



Preparatory Study on Textile Products

Workshop with stakeholders

14-15 January 2026

WEBEX SESSION

ETIQUETTE FOR VIRTUAL MEETING PARTICIPANTS

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Preparatory Study on Textiles for product policy instruments

Online Workshop on 3rd milestone – Day 1
14 January 2026

Joint Research Centre (JRC)

DELRE Antonio, GONZALEZ TORRES Maria, KOULOUMPIS Viktor, SENATORE Vincenzo, PEREZ ARRIBAS Zahara, BERNAD BELTRAN David, PEREZ CAMACHO Maria Natividad, SYRUS Anandu, MAGRINI Chiara, ALBIZZATI Paola Federica, CAPPUCCI Grazia, ARDENTE Fulvio, GARCIA JOHN Enrique



Aim of the meeting

- JRC is supporting the development of the first Delegated Act under the ESPR.
Addressing textile apparel
- Background to this online consultation: documents shared on 16 December 2025
- Purpose is to verify the work done to date and to collect additional information and views
- Comments to be provided in writing until 23 March 2026



Agenda

Time (duration)	Topic
09:15-09:30 (15 min)	Log-in and preparation
09:30-09:35 (5 min)	Presentation (Chair) <ul style="list-style-type: none"> • Housekeeping rules • Aim of the consultation • Structure of the meeting
09:35-09:55 (20 min)	Presentation (ENV) <ul style="list-style-type: none"> • Updates on ESPR Presentation (JRC) <ul style="list-style-type: none"> • Topics of the consultation • Involvement of stakeholders Questions and answers
09:55-10:25 (30 min)	Presentation (JRC) <ul style="list-style-type: none"> • Aim and structure of Task 4, which reports the analysis of technologies • Updated description of product technologies in the context of physical durability. Questions and answers
10:25-10:40 (15 min)	Break 1

Time (duration)	Topic
10:40-11:00 (20 min)	Presentation (JRC) <ul style="list-style-type: none"> • Updated description of product technologies in the context of recyclability and recycled content. • Product categories Questions and answers
11:00-11:40 (40 min)	Presentation (JRC) <ul style="list-style-type: none"> • Aim and structure of Task 5, which reports the environmental and economic assessment. • Environmental single score and Societal LCC. • Results of the environmental and economic assessment – contribution and scenario analysis. Questions and answers
11:40-12:00 (20 min)	Break 2
12:00-12:30 (30 min)	Presentation (JRC) <ul style="list-style-type: none"> • Fragmentation of textiles Questions and answers
12:30-13:10 (40 min)	Presentation (JRC) <ul style="list-style-type: none"> • Aim and structure of Task 6, which proposes the design options • Overview of design options Questions and answers
13:10-13:15 (5 min)	Closure of Day 1



Meeting etiquette

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Introduction

- Updates on ESPR
- Topics of the consultation
- Involvement of stakeholders



ESPR: Context and next steps

Carsten Wentink (DG ENV)

