used in the next product.
- Using more of potential safety hazards in the next product.
Disposal: Removal of option of manufacturing & repairing a damaged product, rather than

Business case:
[]

eg: Loop's clothing rental and resale platform for new-made goods.

Rebound Effects & Solutions

Potential Rebound Effects:
- Customers can treat products more carelessly because of lack of ownership.
- Overproduction may be overestimated, the size of the market or through competition, leading to lots of unsold products (e.g. the Chinese New Year's Eve fireworks in China).
- The resources spent on reverse logistics & materials handling might cancel out environmental gains.

Rebound Prevention Techniques:
- Repair services for the product can help it reuse a sense of ownership.
- Facilities where the product is damaged or repaired.
- The product is not in the hands of the consumer for long, but in the hands of the repairer.
- Quality - Customers can start paying more for better quality products, that last longer and are more durable.
- Start small & test in a few locations first, rather than scaling up too quickly.

Rebound Effects & Solutions

Potential Rebound Effects:
- Can prevent the rebound effect by reducing the impact of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.

Rebound Prevention Techniques:
- The rebound effect is the rebound effect of the rebound effect.
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Rebound Effects & Solutions

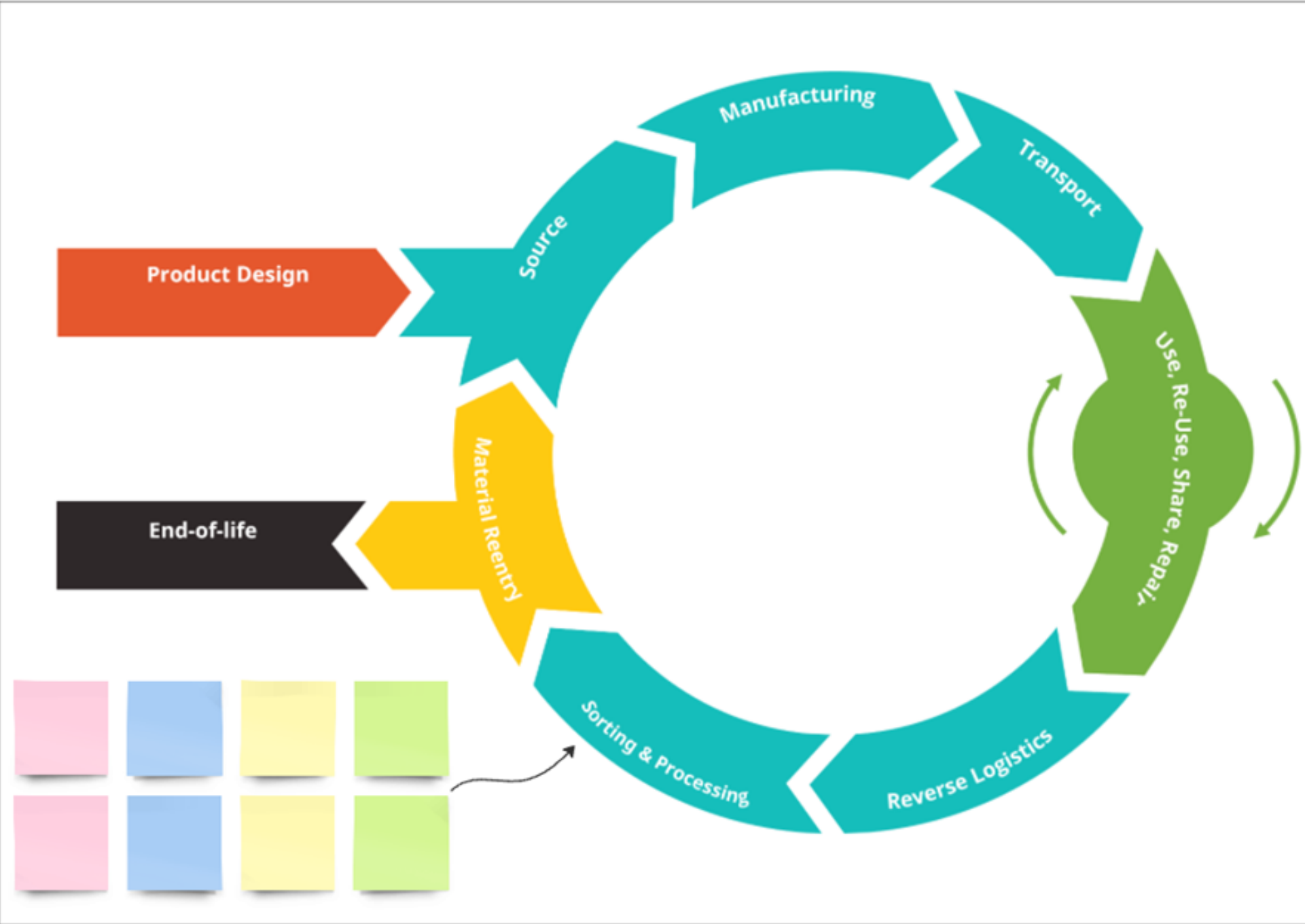
Potential Rebound Effects:
- May perpetuate the rebound effect of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.

