



circular economy  
design training  
in the textile and  
footwear industries

# ECO-DESIGN FOR CIRCULAR ECONOMY IN THE TEXTILE AND FASHION INDUSTRIES

E-learning course & E-learning platform

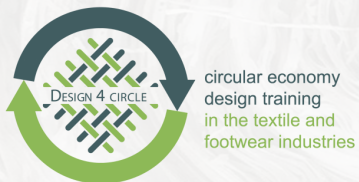


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Programme  
Key action  
Action  
Grant agreement No.

Erasmus+  
Cooperation for innovation and the exchange of good practices  
Strategic Partnerships for vocational education and training  
2018-1-LV01-KA202-046977





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## Project Title

**Innovative design practices for achieving a new textile circular sector**

## Project Acronym

Design4Circle

## Reference Number

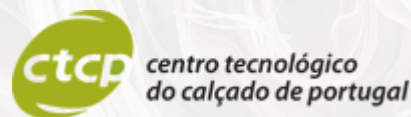
2018-1-LV01-KA202-046977

## Project Duration

01.12.2018 – 28.02.2021

## Project Partners

- RIGA TECHNICAL UNIVERSITY - RTU (Latvia)
- TECHNICAL UNIVERSITY OF IASI - TUIASI (Romania)
- ECORES SPRL - ECORES (Belgium)
- AGRUPACION EMPRESARIAL INNOVADORA DE FABRICANTES DE MUEBLES Y AFINES DE LA REGION DE MURCIA- AMUEBLA (Spain)
- CENTRO TECNOLÓGICO DE CALCADO DE PORTUGAL – CTCP (Portugal)
- TEXTILE TRADE ASSOCIATION - TEXTILE CLUSTER - TTA-TC (Macedonia)



Текстилно Трговско Здружение - Текстилен Кластер - Македонија  
Textile Trade Association - Textile Cluster - Macedonia





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# General details



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## Why?

- A new textiles economy highlights design as strategic action towards a circular textile sector, considering that designing and producing clothes of higher quality and providing access to them via new business models would help shift the perception of clothing from being a disposable item to being a durable product.
- The Circular Economy points that the transition to a circular economy will also require a qualified workforce with specific and sometimes new skills. If the right skills at all levels are to be developed, they will have to be espoused by the education and training systems.



## So...

- To get new competencies, knowledge and skills in the field of eco-design and eco-innovation to thrive in a circular economy we advise you to enroll to the «**ECO-DESIGN FOR CIRCULAR ECONOMY IN THE TEXTILE AND FASHION INDUSTRIES**» course.
- Even if the course is focused on eco-design and eco-innovation for textile and fashion industries, it will also be a benefit for other sectors, as the modules regarding basic principles of the circular economy, circular businesses models, or eco-design could cover knowledge gaps of other sectors. The course is designed to inform about ethical challenges arising in business and help the learners to identify and manage difficult ethical dilemmas they are likely to encounter in their career.



## Keypoints

- This course is harmonized to the European Qualification Framework and facilitates the validation of the training in all EU countries.  
Reference Qualification: Expert in an eco-design for circular economy in the textile and fashion industries  
EQF Level: 5
- You can get knowledge, necessary competencies and skills to implement new practices on eco-design in the textile and fashion industry.
- You acquire knowledge about the new type of business, the circular one, and how to create new textile design companies.
- You will get specific, basic and transversal competencies and skills, management, entrepreneurship, leadership, digital and creative skills, and language competence in the field of Vocational Education and Training (VET).
- You can cooperate and exchange experiences among entities from different fields and perspectives (Universities, sector experts, textile and fashion area, business associations, etc.), and among people with different profiles (VET trainers, managers and other categories of employee, entrepreneurs, teachers), and even different countries.
- You will have access to the training material developed on specific subjects related to circular economy principles for the textile and fashion industry (e-learning platform): a design for a circular model in the fashion and textile sector, entrepreneurship and transversal eco-innovation training.



## Who can attend?

- An employee from the textile and fashion industry (who is working either in the design or manufacturing sector)
- Managers of textiles and fashion companies
- Students who attend courses in the field of Textile and Design Apparel Goods





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# Course details



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Course title

## **Eco-design for circular economy in the textile and fashion industries**

Code	Title of the Learning Module	Hours	Self-study hours	ECVET points
MODULE 1	Introduction to circular economy	6	6	2
MODULE 2	Sustainability challenges in the textile and fashion industry	10	10	4
MODULE 3	Materials for a circular economy	8	8	3
MODULE 4	Design for a circular economy	14	14	6
MODULE 5	Manufacture for a circular economy	8	8	3
MODULE 6	Recycling technologies for a circular economy in a textile and fashion industry	10	10	4
MODULE 7	Business management in a circular economy	14	14	6
	<b>TOTAL</b>	<b>70</b>	<b>70</b>	<b>28</b>



Course title

## **Eco-design for circular economy in the textile and fashion industries**

- **Teaching methods for achieving learning outcomes**

This course is delivered as a non-formal training. The students/learners must study the e-courses (available on the Digital Platform) regarding the principles, concept, benefits of Circular Economy, its current barriers, which are the requisites for the implementation of Circular Economy (CE), the position of CE within the sustainable development concept.

- **Learning resources**

- PowerPoint presentations for each specific subject (up-loaded on the platform)
- examples of best practices/ online video presentations
- a list with references
- a list with additional resources

- **Assessment**

Quizzes assess the level of knowledge acquired by the student/ learner. Quiz answers can take different forms, from short response to true/false and multiple choice. Digitally designed quizzes, question order and options can be randomized, so each student's quiz is unique.

- **Course evaluation**

At the end of each module it is necessary to pass a test with an 80% score to be able to get the Design4Circle training certificate. Tests will only be available to registered users.



