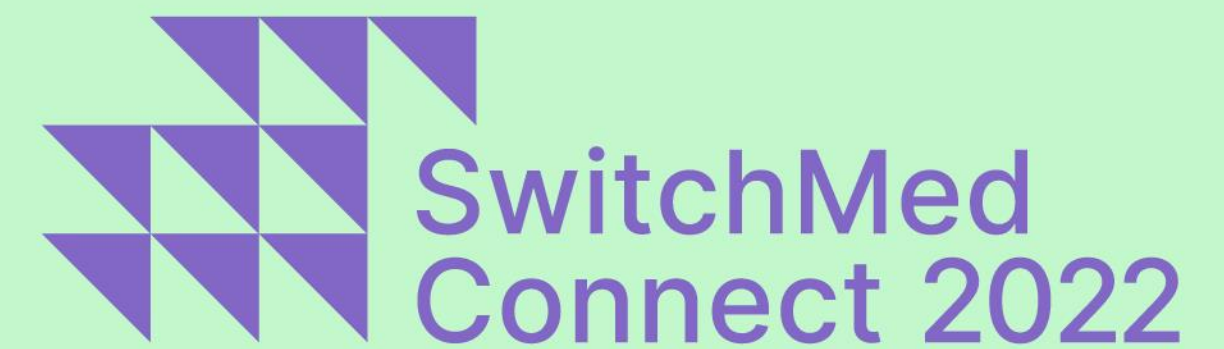


# Circular business opportunities in the south Mediterranean: how can businesses lead the way to sustainable fashion?

November 10, 2022

Ferda Ulutaş İşevi





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**Supervision and coordination:**

Burcu Tunçer and Anna Ibañez de Arolas, SCP/RAC.

**Content prepared by:**

Ferda Ulutaş Işevi and Melis Cengizhan, BCSD Turkey;  
Burcu Tunçer and Anna Ibañez de Arolas, SCP/RAC.

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**For further information, please contact:**

[networking.switchmed@scprac.org](mailto:networking.switchmed@scprac.org) or [aibanez@scprac.org](mailto:aibanez@scprac.org)  
<http://www.scprac.org/>  
<http://www.switchmed.eu>  
<http://www.skdturkiye.org/en>



## South Mediterranean Countries

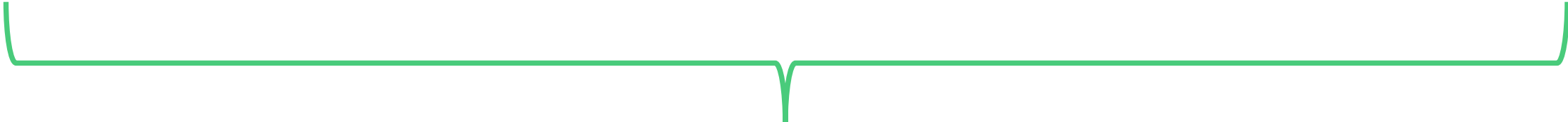
## and Türkiye



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- Value chains, environmental hotspots, international efforts
- Circular economy strategies and business models
- Example cases
- Challenges and opportunities



Businesses, business organizations, experts

# Fashion value chains in the region/ Current consumption/ production patterns

- An important hub for global fashion value chains
- Major exporters to the EU
- Production and supply for international brands and retailer sector
- Ability to respond to client demands and quick changes in production orders, lower costs and strong network for supplies and production
- Although the region is home to the traditions of tailoring and garment repair, etc., fast fashion prevails in production and consumption patterns.
- Younger generations show greater potential for adopting more sustainable forms of dressing and shopping.





# Fashion value chains in the region/ Environmental hotspots

	Productions of fibres and raw materials	Textile manufacturing	Retailing and transport	Consumer use	End-of-life
Land use	Primary				
Water use	Primary	Primary		Primary	
Energy use	Secondary	Secondary	Secondary	Secondary	
Chemicals use	Secondary	Primary		Tertiary	
Emissions to air	Tertiary	Tertiary	Tertiary	Secondary	Primary
Emissions to water	Tertiary	Primary		Primary	
Material waste		Secondary	Primary	Primary	Primary
Biodiversity loss					
Toxic substances	Secondary	Secondary			