ESPR establishes a framework legislation

**ESPR =
framework
legislation**

It does not set
specific measures.
Rather, it enables
their later adoption

Framework legislation



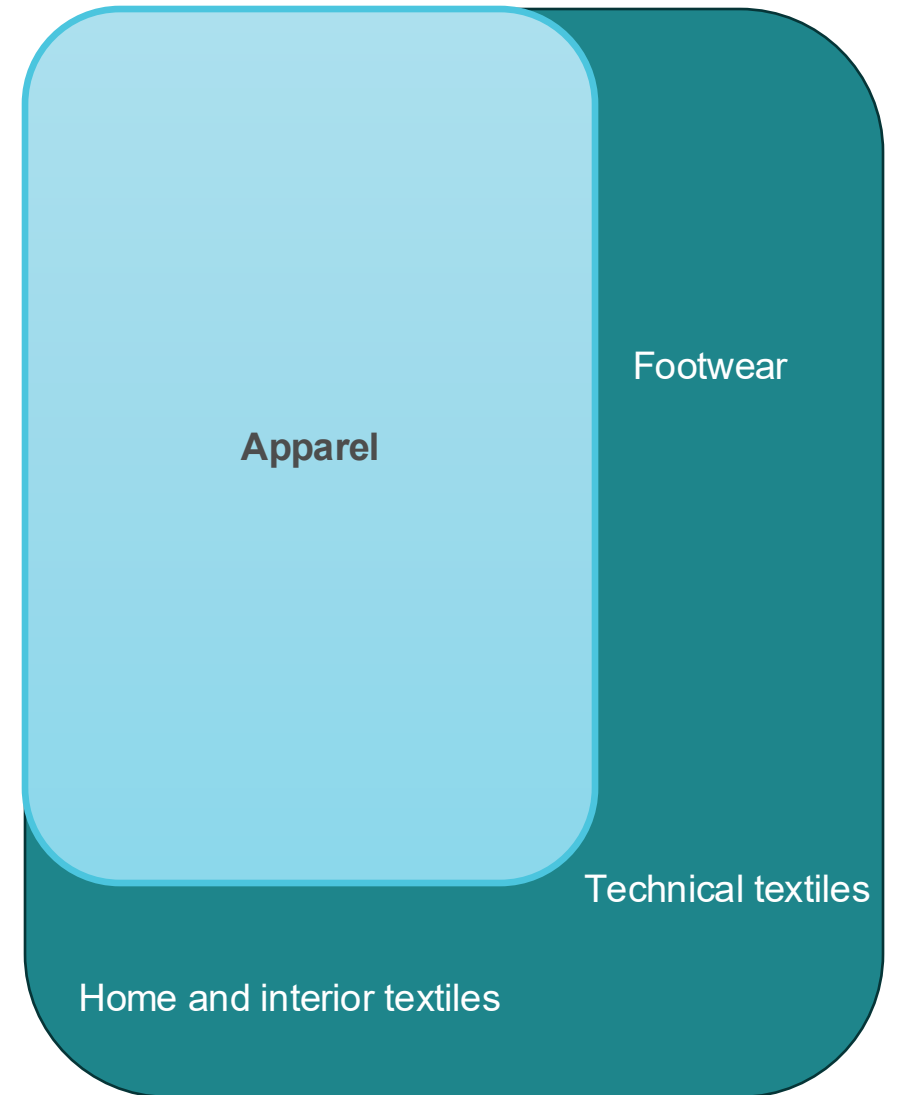
Product-specific measures
based on detailed
preparatory study and impact
assessment