## Modules are suitable for different categories or groups of the trainees

Target group	Suitable modules	Titles of the modules
<b>A trainee from the Fashion Sector/ Students from Design, Textile and Fashion Study Program</b>	M1	Introduction to circular economy
	M2	Sustainability challenges in the textile and fashion industry
	M3	Materials for a circular economy
	M4	Design for a circular economy
	M5	Manufacture for a circular economy
	M6	Recycling technologies for a circular economy of textiles and fashion industry
	M7-advisable	Business management in a circular economy
<b>A trainee from the manufacturing sector</b>	M1	Introduction to circular economy
	M2	Sustainability challenges in the textile and fashion industry (without unit 2.2)
	M5	Manufacture for a circular economy
	M6	Recycling technologies for a circular economy of textiles and fashion industry
	M7	Business management in a circular economy
<b>Manager</b>	M1	Introduction to circular economy
	M2	Sustainability challenges in the textile and fashion industry
	M3-optional	Materials for a circular economy
	M4-optional	Design for a circular economy
	M5	Manufacture for a circular economy
	M6	Recycling technologies for a circular economy of textiles and fashion industry
	M7	Business management in a circular economy





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# Modules information



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# Module 1:

## Introduction to Circular Economy



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## Module 1:

# **Introduction to Circular Economy**

- Module 1 introduces the general body of knowledge related to circular economy thinking, starting with limitations of the current linear system. The modules introduce definitions, principles and strategies of circular economy. It presents the concept and its associated vocabulary. It also frames Circular economy within EU legislations and national action plans.
- **Content**
  - UNIT 1.1 **Introduction to circular economy**
  - UNIT 1.2 **Concept and principles of a circular economy**
  - UNIT 1.3 **Policies supporting Circular Economy**



## **UNIT 1.1 Introduction to circular economy**

### **Contents**

- Limits of our current economic system
- Rationale behind the Circular Economy
- Benefits of a Circular Economy
- Barriers preventing Circular Economy

### **Learning outcomes**

- Understand the limits of the current linear economy.
- Understand the purpose of CE, and the rationale for applying the principles of Circular Economy.
- Understand the benefits of CE.
- Understand the current barriers associated with CE.



Source: Unsplash



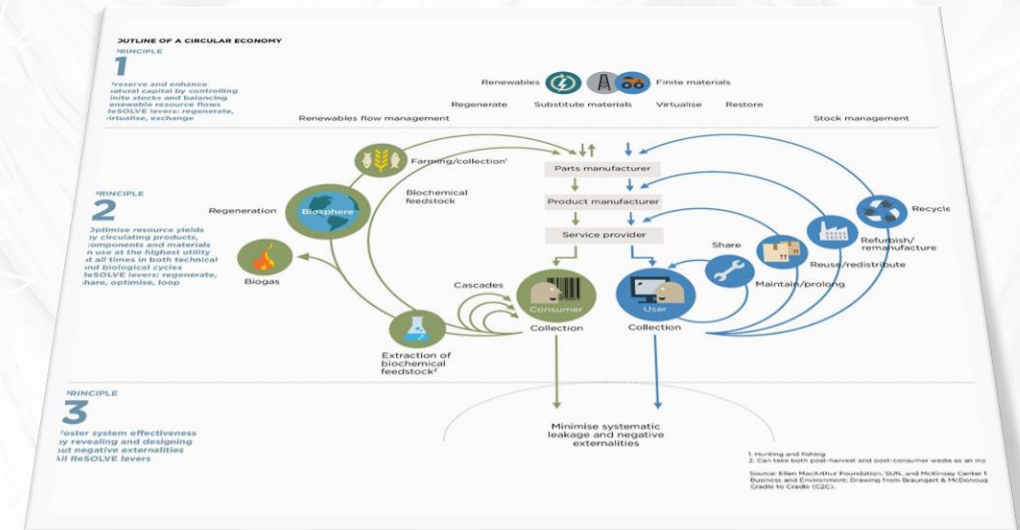
## UNIT 1.2 Concepts and principles of a circular economy

### Contents

- Definition and principles of Circular Economy
- Methods and schools of thought to apply Circular Economy
- General principles of Circular Fashion

### Learning outcomes

- Have a clear understanding of the concept of CE, its historical development, its definitions, its principles.
- Know key examples of CE in practice.



Source: Ellen Mac Arthur foundation



## **UNIT 1.3 Current state of policies addressing Circular Economy**

### **Contents**

- Policy documents related to the implementation of Circular economy

### **Learning outcomes**

- Understand the general EU framework related to the implementation of Circular Economy.
- Being able to position CE within the sustainable development concept.



Source: EC



## **Module 2:**

# Sustainability Challenges in Textile and Fashion Industry





## Module 2:

# **Sustainability Challenges in Textile and Fashion Industry**

- Module 2 clarifies how the CE paradigm is answering sustainability challenges in the textile and fashion industry. It introduces tools and methods to monitor and manage the environmental and social impacts of companies active in the sector.

- **Content**

UNIT 2.1 **Alarming trends in textile and fashion industry in terms of environmental issues and negative social impact**

UNIT 2.2 **People Health and Safety**

UNIT 2.3 **Waste, package and environmental footprint according to the EU regulations**

UNIT 2.4 **Ethical production**

- **Learning outcomes**

By the end of Module 2, learners will understand:

- the existing situation and challenges in the textile industry in EU and worldwide,
- natural and technical cycles of matter and energy,
- impact of CE to people health and safety,
- how to supervise environmental practices of companies in order to comply with national and EU regulations,
- how to apply critical success actions and best practices in CSR on key topics and how to optimize the use of resources by circulating products and materials.



## **Unit 2.1 Alarming trends in textile and fashion industry in terms of environmental issues and negative social impact**

### **Contents**

- The most alarming trends in textile and fashion industry, including, fast fashion, forced labour, human trafficking, «sweatshops» and child labour.
- Wages of textile and fashion industry around the world.
- Environmental impact of leather industry.
- Good examples, practices and initiatives are given to help people evaluate their clothing choices.



Source: <https://www.fairtrade.org.uk/Media-Centre/Blog/2017/April/What-do-you-know-about-modern-slavery-in-fashion>



## **Unit 2.2 People Health and Safety**

### **Contents**

- Textile and fashion industry's supply chain is long, complicated and it lacks transparency. Estimated 300 million people are employed in the process of converting fiber into complete textile product, that is why this unit is concentrating on those people and shows different threats that employees face.
- Suggestions to help improve safety and health conditions in the industry.



Source: <https://www.travelmaxwellscott.com/uncategorised/seed-to-self/>



## Unit 2.3 Waste, package and environmental footprint according to the EU regulations

### Contents

- According to the Pulse of Fashion Report 2017 and Common Objective calculations 39 million tons of textile waste is generated annually at the post-consumer stage, 57% of which end up in landfill, 25% are incinerated and only 18% are recycled or re-used.
- Unit shows statistics and data about waste and packaging and environmental footprint of the industry, also talks about circular economy action plan, textile regulation, landfill directive, Sustainable development goals and other necessary things for achieving a greener industry.



Source: <http://www.sjfzxm.com/global/en/543298.html>



## **Unit 2.4 Ethical production**

### **Contents**

- Ethical production/manufacturing is a holistic approach to the production/manufacturing process that is focused on good health and fair treatment (in terms of working conditions and payment) for all involved parties, considering human rights, animal welfare and environmental impact throughout the supply chain (from design to sourcing, manufacturing, retail and consumption).
- Unit shows what ethical production means, organizations, movements and initiatives that are for ethical production and good practices from the brands.