Rebound Prevention Techniques:
- The rebound effect is the rebound effect of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.

Rebound Effects & Solutions

Potential Rebound Effects:
- Can be a large rebound effect.
- The rebound effect is the rebound effect of the rebound effect.
- The rebound effect is the rebound effect of the rebound effect.

Rebound Prevention Techniques:
- The rebound effect is the rebound effect of the rebound effect.
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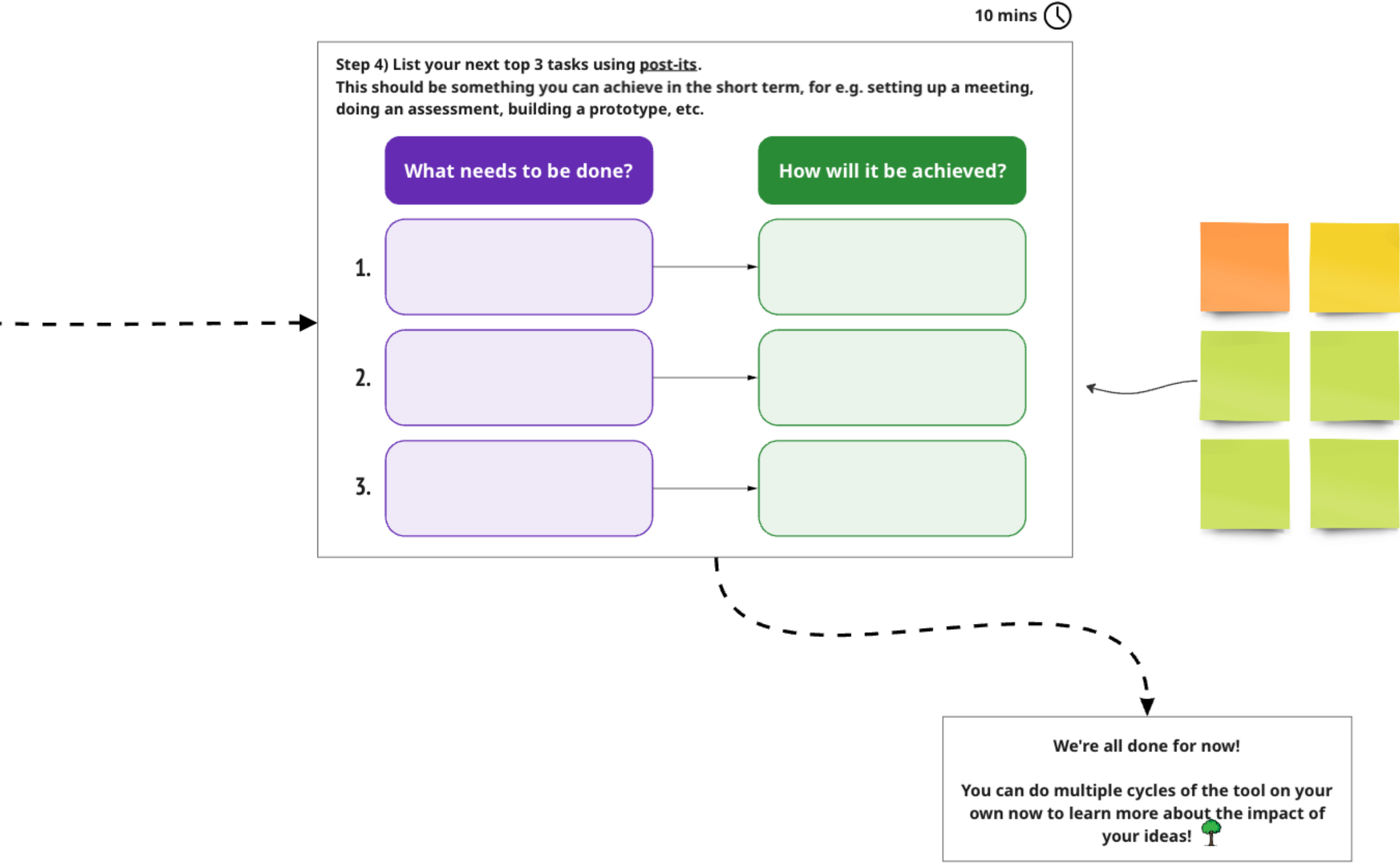
Step 3.1) Place your chosen circular strategy in the box below.