Regularly updated
**multiannual working
plans** setting out priorities

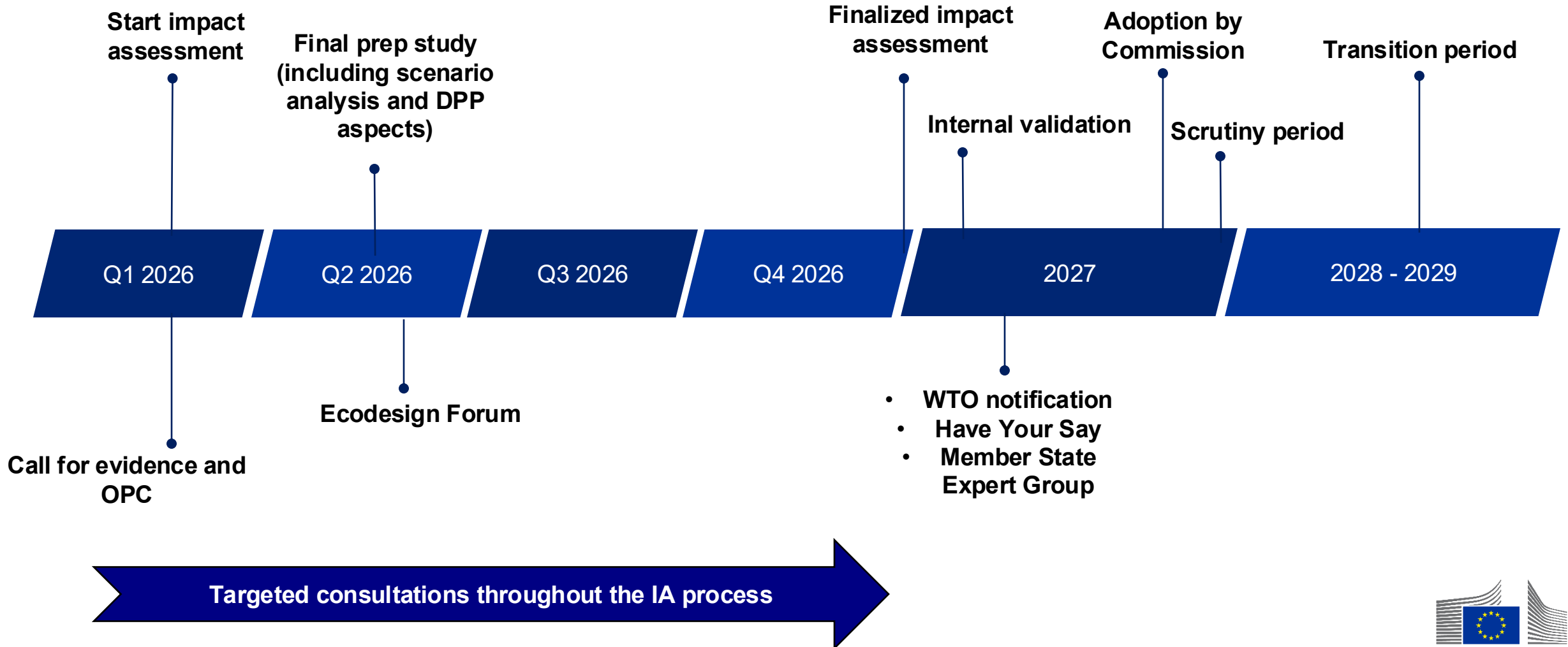


Scope

- Delegated act focuses on **apparel (including clothing accessories)**
- **Other textile and footwear products** were not prioritized in the ESPR working plan.
- **Footwear** will be further considered in the mid-term review of the Working plan, based on a scoping study (to be finalized by end 2027)