Characteristics of ethical production





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# Module 3:

## Materials for a Circular Economy



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## Module 3: **Materials for a Circular Economy**

- Module 3 defines sustainable textile and fashion materials, their processing and finishing, analyses the influence of the production processes of fibers, yarns, fabrics to environment, determines the types of textiles that can be recycled, and analyses the properties of recycled fibers and their products.
- **Content**
  - UNIT 3.1 **Sustainable textile and non-textile materials**
  - UNIT 3.2 **Textile waste as raw material for upcycling**
  - UNIT 3.3 **Recycled textiles**



## **Unit 3.1 Sustainable textile and non-textile materials**

### **Contents**

- Sustainable natural (cotton, bast, wool, silk) fiber production
- Sustainable production of regenerated cellulosic fibres
- Sustainable synthetic fiber production
- Sustainable chemical technologies for textile
- Low impact materials – non-textile materials

### **Learning outcomes**

#### **Gain knowledge of:**

- Sustainable production processes for natural and man-made fibers
- Clean technologies and advanced techniques for textile chemical processing
- Non-conventional fibers and non-textiles from renewable resources, and their applications

#### **Gain skills in:**

- Telling the difference between conventional and sustainable fibers in terms of quality and specifications
- Choosing eco-friendly/sustainable processes for textile production
- Implementing sustainable technologies and materials for textile chemical processing
- Developing novel products with specific applications from non-conventional fibers and non-textile materials



## Unit 3.2 Textile waste as raw material for upcycling

### Contents

- Garment production waste materials
- Reuse of already worn garment materials

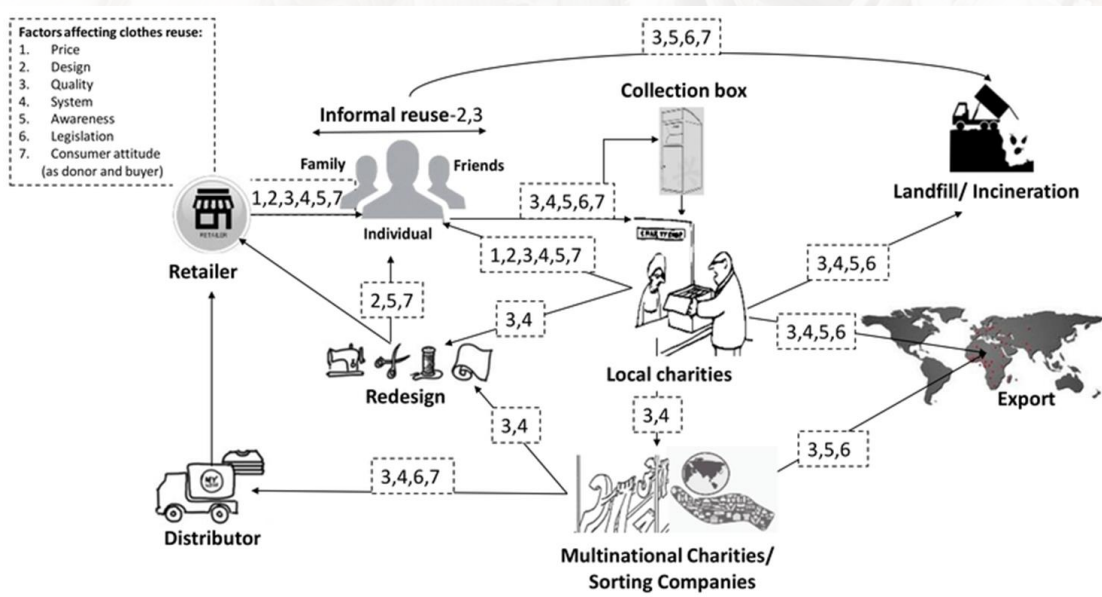
### Learning outcomes

#### Gain knowledge of:

- Sources of waste materials in the textile and fashion industry, grouped in pre-consumer and post-consumer textile waste
- Management of textile waste
- Criteria for garments waste sorting
- Waste management for a circular business

#### Gain skills in:

- Implementing criteria of sorting textile waste to identify the suitable path of recovery
- Knowing the benefits of choosing the textile waste as raw materials
- Re-use techniques of already wore garment materials



Source: [https://www.researchgate.net/figure/Model-of-the-reuse-based-clothing-value-chain\\_fig2\\_324514027](https://www.researchgate.net/figure/Model-of-the-reuse-based-clothing-value-chain_fig2_324514027)



## Unit 3.3 Recycled textiles

### Contents

- Recycled fibre
- Recycled fiber yarn, woven and knitted fabrics
- Recycled non-woven fabrics
- Recycled fiber application in technical textiles

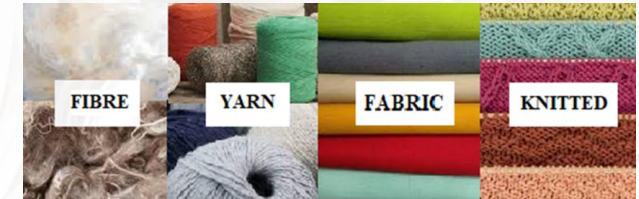
### Learning outcomes

#### Gain knowledge of:

- Sustainable production processes of recycled fibers, fiber yarns, woven, non-woven, knitted fabrics
- Properties and advantages and of recycled fibers, fiber yarn, woven, knitted and non-woven fabrics
- Recycled fiber applications in technical textiles

#### Gain skills in:

- Choosing sustainable processes for recycled fibers
- Implementing sustainable technologies and materials for recycled fibers
- Developing recycled fiber applications for technical textiles
- Unconventional textile materials from recycled fibers



Source: <http://www.moodle.tex.tuiasi.ro/> Liliana Hristian Ingineria Textilelor Tehnice.tuiasi.ro/



Source: <http://www.moodle.tex.tuiasi.ro/> Liliana Hristian Ingineria Textilelor Tehnice.tuiasi.ro/





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# Module 4:

## Design for a Circular Economy



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## Module 4: **Design for a Circular Economy**

- Module 4 pays attention on understanding the product life cycle, eco-design fundamentals and principles of circular fashion.