- Raw materials: cotton (water, pesticides), synthetic fibers
  - Natural fibre alternatives (hemp, linen)
- Production: water, energy, chemicals use, carbon emissions
- Post-consumption: waste

# Fashion value chains in the region/ International impacts

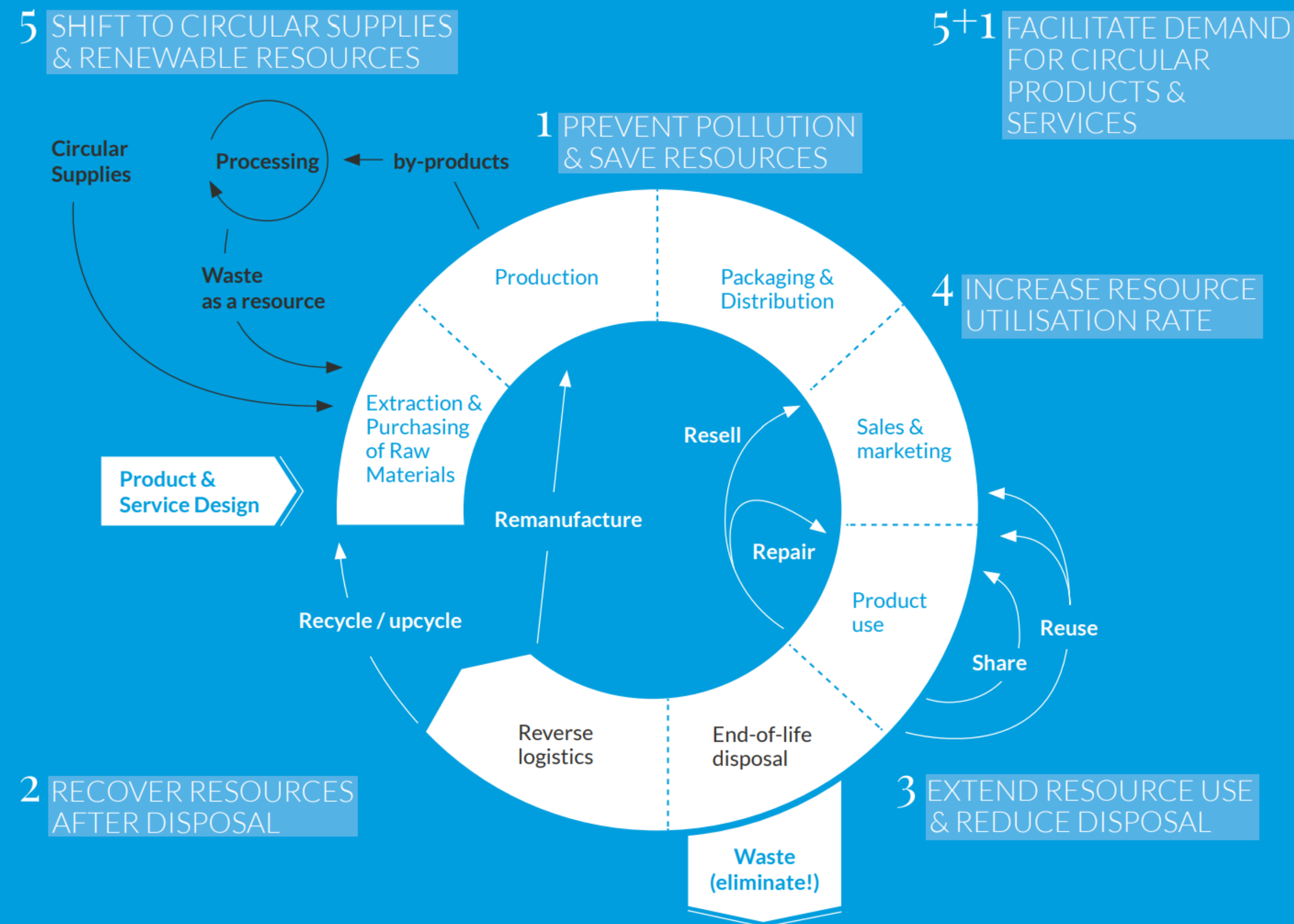
- EU regulations, Circular economy Action Plan, economic instruments, etc.
  - Eco-design directive, right to repair, reuse opportunities, extended producer responsibility
- Private sector initiatives (EMF, Circle Economy, Global Fashion Agenda, etc.)
  - Circular fibres, durability, recyclability, traceability, textile to textile recycling, collaborations, commitments of brands, etc.