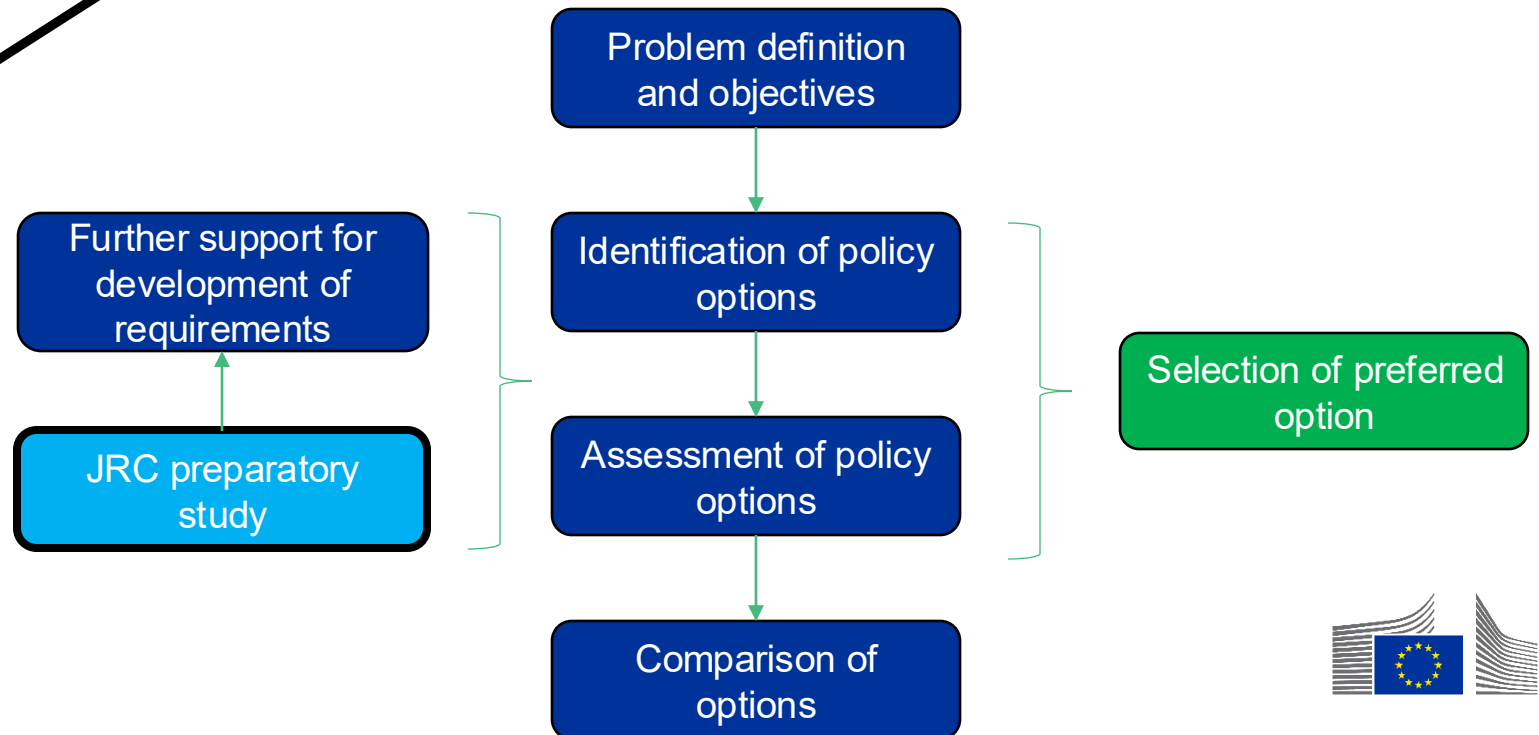


Next steps and indicative timeline



Impact assessment

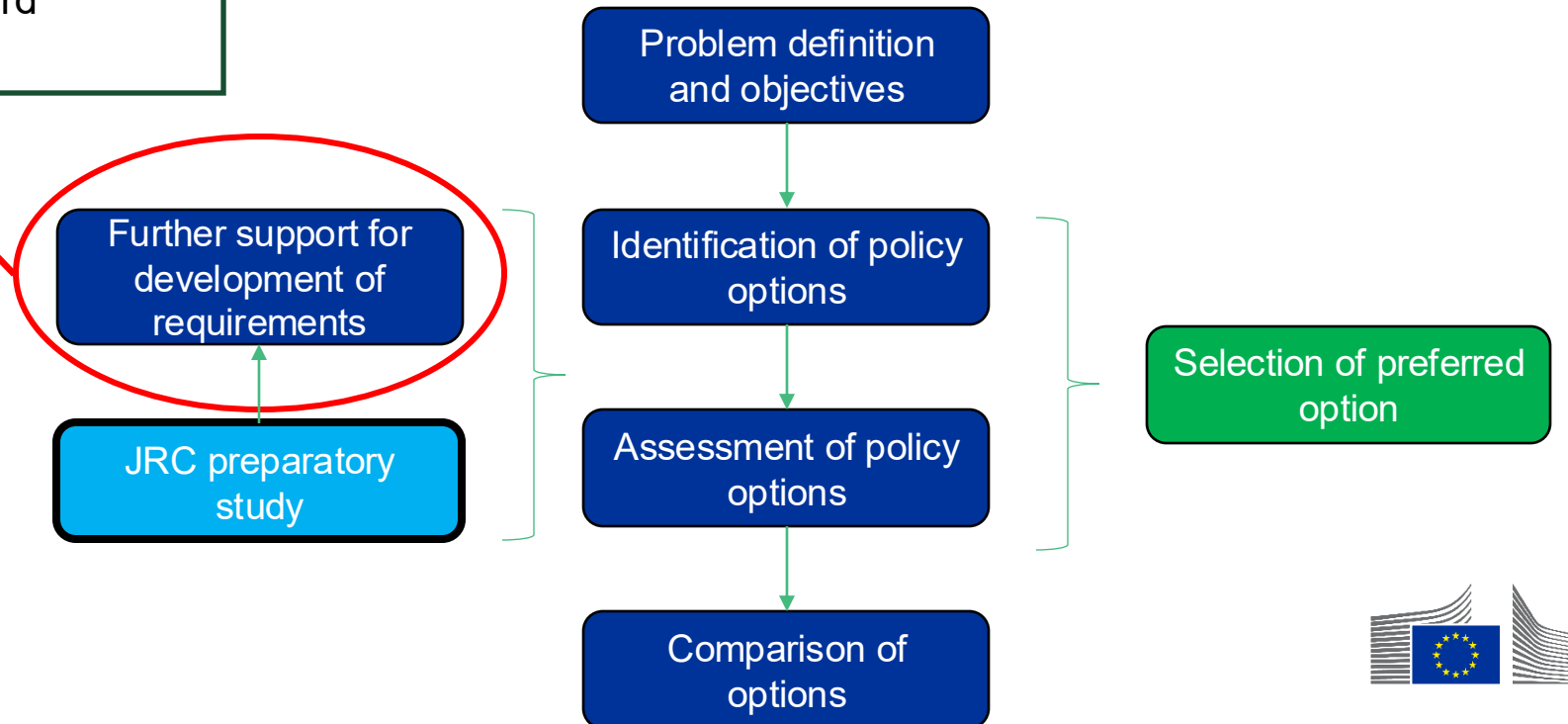
- Comprehensive assessment based on Better Regulation Guidelines
- Impact assessment support study (dark blue) will incorporate and supplement outcomes of the JRC preparatory study
 - By Trinomics, VITO, Oeko-Institut, Fraunhofer IZM
- JRC registered stakeholders will be invited to register as a stakeholder for the purpose of consultations under the impact assessment support study