- **Content**

UNIT 4.1 **Products life cycle, eco-design fundamentals and principles of circular fashion**

UNIT 4.2 **Eco-design principles in fashion and textile industry**

- **Learning outcomes**

By the end of Module 4 learners will be able

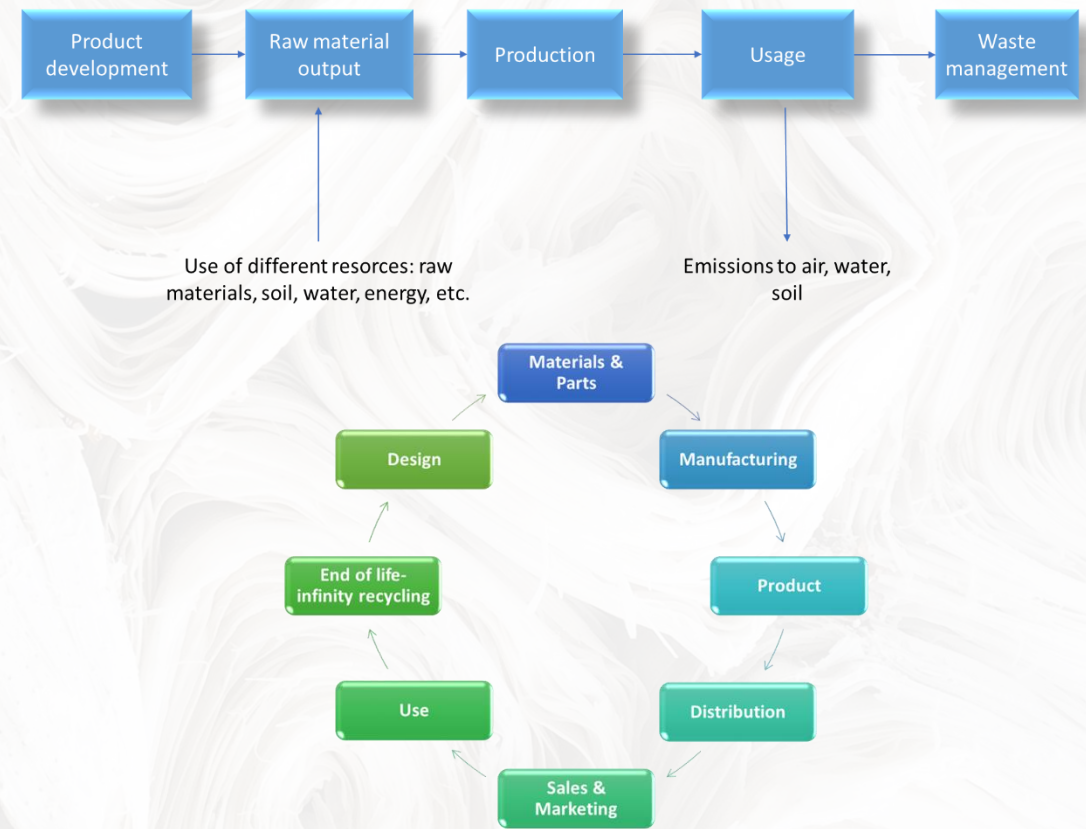
- to understand the product life cycle, eco-design fundamentals and principles of circular fashion,
- to promote an “environment friendly” view toward the entire lifecycle of the product,
- to understand the principles of zero waste design,
- to create the products using principles of the eco-design and circularity.



## Unit 4.1 Products life cycle, eco-design fundamentals and principles of circular fashion

### Contents

- Unit represents products life cycle and Eco design fundamentals in every step of it, starting from the product development or design and finishing at the end of product life
- Unit also gives an insight into statistics and barriers of circular fashion



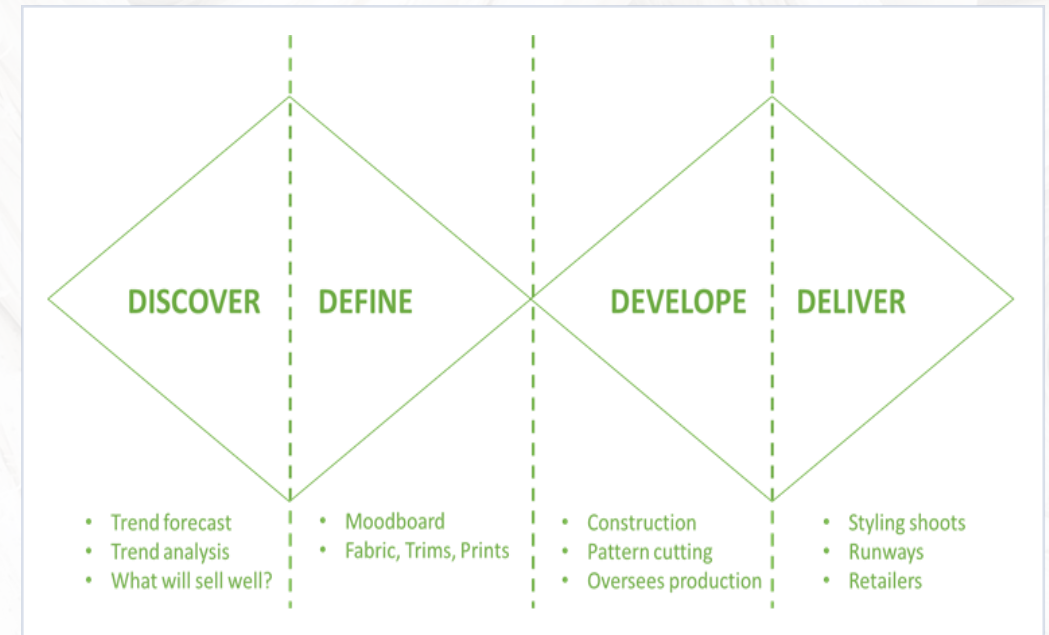
Source: <https://sustainabilityguide.eu/ecodesign/>



## **Unit 4.2 Eco-design principles in fashion and textile industry**

### **Contents**

- Unit gives an insight into lot of different ways key principles to support circular and sustainable fashion and textile industry, starting from ways to design clothing and shoes, to how to source and produce them, what kind of services to provide and finishing off with ways to extend user phase in different ways.



Source: <https://uxdesign.cc/ux-fashion-2dff96a983a8>





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# Module 5:

## Manufacture for a Circular Economy



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## Module 5: **Manufacture for a Circular Economy**

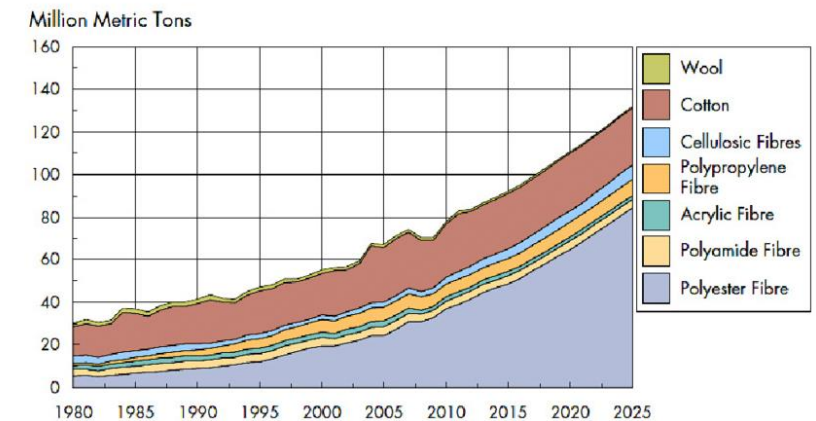
- Module 5 pays attention to all of the manufacturing sides of fashion, starting from individual processes, like cutting, sewing and packaging to environmentally friendly and clean technologies production.
- **Content**
  - UNIT 5.1 **General Manufacture processes for a circular economy in fabric production**
  - UNIT 5.2 **Manufacture processes for a circular economy in garment production**
  - UNIT 5.3 **Environmentally friendly production**
  - UNIT 5.4 **Clean technologies production**
  - UNIT 5.5. **Services to support long life**
- **Learning outcomes**

By the end of Module 5 learners will be able to create durable and long-lasting products (products that can be repaired, modernized, reassembled, with a high value), using technologies and resources that do not harm environment.