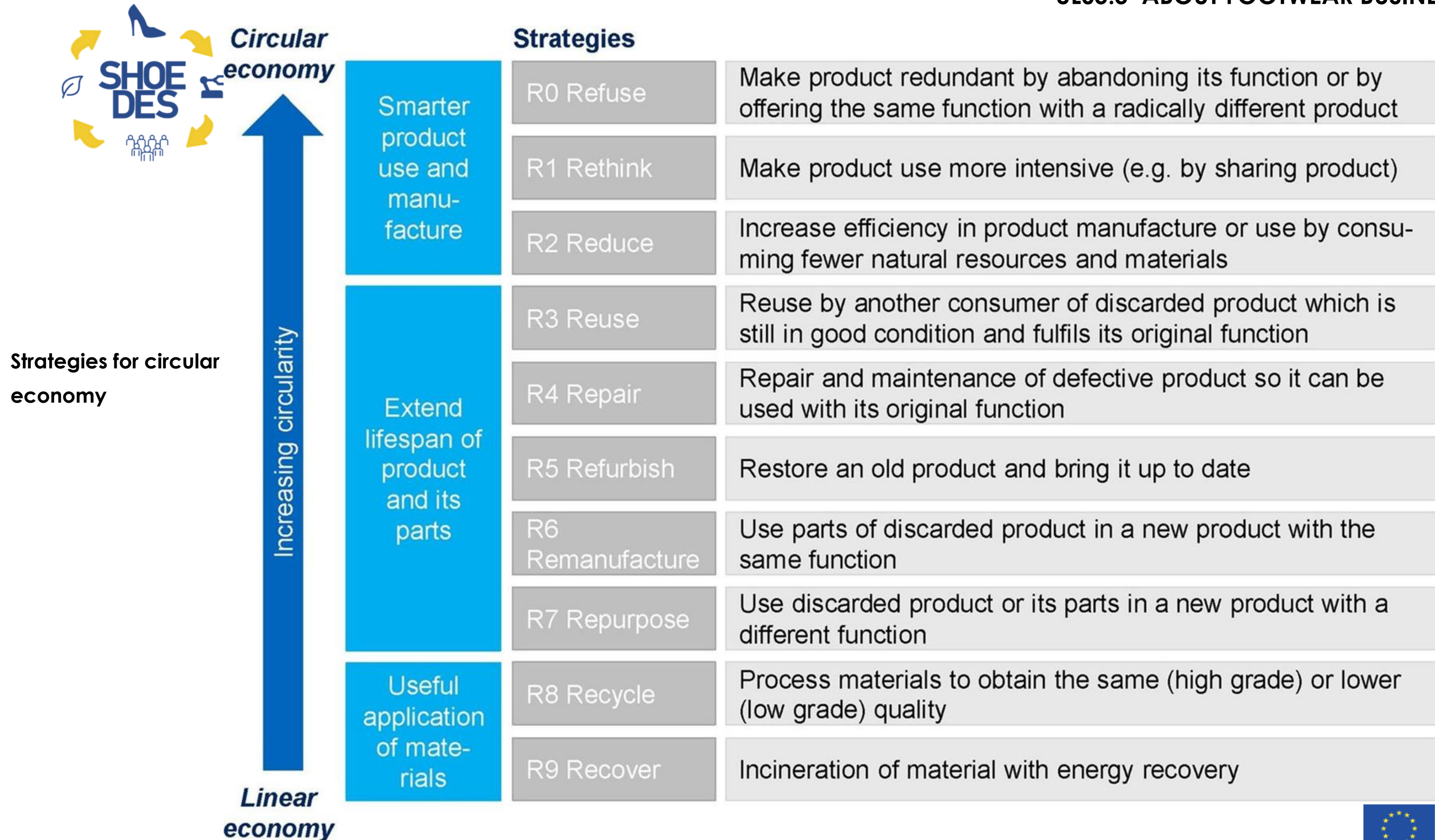


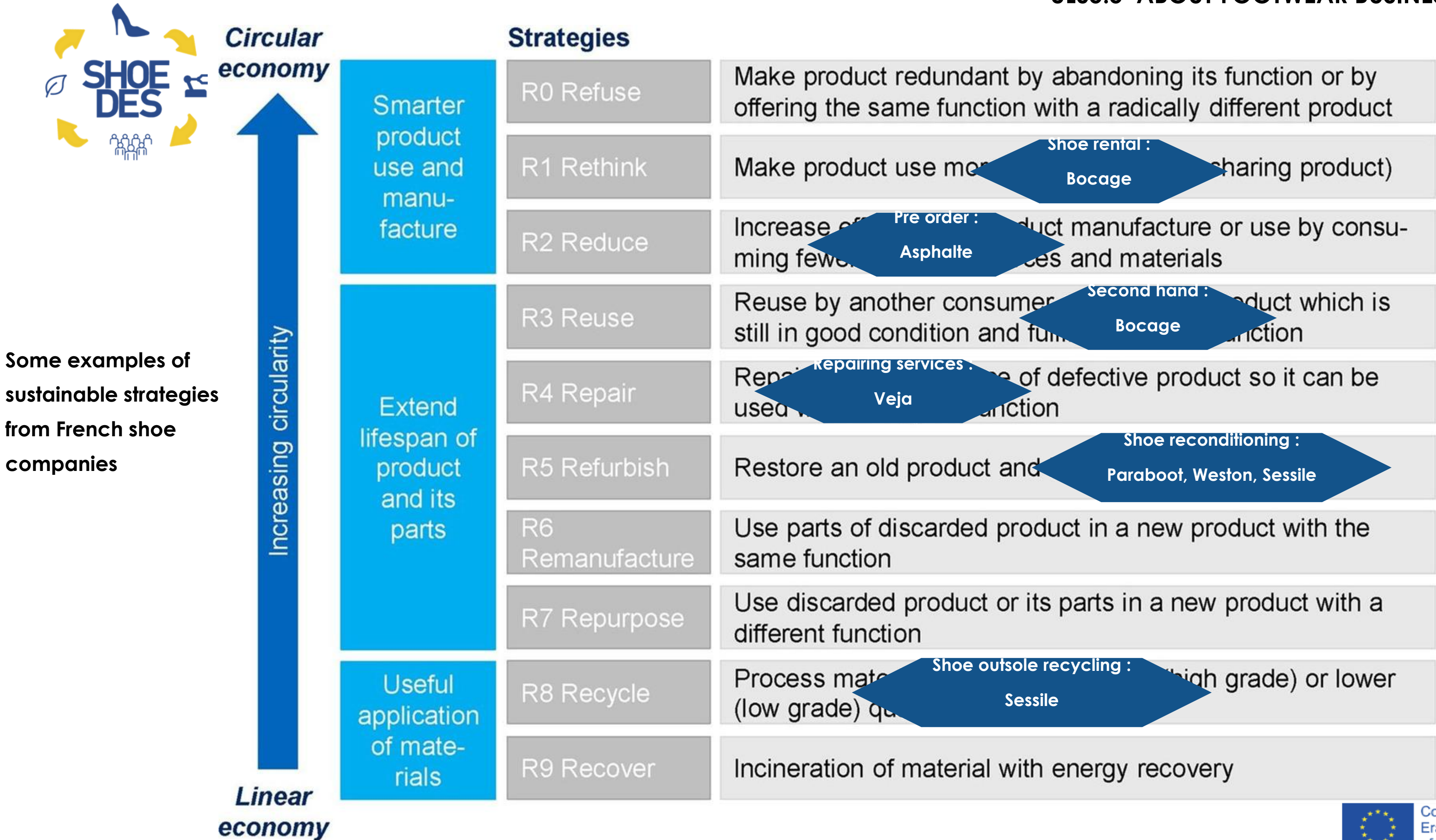
3.2) Using post-its, map out your idea along the entire life-cycle.