Impact assessment

From January onwards:

- Chain of custody systems for content requirements
- Verification of compliance and conformity
- Textile specific elements for the DPP
- Testing requirements in terms of impacts on SMEs and third countries

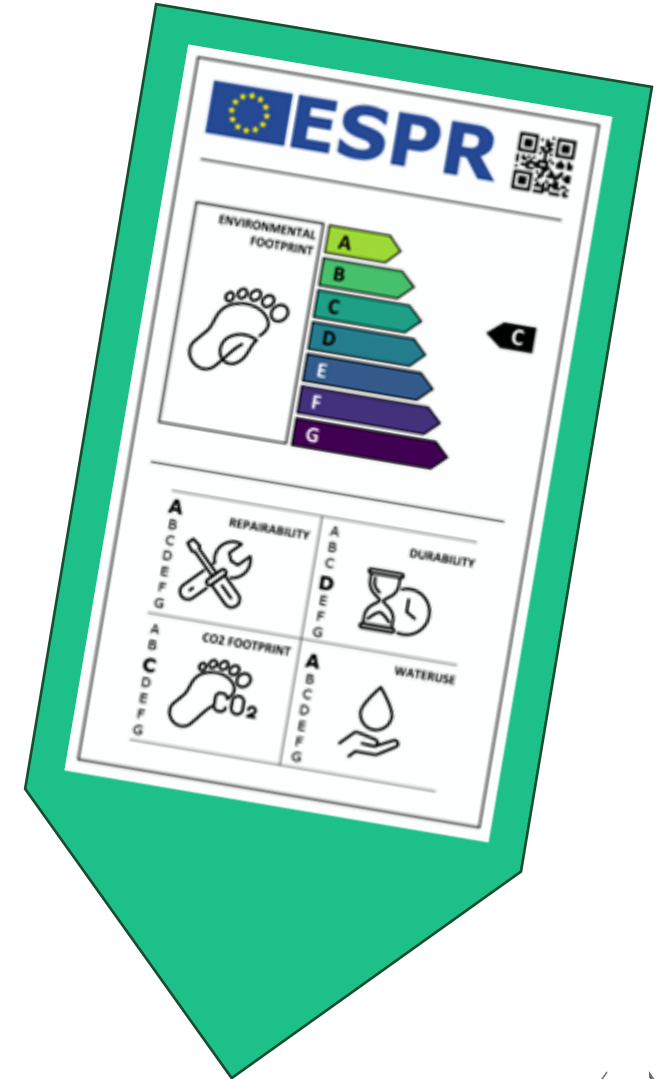


ESPR provisions on labels

Article 7 (information requirements)

7. Information requirements shall indicate the manner in which the required information is to be made available. Where a digital product passport is available, the required information shall be provided therein and shall, where necessary, also be provided in one or more of the following forms:

- a) on the product itself;
- b) on the product's packaging;
- c) on a label referred to in Article 16;
- d) in a user manual or other documentation accompanying the product;
- e) on a free access website or application.



ESPR – Implementing act on labels

Article 16

5. *The Commission shall adopt implementing acts establishing common requirements for the layout of the labels required pursuant to Article 7(7), point (c)*