Policy instruments		Life cycle stage			
Regulatory Instruments		Extraction of natural resources and sourcing of materials	Manufacturing and packaging	Acquisition & use	End-of-life
		<ul style="list-style-type: none"> <li>The Textile Regulation (EU) No 1007/2011 on fiber names and related labelling and marking of the fiber composition of textile products. This contributes to a common categorisation of textile materials, which will help in the transition to the circular economy</li> </ul>	<ul style="list-style-type: none"> <li>The EU flagship initiative on the garment sector (<a href="#">European Parliament resolution of 27 April 2017</a>) calls on Member States and textile manufacturers to increase funding for research and development, including in the field of clothes</li> </ul>	<ul style="list-style-type: none"> <li>Based on the new Circular Economy Action Plan, requirements will be set for providing consumers with repair and reuse services</li> </ul>	<ul style="list-style-type: none"> <li>The <a href="#">Waste Framework Directive (EU) 2018/851</a> (amending Directive 2008/98/EC) specifically refers to textiles. The directive calls for end-of-waste specific criteria for textiles to be developed and for the introduction of the separate collection of textile wastey</li> </ul>
Organization		Description		Program / Initiative	Program Partners /Core Partners
<a href="#">The Ellen MacArthur Foundation</a>		<ul style="list-style-type: none"> <li>The Ellen MacArthur Foundation is a UK-registered nonprofit organization which works with businesses, the government, and academia to build a framework for every field of the circular economy</li> </ul>		<a href="#">Circular Fibers Initiative</a>	<ul style="list-style-type: none"> <li>Burberry, Inditex, Stella McCartney, HSBC, H&amp;M Group, PVH, Gap Inc.</li> </ul>
				<a href="#">Make Fashion Circular</a>	<ul style="list-style-type: none"> <li>Burberry, Gap Inc., H&amp;M Group, HSBC, PVH, Stella McCartney</li> </ul>
		Program Description			
		<ul style="list-style-type: none"> <li>The initiative drives collaboration between industry leaders and other key stakeholders to create a circular textiles economy. Its ambition is to ensure that clothes are made from safe and renewable materials, that new business models increase their use, and that old clothes are turned into new. It promotes a new system based on circular economy principles</li> </ul>			
		<ul style="list-style-type: none"> <li>Make Fashion Circular, the second phase of the Circular Fibers Initiative, redesigns the fashion industry's operating model to keep safe materials in use. It aims to stimulate the level of collaboration and innovation necessary to create a new textiles economy</li> </ul>			



# Circular business opportunities in fashion industry/ Strategies and business models

## Circular Economy Strategies



- Prevent pollution and save resources
- Recover resources after disposal
- Extend resource use and reduce disposal
- Increase resource utilization rate
- Shift to circular supplies and renewable resources