## Unit 5.1 General Manufacture processes for a circular economy in fabric production

- Fibers must be spun into yarns and then woven for fabric production. In addition to the use of chemical auxiliaries, the high energy consumption for spinning, weaving, washing and drying processes is of particular environmental relevance in this production step. Saving energy is therefore also in the interest of companies. With improved process sequences or with energy recovery from the process waste heat, an attempt is made to get the maximum out of the energy consumed.



**Innovations in the textile** sector aim to reduce the quantities of chemically contaminated wastewater while at the same time reducing the demand for fresh water.



## Unit 5.2 Manufacture processes for a circular economy in garment production

- The importance of the process of **cutting textile materials** from the aspect of the circular economy is seen through the creation of conditions for waste reduction, selection, disposal, but also reuse for products that will be interesting and cheap for customers.  
**Zero waste pattern cutting!!!**
- The **correct choice of machines** for the realization of the sewing process, their age, their condition, the automation of the machine park contributes to saving the production time, affects the increase of the production capacity, the quality of the products and energy saving and sustainable production.
- From the **type of clothing, the type of textile fibers from which it is made and the choice of ironing and finishing products** will depend on the economy, rationalization and duration of this process in the clothing industry.



Source: <https://blog.recyclecoach.com/blog/ways-to-reduce-clothing-and-textile-waste-in-your-community>

### The **Eco-friendly packaging:**

- Produces little to no environmental waste
- Made from reusable or biodegradable packaging materials
- Safe for people and the environment



## Unit 5.3 Environmentally friendly production

- For getting competitive advantage in fashion business the companies have to take care of social, political and economical issues, and they must be aware of current trends of the market.
- Textile fashion companies are focusing more on sustainable products these days, so that they can meet the environmental and social aspects.
- Local production can be a sustainable development strategy with economic, environmental, and social benefits.
- The consumers can be involved in avoiding waste origin from ready garments. Besides the need to decrease the production of new clothes, consumers also need to stop throwing away clothes and, on that way, to slow down the fast fashion.
- **To slow down the fast fashion industry, the consumer behavior have to be changed!!!**

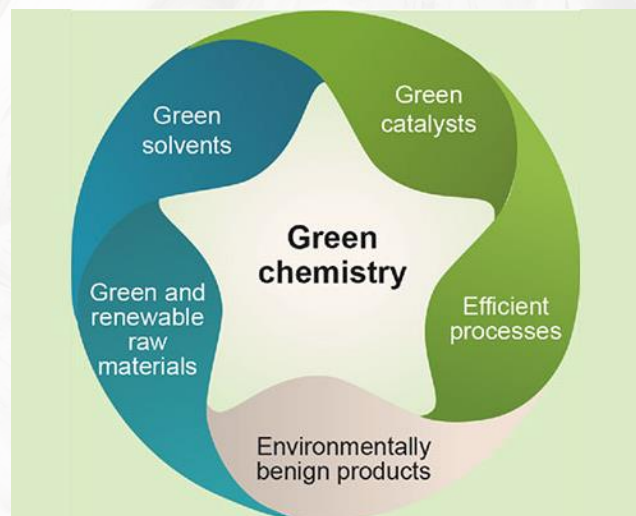


Source: <http://www.diva-portal.org/smash/get/diva2:1312071/FULLTEXT01.pdf>



## Unit 5.4 Clean technologies production

- The industry's challenge is to adopt more water-friendly technologies for pretreatments, dyeing, printing and finishing operations. New production methods that use no water or a lesser quantity of water such as plasma processing, supercritical carbon dioxide dyeing, and ultrasound dyeing have been much research; these technologies show positive signs for the environmentally friendly processing of textiles.



Source: <https://www.amrita.edu/sites/default/files/green-chemistry-1.jpg>

**Green Chemistry** is the utilization of a set of principles that reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemical products.

### Design for Environment Guidelines

Materials	Production	Distribution	Use	Recovery
<ul style="list-style-type: none"> <li>Specify Renewable Materials</li> <li>Specify Non-Hazardous Materials</li> </ul>	<ul style="list-style-type: none"> <li>Employ as few manufacturing steps as possible</li> <li>Minimize the number of components</li> </ul>	<ul style="list-style-type: none"> <li>Minimize Packaging</li> <li>Use recyclable and reusable packaging</li> <li>Minimize total packing volume</li> </ul>	<ul style="list-style-type: none"> <li>Minimize failure</li> <li>Ensure minimal maintenance</li> <li>Ensure aesthetic life is equal to the functional product life</li> </ul>	<ul style="list-style-type: none"> <li>Ensure easy access to fasteners</li> <li>Promote use of common tools</li> <li>Implement swappable components</li> </ul>

Source: [https://sites.google.com/site/allweatherbicycle/\\_/rsrc/1393518190226/home-1/embodiment-design/5-design-for-sustainability/S7.JPG](https://sites.google.com/site/allweatherbicycle/_/rsrc/1393518190226/home-1/embodiment-design/5-design-for-sustainability/S7.JPG)



## **Unit 5.5 Services to support long life**

- Many actors will have to be involved in the process of setting the new standards and regulations that are needed to **make a longer lifetime for products possible!!!**
- Easy maintenance
- Reparability
- Upgradeability
- Standardization
- Compatibility
- Strong consumer-manufacturer relationship.
- Developing products that can take “wear and tear” without breaking down.
- Design for physically durability
- Design for stylistically emotional durability (love of classic and vintage) – products that last longer.