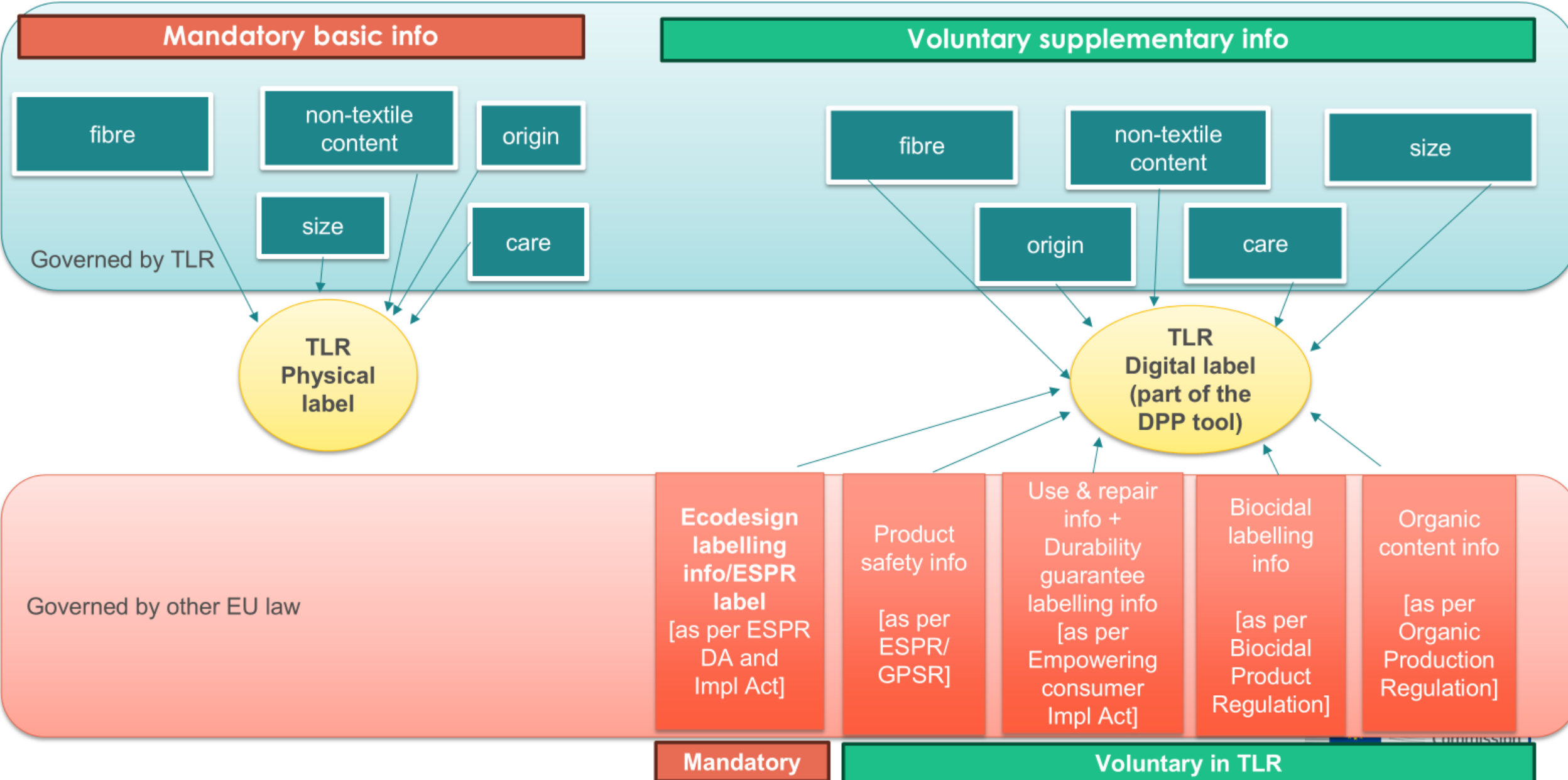
Support study (Fraunhofer ISI, WSEE, IPSOS, Ramboll, Oeko Insititure, VITO)

- Will develop at least 3 layout prototypes and test them on at least 5 product groups (including apparel textiles)
- Results will be taken into account in the impact assessment for the delegated act on apparel textiles
- The label design and the overall progress of the project will be discussed at a meeting of the Ecodesign Forum, tentatively planned for **March 2026**

