Seminar, European Parliament, room 6Q1, 09:00 – 11:00 followed by refreshments

Organised by Mistra, in collaboration with IEEP and SEI





Welcome by Sirpa Pietikäinen, MEP, ECON Committee



Welcome by **Åke Iverfeldt**, CEO, Mistra



## **Research presentations**



# Policies for the Circular Economy

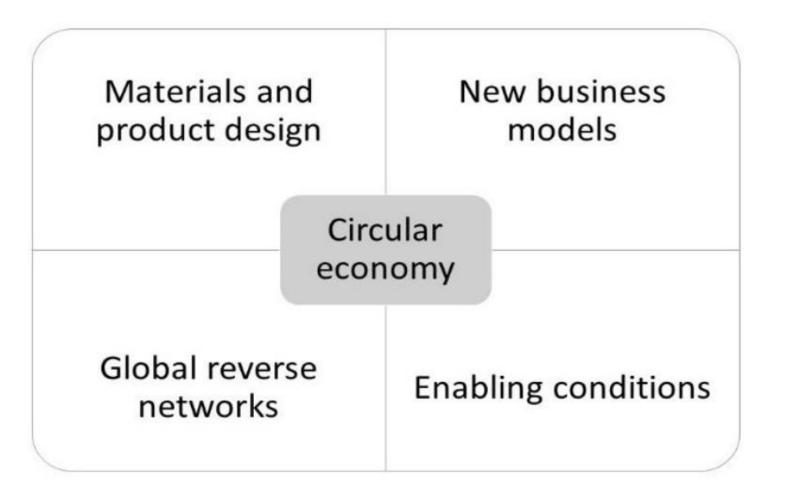
Carl Dalhammar, IIIEE, Lund University





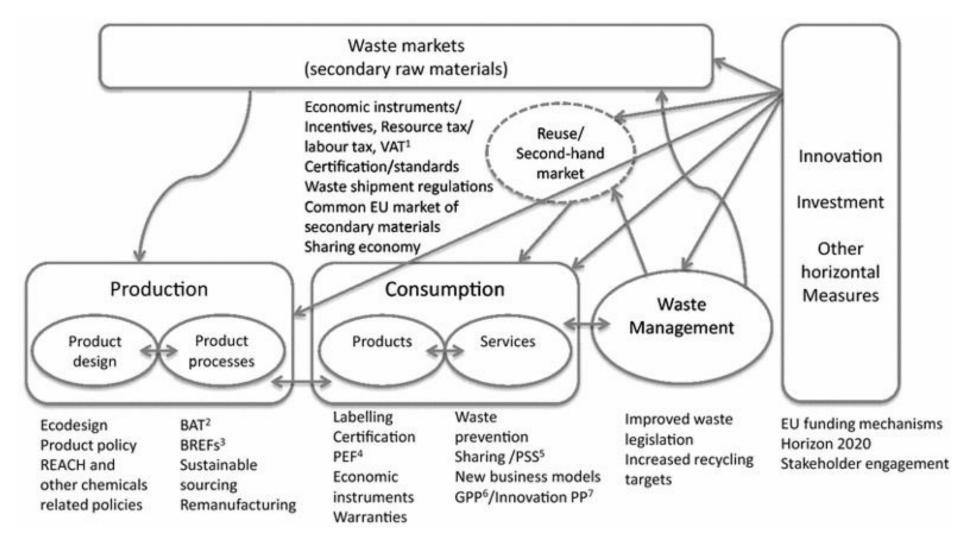


### The Circular Economy: building blocks



- Durable products
- Design for modularity & reparabaility
- Re-use/repair/
- remanufacturing
- Biobased materials and products
- Sharing and renting
- Product-service systems (PSS)
- 1. Right policy framework
- 2. Funding and investment opportunities
- Targeted efforts to support 'circular' businesses in a 'linear' economy

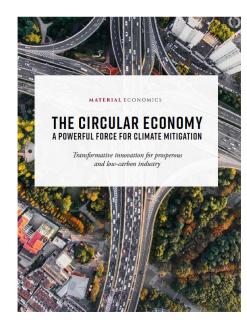
#### EU circular economy landscape (EU Action Plan)



*Source: Milios 2017*. <sup>1</sup> Value Added Tax; <sup>2</sup> Best Available Techniques; <sup>3</sup> BAT Reference documents; <sup>4</sup> Product Environmental Footprint; <sup>5</sup> Product-Service System; <sup>6</sup> Green Public Procurement; <sup>7</sup> Public Procurement

#### The circular economy and the climate challenge

- The circular economy has high climate potential
- Longer-lasting products and materials and re-use can cut GHG emissions
- Climate infrastructure and technology require natural resources