# Circular business opportunities in fashion industry/ Strategies and business models

## Strategy 1 / Prevent Pollution and Save Resources

Cleaner, Resource-Efficient, and Zero-waste Production

## Strategy 2 / Recover Resources After Disposal

Design for Disassembly, Reassembly, and Recycling

Collection and Recycling

Upcycling

## Strategy 3 / Extend Resource Use and Reduce Disposal

Design for Durability, Long Lasting, and Modularity

Repairing and Upgrading

Reselling

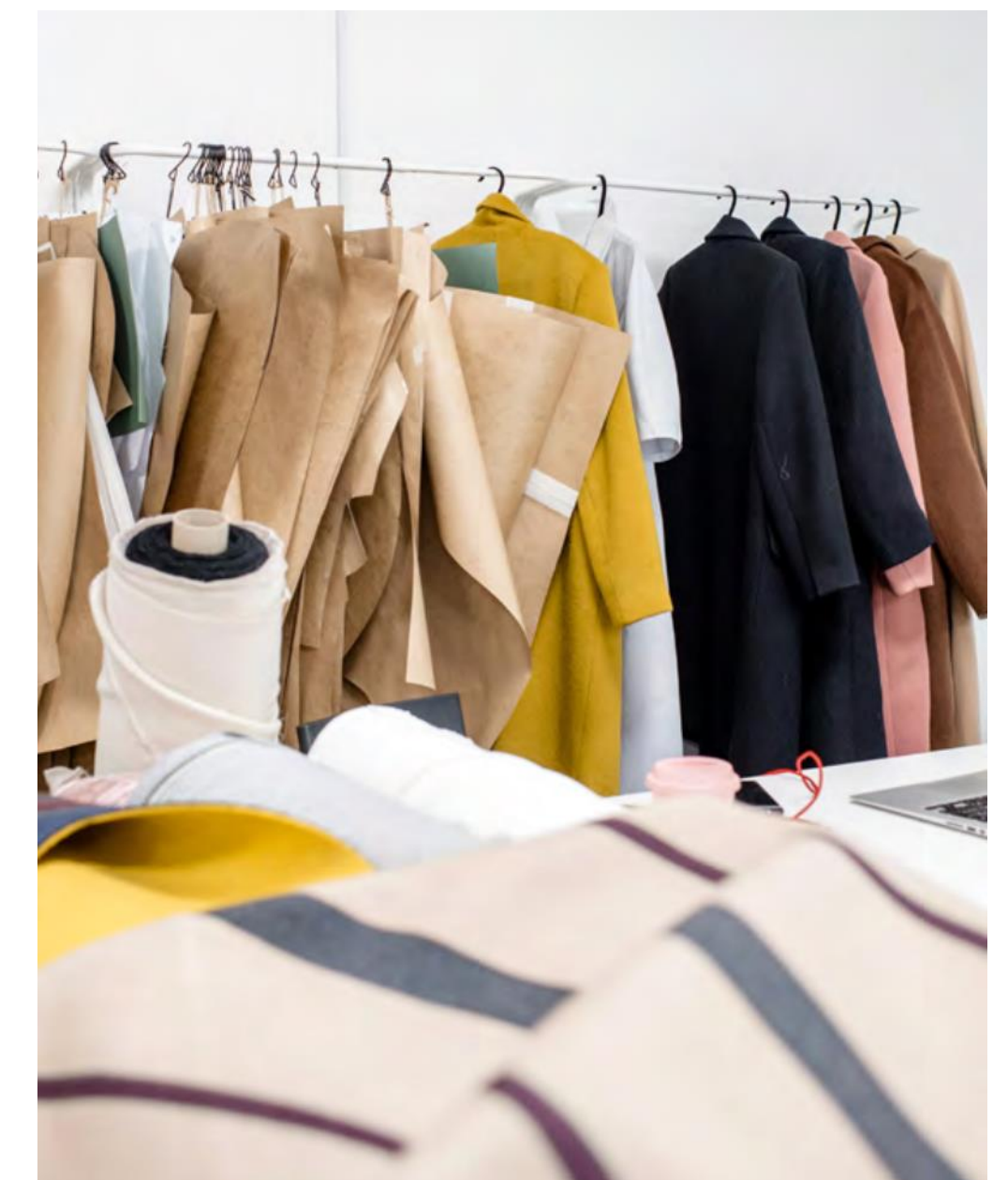
## Strategy 4 / Increase Resource Utilization Rate

Rental/Leasing and Subscription

## Strategy 5 / Shift to Circular Supplies and Renewable Resources

Value Chains Driven by Alternative, Low-Impact Fibers or Recycled Materials

Slow Fashion in Full Control of the Value Chains





# Circular business opportunities in fashion industry/ Business model analyses

- Business model canvas
- Environmental-economic-social impacts
- Reblibility in the region
- Challenges and opportunities

## Potential Impacts



### Economic

- Increase in the demand for recyclable materials
- Expansion of the sustainable garment and accessories market
- Value and savings created through the use of recycled materials and elimination of virgin materials
- Expansion of the garment and accessories collection and recycling sector
- Reduction in costs associated with landfilling and incinerating end-of-life products



### Environmental

- Reduction in the overall environmental impacts stemming from the extraction, processing, and waste management of non-recyclable materials products
- Reduction in the amount of garment and accessories waste landfilled or incinerated
- Improvement in the eco-design and sustainability perspective at both company and value chain levels



### Social

- A safer and cleaner environment for the community
- Job creation and an increase in the demand for sustainable fashion designers
- Job creation in the garment and accessories collection and recycling sectors
- Raised awareness among consumers of eco-designed products