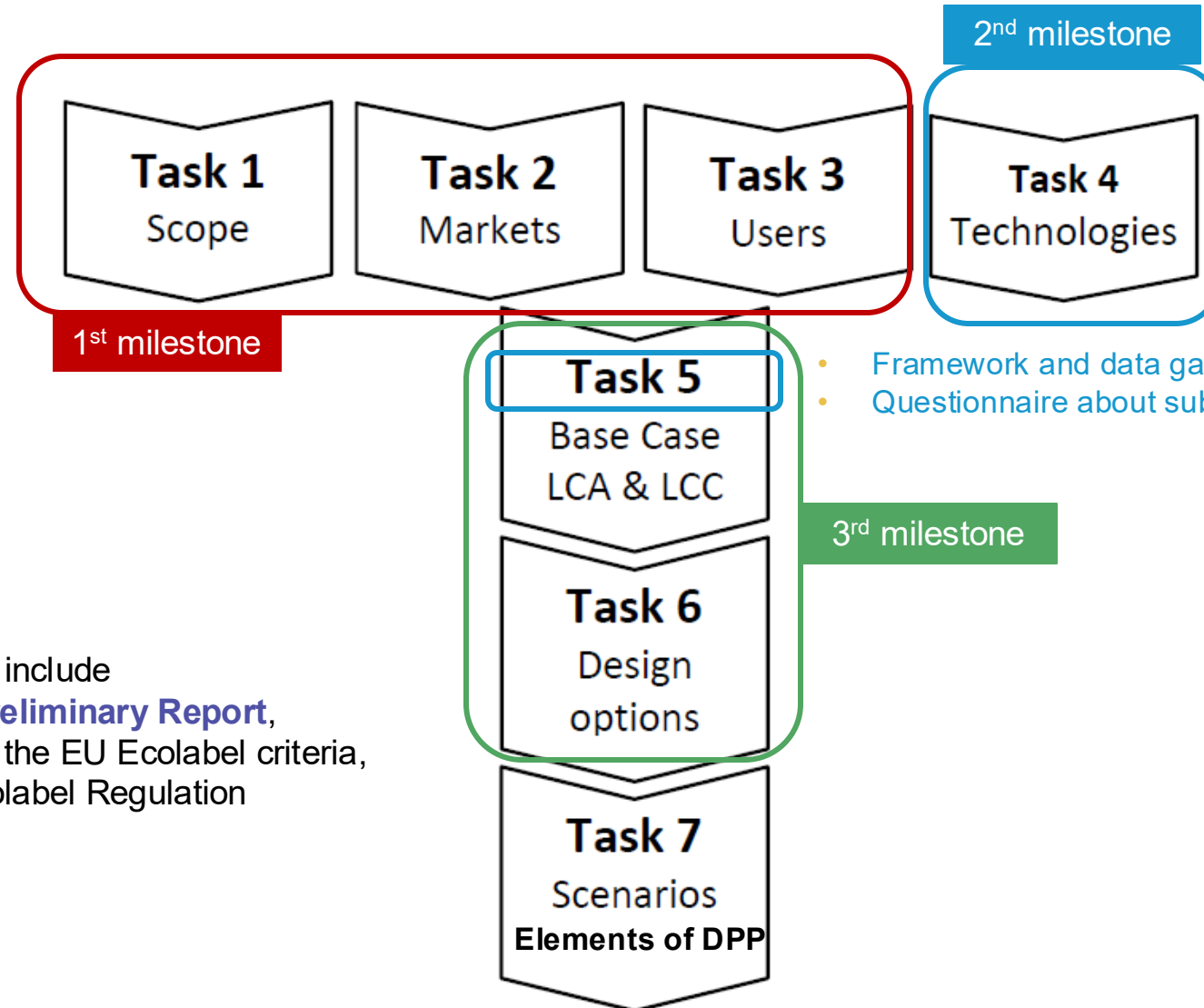
Full coherence with the Textile Labelling Regulation revision (tentatively planned for adoption in Q2 2026) to be ensured



TLR planned revision - Single Label approach (SMS 2025, part 6)



Methodology of the preparatory study



The PS will include
all elements of the Preliminary Report,
to be used for the revision of the EU Ecolabel criteria,
as set by the EU Ecolabel Regulation



Involvement of stakeholders for the development of the preparatory study

Milestone	Topic to be addressed	Date
Initial questionnaire	Definitions, Scope, Market analysis, User Behaviour, Ecodesign aspects, EU Ecolabel, EU Green Public Procurement	30 March 2023 – 8 May 2023
1 st milestone	Scope, market, user behaviour, current EU Ecolabel criteria, current EU Green Public Procurement criteria	23 February 2024 – 22 April 2024
2 nd milestone	Technologies, framework and data gaps of environmental and economic model, and a questionnaire about substances of concern	14 November 2024 – 17 March 2025
3 rd milestone	Analysis of base cases and design options	16 December 2025 to 23 March 2026
4 th milestone	Policy scenarios, and elements to be included in the digital product passport	Q2 2026 (Ecodesign Forum)

After the meeting,
all registered stakeholders will be able to
provide written comments to the working document of the preparatory study
using an online questionnaire.