MATERIAL ECONOMICS

# Examples of new emerging and proposed CE policies and laws and standards

#### **EU policies**

- Ecodesign Directive: requirements on durability, reparability, spare parts etc.
- Proposed labeling scheme for durability and reparability
  - New standardisation activities

#### **National policies**

- Criminalizing planned obsolescence (France)
- Fines for planned obsolescence (competition authority, e.g. Italy)
- Strengthening consumer law (several EEA countries)
  - Tax reliefs for repair (e.g. Sweden)





#### **Regional and local policies**

- Public procurement of remanufactured ICT and furniture, biobased products etc.
  - Re-use parks and similar infrastructure.
- Right-ro-repair (R2R) laws proposed in several US states
  - Quality labels for re-used goods





### How to move forward in product policy?

#### EU level

- Funding and support for CE projects
- Green public procurement criteria & guidelines
- Ecodesign
  - Durability, reparability, right-to-repair
- Labeling
  - Lifetime, reparability, upgrades etc.

#### National level

- Consumer law
  - Consumer rights, information, guarantees
- Taxes & charges
  - Influence economics of repair, using virgin materials and fibres etc.
- Public procurement
  - Promote durable products and maintenance & repairs, procure funtional solutions, prioritize remanufactured products, 'circular' buildings, biobased products etc.

#### €10 bn to support the circular economy in the EU

EUR 10 billion to support the Circular Economy in the EU (https://www.eib.org/en/press/all/2019-191-eur-10-billion-to-support-the-circular-economy-in-the-eu)



# a future fashion system

#### **Sigrid Barnekow**

**CEO TreeTo Textile** 

2019-12-05

mistra future fashion

www.mistrafuturefashion.com

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# vision: enabling a systemic change of fashion industry & society