## Business Model Canvas



### Key Partners / Stakeholders

- Raw material (fiber, yarn, fabric, etc.) and chemical suppliers that provide eco-friendly inputs and improve eco-efficiency
- Equipment and machinery suppliers that provide more efficient manufacturing systems and improved services
- Employees that implement and contribute to the cleaner production measures
- Customers (brands&retailers) that collaborate to develop more eco-efficiently produced materials, garments, and accessories
- R&D centers, universities, and consultants that collaboratively conduct the relevant R&D work and projects



### Key Activities

- Conducting cleaner production and energy efficiency audits
- Identifying cleaner production opportunities
- Identifying priority areas through life cycle assessments, material flow analyses, etc.
- Conducting technical and economic feasibility studies
- Developing and implementing cleaner production, energy efficiency and zero-waste action plans
- Purchasing equipment and tools for cleaner production of materials, garments, and accessories
- Monitoring inputs and outputs
- Setting and implementing environmental management systems
- Cooperating with suppliers, consultants,



### Value Propositions

- Provide brands&retailers with more circular and eco-friendly materials or garments and accessories and at reduced prices due to reduced operational costs
- Provide consumers with more circular and eco-efficiently produced garments and accessories, allowing them to reduce the environmental footprint of their fashion purchase practices



### Customer Relationships

- Joint projects and activities with brands&retailers that improve circular and eco-efficiency performance
- Relationships formed during compliance audits and when brands&retailers report their processes
- Stronger relationships with and commitments from brands&retailers
- Relationships with consumers that are more trustful and last longer
- Business-to-business commercial relationships and offline/online points of sale that provide opportunities for CE-related relationships with customers



### Customer Segments

- Brands&retailers that produce/sell more eco-efficiently produced garments and accessories and are engaged with circular and sustainability practices
- Consumers seeking more circular and eco-friendly produced garments and accessories

### Key Resources

- Human resources
- Inputs including internal textile scraps, natural dyes, or low-impact chemicals and other accessories such as zips, buttons, etc. compatible

### Channels

#### For businesses:

- Sales: faire e-business



# Circular business opportunities in fashion industry/ Business model analyses

- Business model canvas
- Environmental-economic-social impacts
- Replicability in the region
- Challenges and opportunities

## Replicability in the South Mediterranean

Pollution prevention and cleaner production programs have been in place in the South Mediterranean countries for more than two decades. They include both UN-supported programs and governmental initiatives. These countries have cleaner production centers or equivalents, helping companies enhance their capacity not only for

cleaner production but also for other relevant concepts that evolve based on the sustainability agenda. The textile (especially its wet processing) and leather industries are among the priority industries due to their high resource consumption and environmental impacts.

### Opportunities and Challenges for Businesses

Companies operating in these sectors in the South Mediterranean countries already have experience in and an understanding of pollution prevention and cleaner production, but there is much untapped potential, especially in terms of shifting to more sustainable inputs and advanced technologies, regardless of the size of the plants. Despite Turkey's developed textile and leather manufacturing industries and extensive processes, there is great potential to build up its cleaner and resource efficient practices. This is also the case for the South Mediterranean countries, mainly Morocco, Jordan, Tunisia, and Egypt, where textile processes are relatively extensive.

The zero-waste campaign<sup>9</sup> recently launched in Turkey is also expected to positively influence all industries, including textile and leather, in terms of pollution prevention and resource efficiency.

### Opportunities and Drivers for Businesses

- Much room for improvement in cleaner and resource-efficient production both in textile and leather industries, especially wet processing facilities
- Expanding international markets for eco-friendly materials and products and the potential of increasing exports thereof
- Supportive legislation and finance opportunities in Turkey (zero-waste regulation, regional development agency supports, etc.)
- Business creation opportunities due to increased demand for expertise, services and supplies for cleaner production
- Opportunity to apply other circular economy strategies once cleaner production capacity and infrastructure improves
- Opportunity to improve company competitiveness and reputation

### Challenges and Barriers for Businesses

- Human resource and external consultancy needed for audits and implementation
- Investments needed especially for new equipment and technologies
- Insufficient R&D and innovation capacity
- Insufficient incentives and financial aids
- Suppliers' limited ability to provide sustainable inputs
- Conventional expectations of customers and challenges in persuading them to use modified materials
- Underdeveloped local markets and demand for eco-friendly products
- Challenges in communicating the value and benefits of cleaner production efforts for customers and consumers

### Opportunities and Challenges for Consumers

Consumers may possibly enjoy reduced prices with according cost reduction achieved during production. They will also enjoy safer and healthier products where particularly hazardous chemical content is eliminated or reduced.