Source: <https://s3-eu-west-1.amazonaws.com/stjm/20160330092502/Service-based-business-models-and-circular-strategies-for-textiles-2015-SITRA-STJM.pdf>





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# Module 6:

## Recycling Technologies for a Circular Economy of Textile and Fashion Industry



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## Module 6:

# **Recycling Technologies for a Circular Economy of Textile and Fashion Industry**

- Module 6 focuses on understanding existing situation and challenges in textile recycling, provides knowledge of clean technologies for fashion design and recycling technologies. It gives theoretical view about textile waste collection, sorting, about different ways of recycling technologies and reuse of recycled fibers.
- **Content**
  - UNIT 6.1 **The basics of textile recycling**
  - UNIT 6.2 **Textile waste collection, sorting and preparation for recycling**
  - UNIT 6.3 **Technology for textile recycling**
- **Learning outcomes**

By the end of Module 6 learners will be able to understand the existing situation and challenges in textile recycling, and to know textile recycling's technology.



## Unit 6.1 The basics of textile recycling

### Contents

- Basics of textile recycling process
- Lifecycle of textiles based on the waste hierarchy

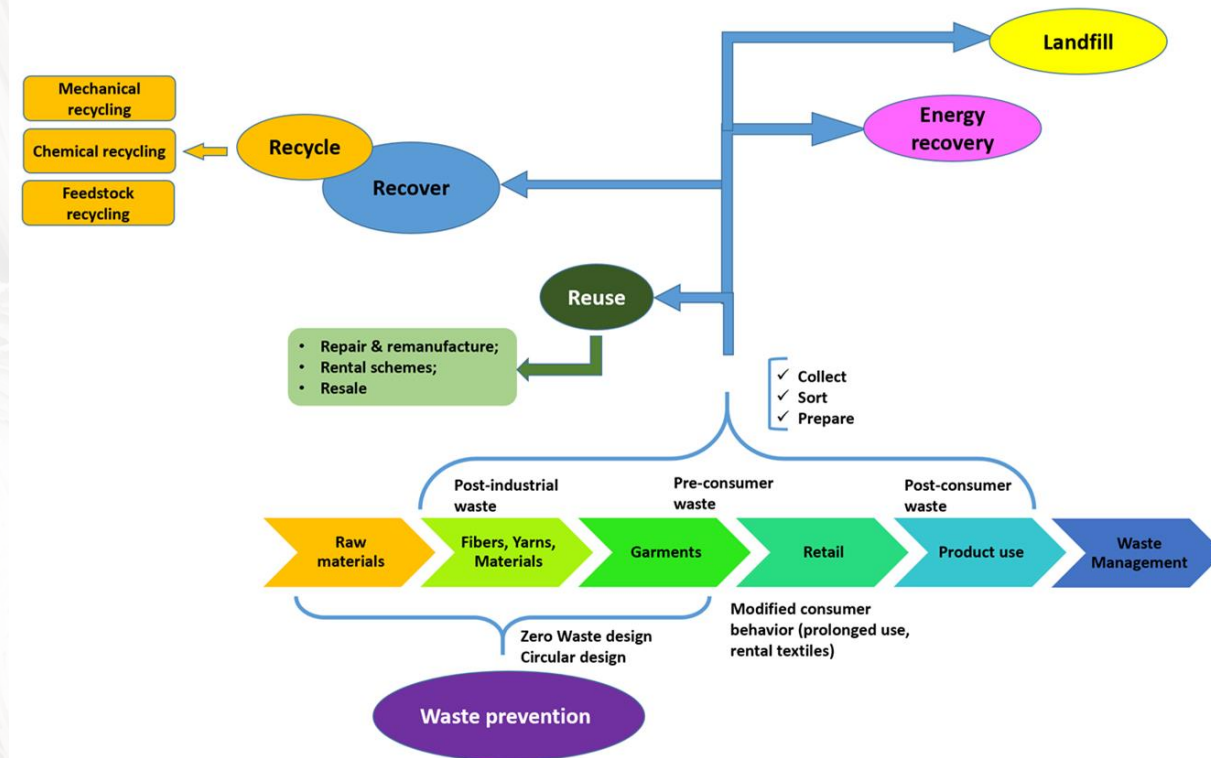
### Learning outcomes

#### Gain knowledge of:

- Waste management at European level to favour the textile industry towards the Circular Economy
- Recycling, recovery, upcycling and down cycling processes
- Recycling processes in apparel industry

#### Gain skills in:

- Telling the difference between recycling, recovery, upcycling and down cycling processes in terms of principles
- Existing textile recycling technologies
- Advantages of textile recycling
- Limitations and challenges for textile recycling



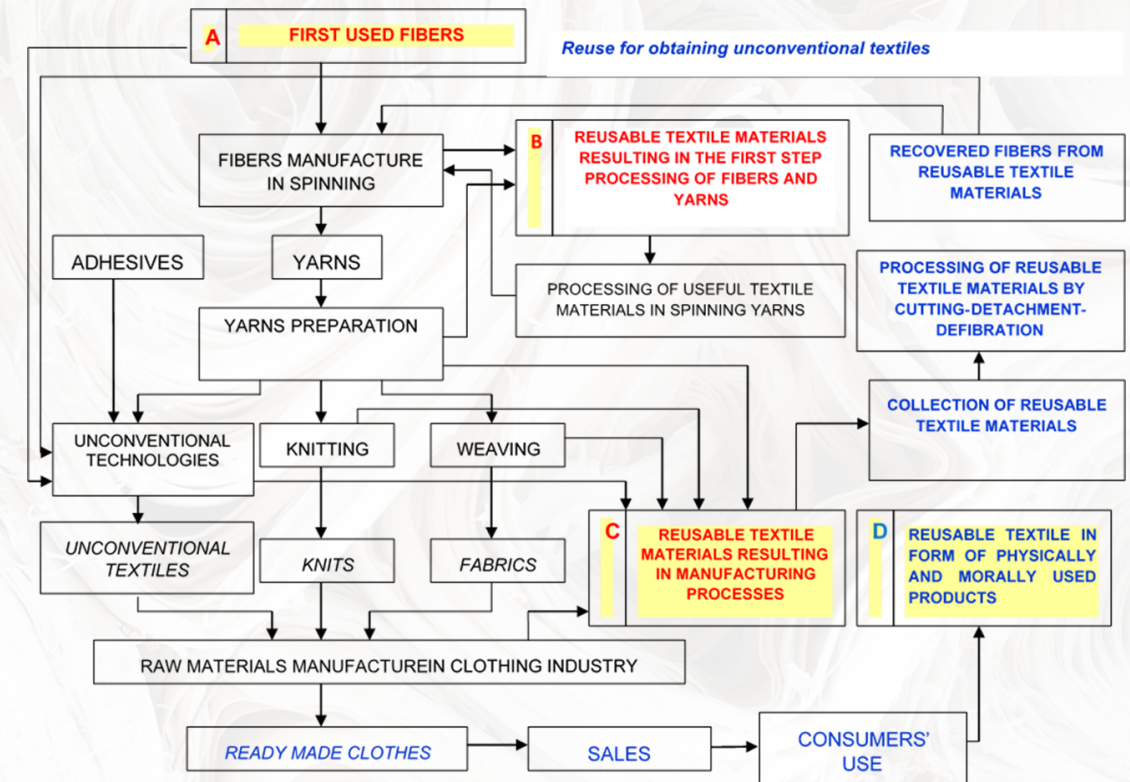
Life cycle of textiles based on the waste hierarchy