3.3) Look at the card with potential rebound effects. Do these rebounds apply to you? How can you solve them? Put your thoughts on a post-it on the life-cycle map

3.4) Move to the next step when you think you have mapped all possible parts of the life-cycle









To help a company launch a **shoe design and sales activity** while integrating the **principles of the circular economy**, with **limited resources** and a **small team** (without a marketing, sales, or communications director), it's essential to adopt a pragmatic and progressive approach. Here's a comprehensive method tailored to the mentioned constraints:

1. Define a clear and responsible value proposition

• Why would customers buy these circular shoes?

→ Comfort, durability, aesthetics, repairability, and reduced environmental impact.

• Highlight differentiating factors: recycled materials, local production, modularity.

2. Simplified circular design approach

Based on the **Circular Rebound Tool** model:

- ✓ Design for **durability**: robust, easily replaceable materials.
- ✓ Design for **repairability**: interchangeable soles, modular parts.
- ✓ Design for **end-of-life**: ease of recycling or reuse.
- 🔍 *Prioritize choices with the greatest impact at the lowest cost.*

📢 3. Low-cost marketing and communication

Without a dedicated team, communication can rely on **high-leverage actions**:

- Build an **engaged community** on targeted social media platforms (*Instagram, TikTok*) with authentic content (behind-the-scenes production, customer testimonials, manufacturing stories).
- Collaborate with **micro-influencers** passionate about environmental issues.
- Use platforms like **Canva** to create visuals without advanced graphic skills.
- Share articles on **LinkedIn** to reach key partners and stakeholders.

🛒 4. Progressive sales strategy

With limited staff:

- **Direct online sales**: Create a simple e-commerce site (e.g., Shopify, Wix) with a small but well-presented product range.
- **Local partnerships**: Work with small shops, concept stores, or local markets to avoid complex logistics.
- **Pre-order campaigns** (via Ulule or Kickstarter) to validate interest and fund production.