On the other hand, it is a challenge for consumers to differentiate eco-friendly products from others and find the right purchasing channels. In some cases, they may also encounter relatively higher prices for such products, due to the higher price of input materials.



# Circular business opportunities in fashion industry/ Example cases

Strategy 1 -  
Prevent Pollution  
and Save Resources

**Cleaner, Resource-Efficient,  
and Zero-Waste Production**  
Kilim Denim / Textil Santanderina

Strategy 2 -  
Recover Resources  
After Disposal

**Design for Disassembly, Reassembly and Recycling**  
Rakha / Freitag

**Collection and Recycling**  
I:CO (I:Collect) / Deniz Tekstil Grup

**Upcycling**  
Elvis & Kresse / DYR

Strategy 3 -  
Extend Resource Use  
and Reduce Disposal

**Design for Durability, Long Lasting, and Modularity**  
Flavialarocca / Houdini

**Repairing and Upgrading**  
Houdini / E-terzi

**Reselling**  
Thred Up / Tarz2

Strategy 4 -  
Increase Resource  
Utilization Rate

**Rental/Leasing and Subscription**  
Ohlook / MUD Jeans

Strategy 5 -  
Shift to Circular  
Supplies and  
Renewable  
Resources

**Value Chains Driven by Alternative,  
Low-impact Fibers or Recycled Materials**  
Orta / Darwin's Botanicals

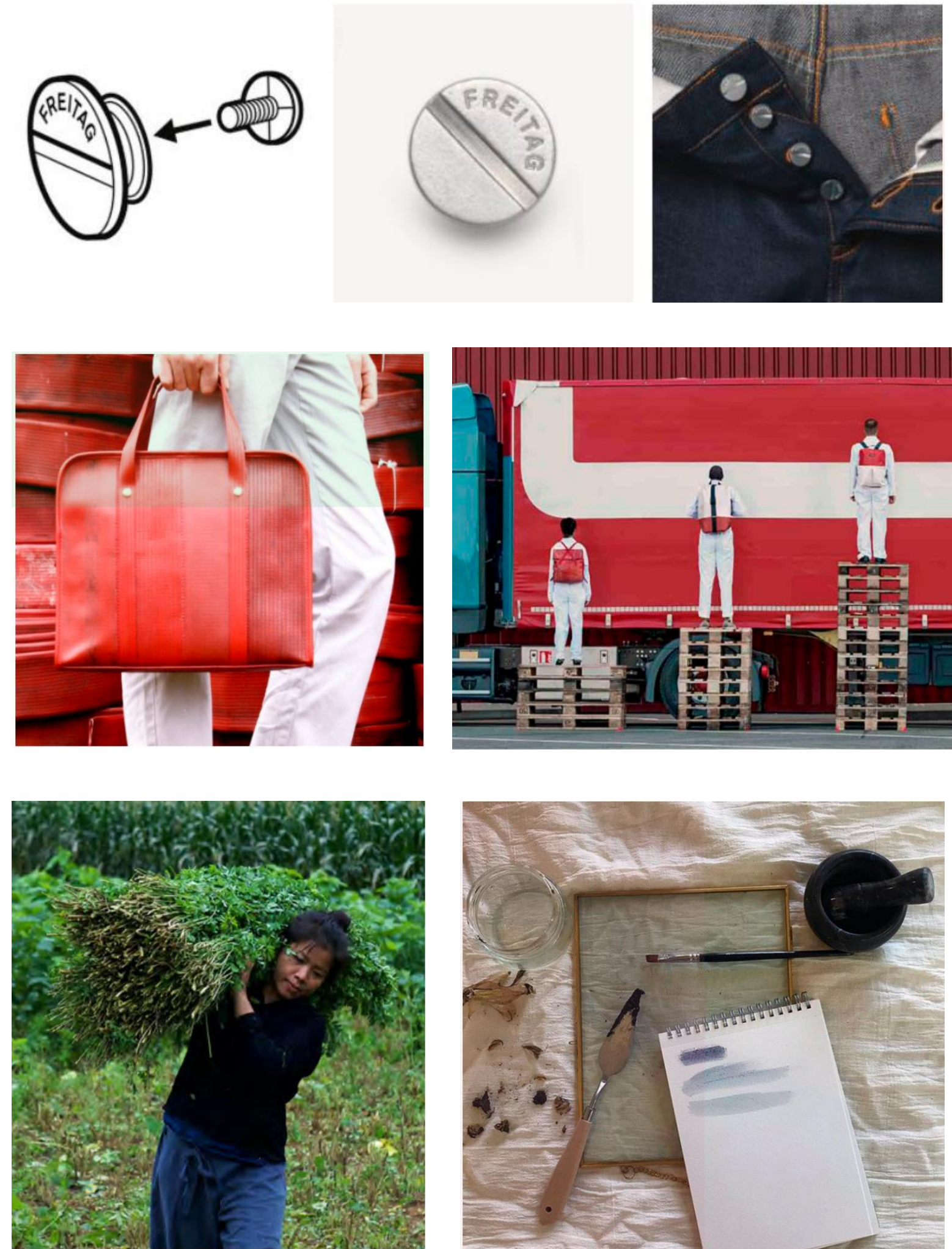
**Slow Fashion with Full Control Over the Value Chains**  
Kilomet109 / One Square Meter