## Unit 6.2 The basics of textile recycling

### Contents

1. Waste types in textile production (fibers, yarns, pieces of fabrics, used or unused garments)
2. Waste sorting principles according to their type, fiber content, colour and other characteristics
3. Separation of non-textile parts of recyclable garments



### Gain knowledge of:

- Waste type, sorting principles and separation of non-textile parts of recycle garments
- The flow of textile materials with the possibility to be reintroduced in the manufacturing process
- Recycling process garments with non-textile parts

### Gain skills in:

- Knowing the waste types in the textile industry and sorting principles
- Knowing advantages and disadvantages of different sorting technologies
- Developing new products by recycling garments with non-textile parts.



## Unit 6.3 Technology for textile recycling

### Contents

1. Textile waste material recycling into fiber
2. Yarn production from recycled fibers
3. Non-woven fabric production from recycled fibers

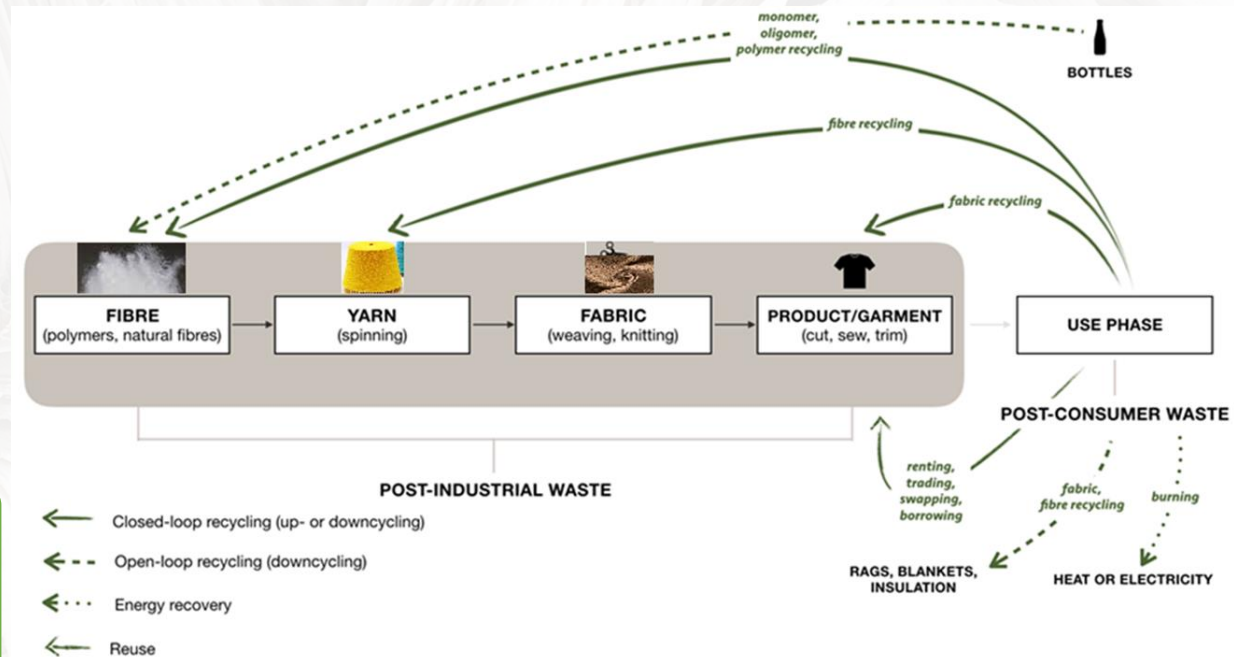
### Learning outcomes

#### Gain knowledge of:

- Processes to obtain yarns and non-woven fabrics from recycled fibers
- Recycling waste textiles into fibers
- Differences between non-woven fabrics categories

#### Gain skills in:

- Knowing the differences between recycling technologies
- Characterizing recycling processes per fiber category
- Knowing category of non-woven fabrics and principles of them producing processes



Classification of textile waste and recycling routes

Source: Sandin G., 2018 and Le K., 2018





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design training  
in the textile and  
footwear industries

# Module 7:

## Business Management in a Circular Economy



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## Module 7:

# **Business Management in a Circular Economy**

- Module 7 provides skills related to circular business model innovation and circular marketing while providing a systems thinking perspective. It provides knowledge on business models and sustainable innovation, introduces tools to design a successful circular business model, looks at innovative marketing strategies to engage customers and end-users through practical examples. It emphasizes the importance of thinking in systems and engage in cross sector collaborations to implement full circular systems.
- **Content**
  - UNIT 7.1 **Entrepreneurship and new business models for circular economy**
  - UNIT 7.2 **Marketing and user-centred approaches**
  - UNIT 7.3 **Systems thinking and networking**
  - UNIT 7.4 **Corporate social responsibility**
  - UNIT 7.5 **Sustainability performance indicators and guidelines**



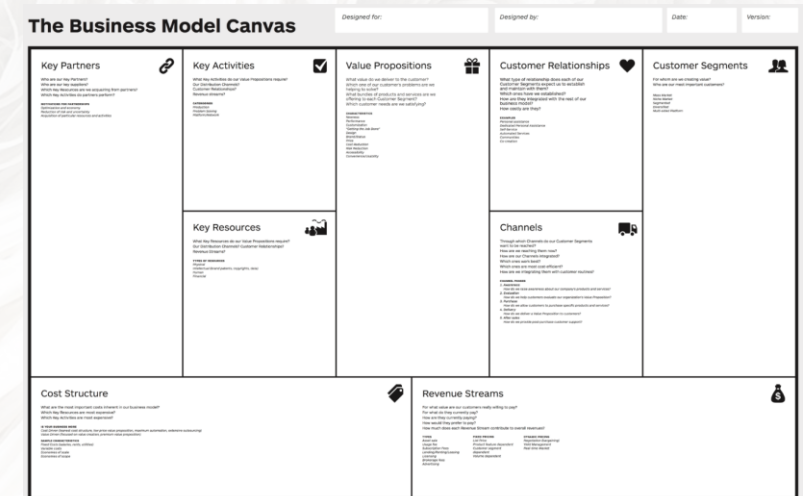
# Unit 7.1 Entrepreneurship and new business models for circular economy