FUNDED BY



The Swedish Foundation for Strategic Environmental Research



**11,5** million EUR 2011-2019

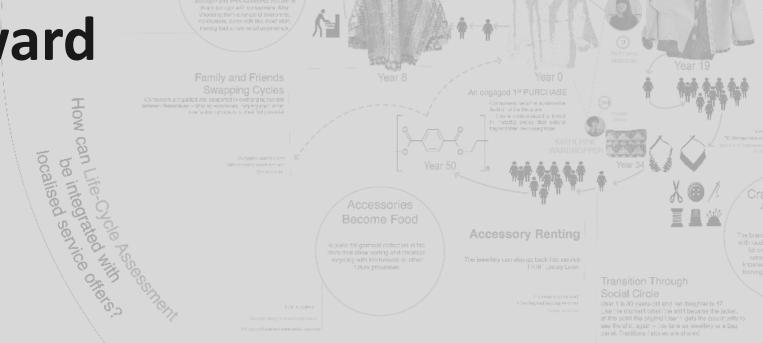
# the consortium





# 1. measuring sustainable fashion

- 2. holistic perspective
- 3. policies forward



that explore





number of uses: 140

# measuring sustainable fashion





number of uses: 26

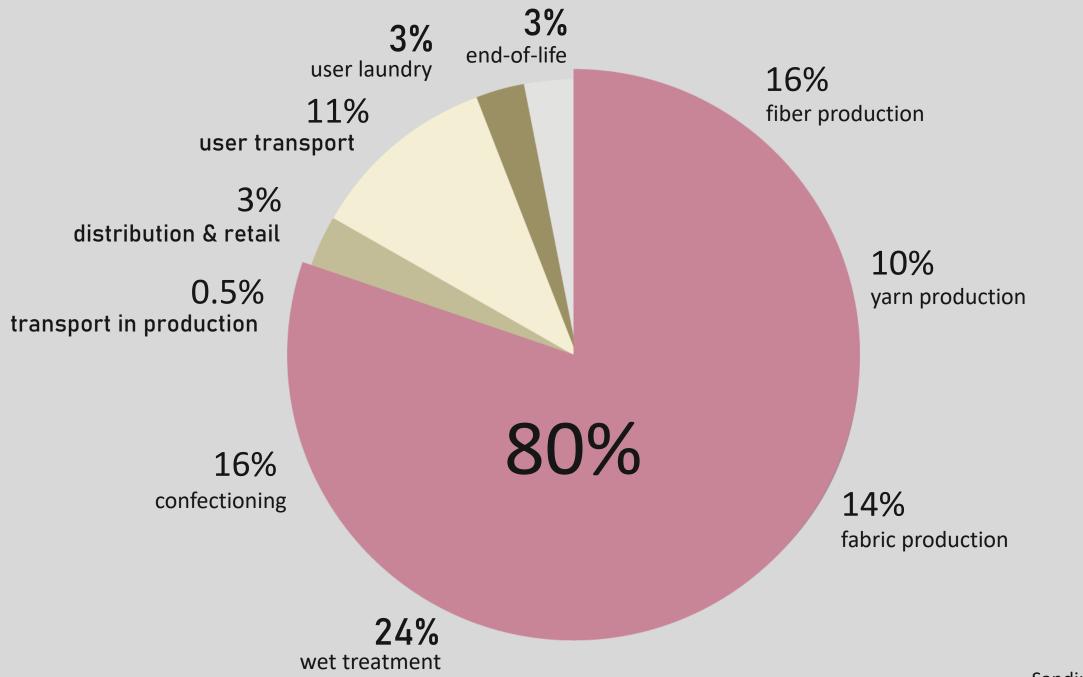
number of uses: 240





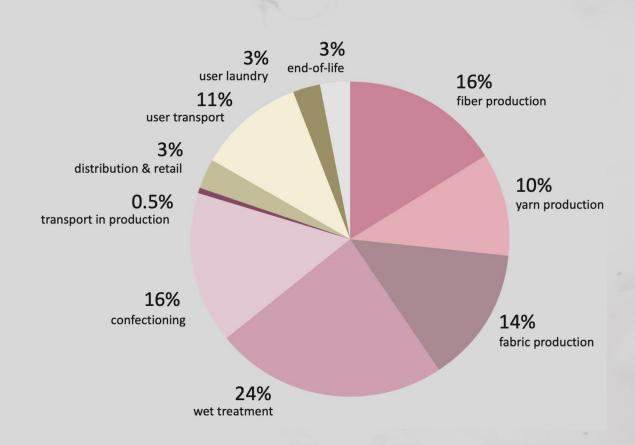
number of uses: 75

number of uses: 27



Sandin et al. 2019 a

#### policies forward sustainable production



Actions for switching to **renewable energy**, for electricity and heat in the production process.

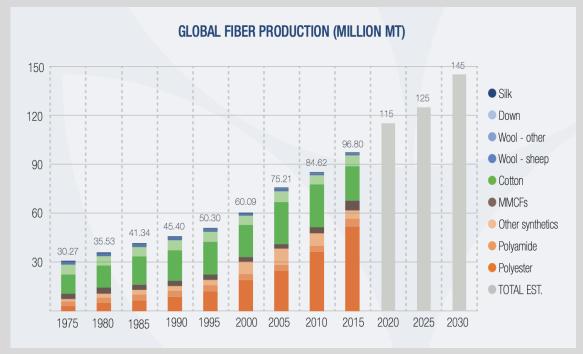
Insert **Best Use Practices** on fertilizers, pesticides, chemicals, catalysts etc

**Promote** process innovations

**New care labels** in clothes that specify energy use, water scarcity and toxicity

In Design phase consider **user transportation** especially for collaborative consumption

### policies forward sustainable sourcing



Source: Textile Exchange

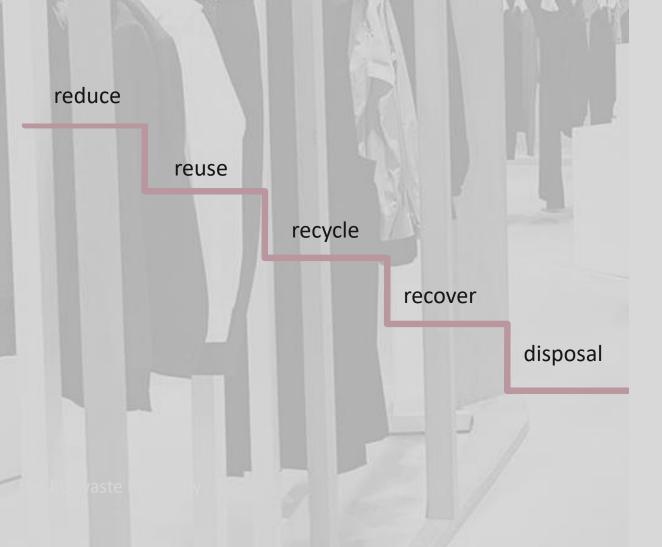
## Promote relevant fiber stock, both virgin and recycled

90% is synthetics and cotton. Man-made biobased is appr 7%. **Bio-based need to increase.** 

Recycled fibers is key in future palette of fiber supply but **consider quality issues due to degrading** 