# Circular business opportunities in fashion industry/ Example cases

- Eco-friendly processes and dyes, natural dyes and materials
- Bio-degradable materials, pieces that can be disassembled and reused again
- Modular and flexible product designs
- Organic fibre production ve handmade products through natural production processes
- Repairability and repairing services
- Integrated systems for collecting and recovering post-consumer products
- Production of accessories from post production textile wastes, used fire hoses, truck tarpaulins, discarded bicycle inner tubes and auction banners, etc





# Results/ Challenges and drivers

## CHALLENGES and BARRIERS

### A. Immature local markets, which slow the demand for sustainable products:

growing middle class that want to exercise their purchase power; risks associated with market acceptance, consumer trust and perception, and the dominance of fast fashion habits; requirement of awareness rising, mindset shift and behavior change .

### B. Lack of skills, which slows the circular transition:

Lack of human resource and specific capabilities; capacity needed for eco-design, manufacturing, R&D and innovation.

### C. Supply and demand constraints on sustainable materials, which hinder the offer:

Suppliers' limited ability to provide sustainable inputs on a continuous basis and at stable prices, including inventories of clothes for resale and rental businesses; low interest from garment producers in using alternative materials and in mainstreaming the use of unblended and recycled fabrics.

### D. The need for infrastructure, technology, and investments that prevents the implementation of certain business models:

Insufficient collection-sorting-recycling infrastructures and technologies; investments needed for certain technologies and equipment; requirements for outsourced activities including logistics, maintenance, cleaning etc.

### E. Communication challenges hindering access to markets:

Challenges in communicating the value and benefits of slow fashion, circular design and circular practices and inputs, as well as in communicating the business models.

### F. Limited government support for the creation of circular businesses:

Insufficient incentives, financial aids, and permit and license requirements for the launching of green businesses; lack of regulations for the establishment of the Extended Producer Responsibility.





# Results/ Drivers and opportunities

## DRIVERS and OPPORTUNITIES

### A. Increasing demand for sustainable clothing fostering industry transformation:

Increasing consumer demand for lower-cost and flexible options; increasing interest in resale and rental markets, especially the potential in young people for adopting more sustainable ways to dress and shop.

### B. Mediterranean cultural traits and existing capacities enabling circular production:

Traditions, traditional capabilities and vocations for certain business models; existence of relevant raw materials, infrastructure and similar businesses.

### C. High potential for waste reduction and for obtaining economic benefits:

High amount of industrial wastes available and high costs associated with their management; lower technological needs and lower investment costs for some business models; resiliency against fluctuating material and production costs; possibility of generating additional revenues.

### D. High potential for business/market creation and expansion:

Business creation opportunities due to increased demand for circular expertise, services and products; international brands&retailers' demands and targets for more circular value chains and extended producer responsibilities; potential for creating social businesses.