## Contents

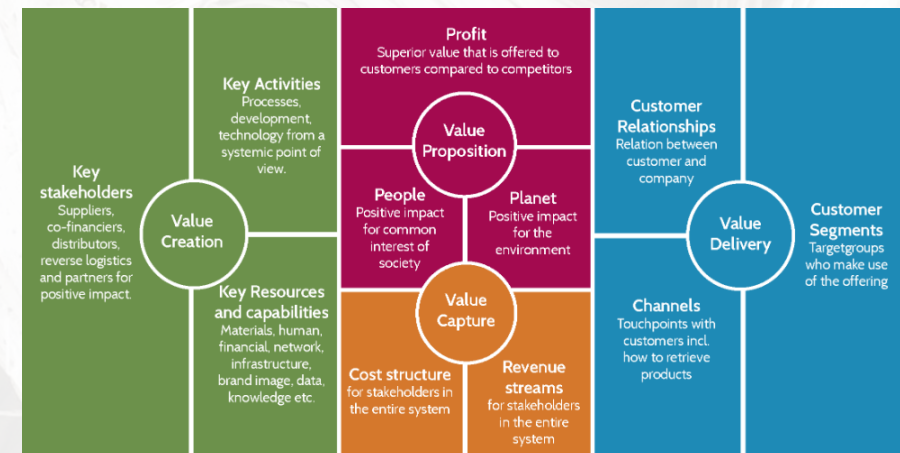
- Business models for a Circular Economy
- Business model design processes
- The Business Model Canvas
- Sustainable and circular business models and principles
- The fundamentals of creating a circular economy business venture

## Learning outcomes

- Understand what a business model and know how sustainable and circular business model can be defined and implemented
- Understand the fundamentals of launching a circular economy business venture



Source: Strategyzer



Source: Bocken 2014



## **Unit 7.2 Marketing and user-centered approaches**

### **Contents**

- The marketing concept. The marketing mix
- The importance of segmentation, differentiation, positioning
- From goods dominant approach to service dominant approach. Green marketing
- Communicating Circular offerings. Sustainable Communication
- The circular economy fashion communication canvas
- Co creating solutions with the customer. Consumer attitudes and behaviour related to circular fashion

### **Learning outcomes**

- Understand successful marketing strategies to market circular products and services.
- Be able to communicate circularity to customers/end users.



Source: Supergoods.be



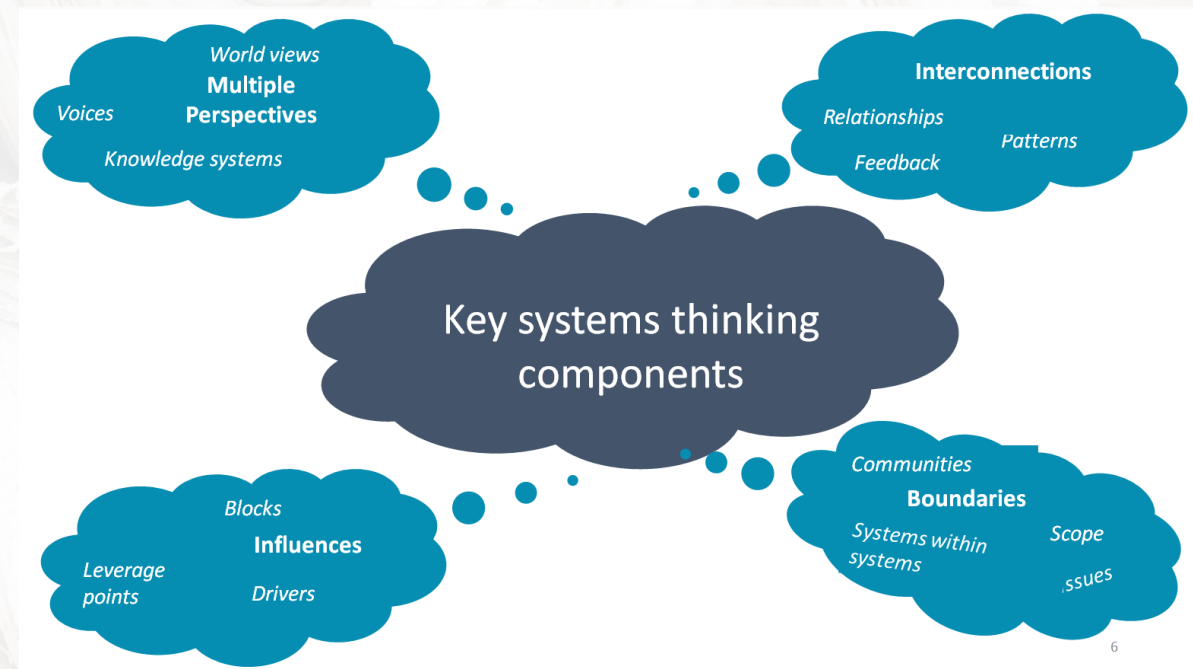
## Unit 7.3 Systems thinking and networking

### Contents

- Systems thinking
- Systemic design
- Tools/methods for systems thinking and systemic design
- Value network for a circular economy

### Learning outcomes

- Have a basic understanding of system thinking and its use in circular economy transition.
- Understand how networks and collaboration can create additional value.



Components of systems thinking



## **Unit 7.4 Corporate social responsibility**

### **Contents**

- What is Corporate Social Responsibility (CSR)
- CSR Guidelines
- Textiles and clothing industry: CSR initiatives

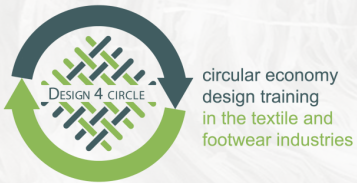
### **Learning outcomes**

- Know the industry initiatives related to CSR.
- Know tools and methods to set up CSR policies, such as GRI.



Source: Colourbox





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## Unit 7.5 Sustainability performance indicators and guidelines

### Contents

- United Nations (UN) Guiding Principles on Business and Human Rights
- The UN Global Compact
- Standards
- Global reporting initiative

### Learning outcomes

- Know sustainability performance indicators (SPIs) and what are they used for.
- Know sustainability reporting guidelines.
- Know economic, environmental and social aspects of sustainability.

### HUMAN RIGHTS

Principle 1:



Principle 2:



### LABOUR

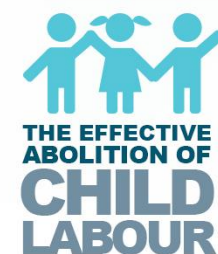
Principle 3:



Principle 4:



Principle 5:



Principle 6:



### ENVIRONMENT

Principle 7:



Principle 8:



Principle 9:



### ANTI-CORRUPTION

Principle 10:







Текстилно Трговско Здружение - Текстилен Кластер - Македонија  
Textile Trade Association - Textile Cluster - Macedonia

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