🌱 5. Post-purchase follow-up and circularity loop

- Offer a **shoe take-back service** for recycling or refurbishment.
- Provide **accessible repair kits** to extend product lifespan.
- Set up a **newsletter** to foster customer loyalty and share care tips



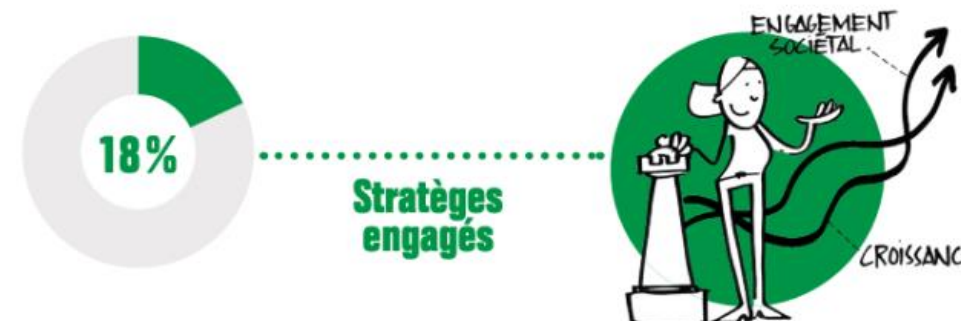
For understaffed and limited resources companies

- Use Generative IA in all activities of your circular project
 - Example hereafter of summarizing the Shoedes result 4 in 3 points
 - **1** Circular Economy in the Footwear Industry
 - - Shift from linear to circular models in footwear production
 - - Focus on durability, repairability, and recyclability
 - - Implementation of international environmental standards (REACH, EU Ecolabel)
 - - Adoption of sustainable materials: organic cotton, recycled PET, bio-based leathers
 - **2** Design & Manufacturing Innovations
 - - Modular designs for easy disassembly and recycling
 - - Use of innovative materials (Piñatex, mushroom leather, recycled rubber)
 - - Techniques: 3D printing, circular knitting, direct digital manufacturing
 - - Example initiatives: Adidas Futurecraft Loop, Nike Grind, Veja sustainable models
 - **3** Market Trends & Consumer Engagement
 - - Growing consumer demand for sustainable footwear
 - - Circular business models: product leasing, take-back programs
 - - Importance of transparent supply chains and traceability
 - - Role of eco-labels and certifications in purchasing decisions
- Generative IA can apply to regulation aspects, computing the impact on the planet, examining fiscal aspects, selecting
- Materials, organizing the production, knowing the different categories of consumers, communicating with them...

UL05.5 ABOUT FOOTWEAR BUSINESS MODELS

Point of attention: There exist different modes of engagement of Managing Teams

- **Procedural Vision of Engagement**
- "Let's optimize processes!"
- - Eco-design
- - Ethical charter
- - Responsible purchasing and production
- **Fragmented Vision of Engagement**
- "Engagement in the service of performance"
- - Regulatory compliance
- - Risk management
- - Environmental management
- **Systemic Vision of Engagement**
- "Impact is at the heart of our model!"
- - Embodied purpose
- - Redesigned business model
- - Ongoing dialogue
- **Opportunistic Vision of Engagement**
- "Improve our image through engagement!"
- - Philanthropy disconnected from the business model
- - Dialogue without impact measurement
- - Green communication
- _Footnote:_
- **Profiling established by Bpifrance Le Lab in 2020**
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- And there exist different Business Leader Profiles**
- - **Primacy of business sustainability:**
 - Preserving the company is the top priority. Ensuring profitability and employment are also essential. Any potential disruption to this balance is considered a risk that must be carefully weighed.
- - **Human and environmental values first:**
 - The pleasure of running a business is not found in growth. Their priorities focus on building a human adventure that respects the environment.
- - **Growth, innovation, and international focus:**
 - They find motivation in growth, innovation, and international expansion, which they need to feel fulfilled. However, they consider environmental and societal issues as peripheral.
- - **Combining strong growth with societal commitments:**
 - They stand out for their openness to the outside world and curiosity, which they draw upon to lead their business.



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