# policies forward

to increase textile value



Incentives for advancements in new sorting and recycling technologies

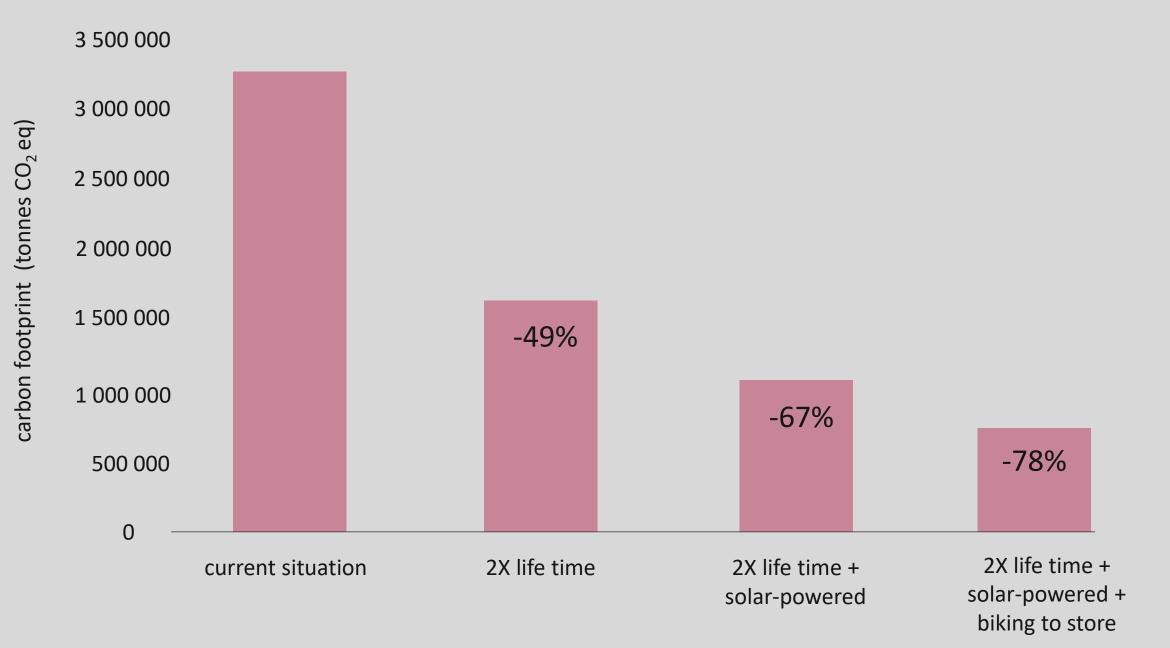
**Coordination** tools to overcome the current "chicken-or-egg" situation of textile waste streams

**Extended Producer Responsibility** (EPR) and **Refunded Virgin Payments system** (charge on virgin material)

Modulated EPR fee at minimum **5-15 percent** more than virgin fibers

Regulatory **synchronization** both across Europe and globally

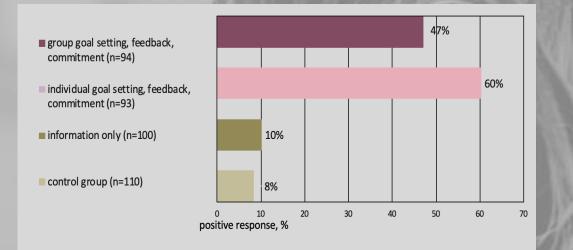
**Reduce the administrative burdens** related to collection, storage and shipment of textile waste.



Sandin et al. 2019 a

# policies forward

to prolong life-time of textiles



Information, individual goal setting, feedback and commitment combined can can change user behavior

Low correlation between fashion, materialism and subjective-wellbeing – **user does not need to own** garments

**Stimuli to the market space** - females and younger consumers are open to alternative business models

Reselling clothes online and traditional repair services are the most popular businesses.

Effective policy tools are labeling, wage subsidies, tax breaks, start-up funding and knowledge hubs

# 1. measuring sustainable fashion

- 2. holistic perspective
- 3. policies forward

Family and Friends Swapping Cycles

that explore

www.mistrafuturefashion.com/publications

can

fast and slov nt prototypes

mistra future

the Swedish market for pre-owned apparel and its role in moving the fashion industry towards more sustainable practices

mistra future fashion

Evaluation of

finishing com

recycling and regeneration of coloured textiles

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## Perspective on the topic

by Sandrine Dixson-Declève, Co-President the Club of Rome



# Q&A with the audience



#### PANEL

#### Delivering circular economy through the European Green Deal: policy solutions for high-impact sectors such as textiles

Moderator: Céline Charveriat, Executive Director, IEEP

#### Aileen McLeod

MEP, ENVI Committee

#### Hans Bruyninckx

Executive Director, European Environment Agency

#### **Pavel Misiga**

European Commission, DG RTD, Head of Unit, Circular Economy & Biobased Systems

**Cillian Lohan** 

Member of the European

**Economic and Social Committee** 

#### **Pascale Moreau**

Sustainability Department, H&M Group

#### Paola Migliorini

European Commission, DG ENV, Deputy Head of Unit Sustainable Production, Products & Consumption



## Debate open to the audience



The Swedish Foundation for Strategic Environmental Resear

### Conclusions

by **Pär Holmgren**, MEP, ENVI Committee

# 11:15 Refreshments at "Le grand café Antall"



# www.mistra.org