### E. Increased business competitiveness and reputation:

Opportunity to improve company competitiveness and reputation; creation of competitive advantages.

### F. Policies and programs promoting the transition to a circular economic model:

Increase in new legislation; national and international programs supporting circularity.





# Results/ Business models that can be implemented in the relatively shorter term

- based on existing capacity and infrastructure in the region

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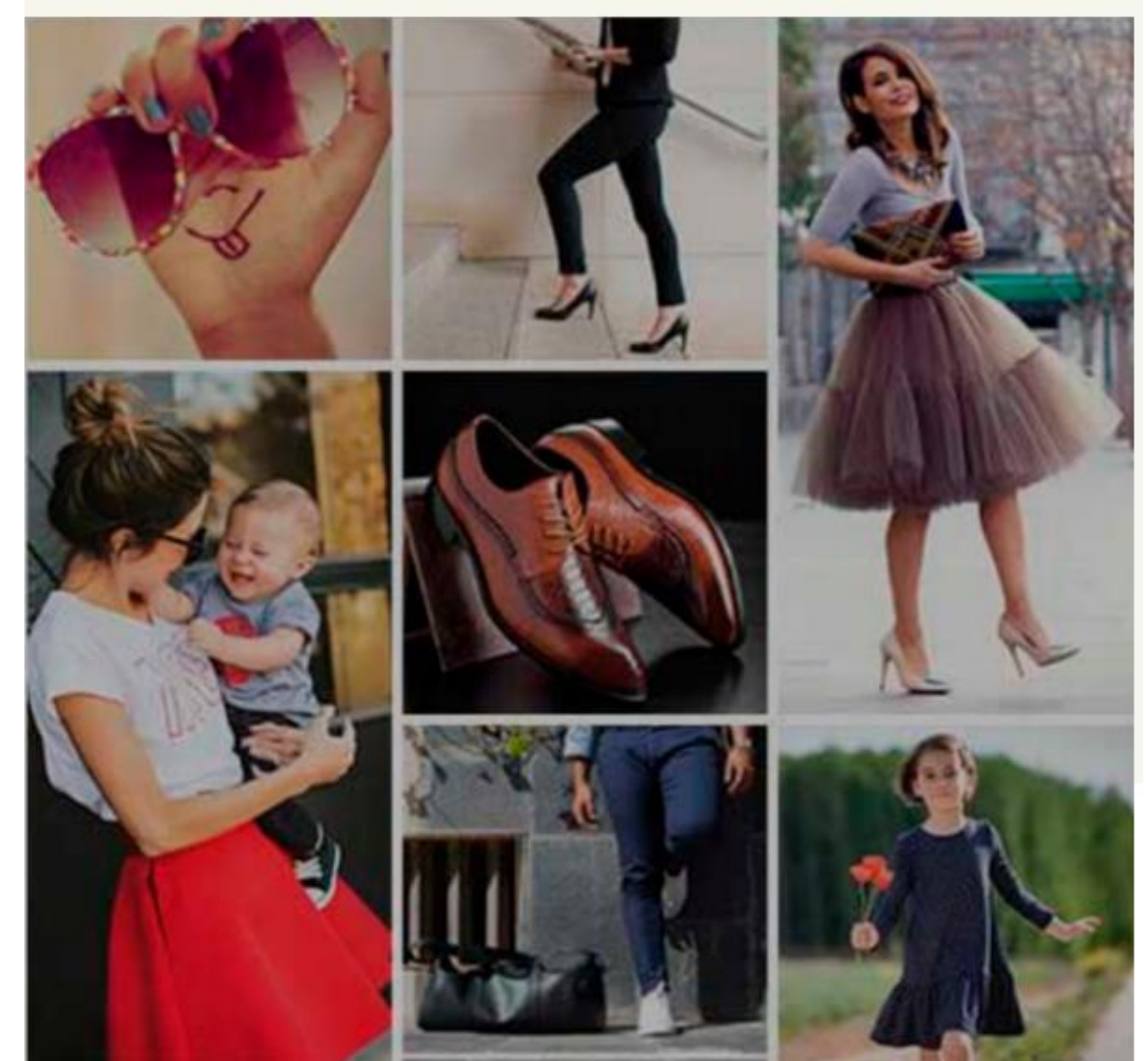
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