Directions will be provided via email.



Introduction

Q&A

Are there any questions related to:

- Following steps?
- Involvement of stakeholders?



Task 4 on product technologies

- Aim and structure of Task 4
- Updated description of product technologies in the context of physical durability



Product technologies – Aim and structure

1. Definition of:

- The Base Case of technologies (**BC**), which is the average product on the market.
- The Best Available Technologies (**BAT**), which have the most ambitious performances available on the market. BAT are implemented at scale.
- The Best Not yet Available Technologies (**BNAT**), which have the most ambitious performances, but they are not implemented at scale, therefore they are considered not available on the market.

2. Analysis of the **ecosystem** related to the specific product aspects:

- process techniques
- business models
- user behaviour
- legislative framework
- industrial best practices

3. Definition of **product categories** that cluster the products that can be subject to the same future requirements.



Product technologies in the context of physical durability

Lack of tests capable to simulate aging of textile apparel

Robustness

Capability of a product to resist, i.e. maintain its physical structure and appearance, after undergoing external stresses, which could be of chemical or physical nature

The identified **key parameters** were:

- **Visual inspection**, which includes the analysis of sub-parameters related to:
 - Colour: colour change, staining, printing pattern
 - Fabric: smoothness, pilling, fuzzing, matting
 - Seams: smoothness, slippage
 - Non textile parts: buttons, press fasteners, slide fasteners, touch and close fasteners, labels, embroidery, and others. This is an assessment of appearance and proper functioning.
- **Spirality**, and
- **Dimensional change**



Product technologies – Robustness

Table 44. Description of product technologies in the context of robustness

Parameter	ISO standard	Fabric construction	BC	BAT	BNAT
Visual inspection	15487	All	3. Moderate change in appearance	4. Negligible change in appearance	5. No change in appearance
Spirality	16322-3	Woven	5% < spirality < 6%	4% ≤ spirality ≤ 5%	spirality < 4%
		Knitted	5% < spirality < 7%	4% ≤ spirality ≤ 5%	spirality < 5%
Dimensional change	3759	Woven	±3% < change < ±4%	±2% ≤ change ≤ ±3%	change < ±2%
		Knitted	±5% < change < ±6%	±3% ≤ change ≤ ±5%	change < ±3%

BC: Base Case, BAT: Best Available Technologies, BNAT: Best Not yet Available Technologies.

All tests must be performed on the product ready to be bought by the user.

All tests must be performed after 5 cleaning cycles according to directions reported on the care label. ISO 6330 should be followed for washing machine, considering a type A machine, and flat dry. In-between washing cycle, the product should be flat dried for a maximum of 12 hours. After the last washing cycle, the product must be completely dry because the tests must be performed on a completely dry item. Detergent 7 will be used for products mainly made of wool and silk, and for products that need delicate or hand washing. For the rest of the products detergent 3 will be used. The detergent should never include bleaching. ISO 3175-2 should be followed for dry cleaning.

The visual inspection test should not include the qualitative assessment of the spirality because this is quantitatively assessed separately with ISO 16322-3.

When performing the visual inspection, many sub-parameters are assessed. In this case, the performance level of the visual inspection is given by the worst performing sub-parameter assessed.

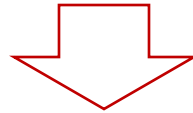
Products which are designed to change their colour over time should not be assessed for colour change in the visual inspection. This applies only if the economic operator clearly communicates to the user this design choice. An example of this would be a product made of denim fabric dyed using indigo techniques to provide a vintage appearance to the product.

Source: own elaboration and consultation with stakeholders

Product technologies – Robustness

This robustness framework has two notable limitations:

1. It is not capable of describing the foreseeable service lifetime related to the intrinsic properties of the product,
2. A known increase in performance level of key parameters corresponds to an unknown increase of physical durability.



The consequent estimated increase in the service lifespan can only be based on expert judgement, which will not be verifiable.

Product technologies in the context of physical durability - Q&A

Are there any questions related to:

- The use of the robustness approach, rather than durability?
- The selection of the key parameters?
- The description of technologies based on fabric construction?
- The main limitations of the robustness framework?



Break 1





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Break until 10:40

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Task 4 on product technologies

- Updated description of product technologies in the context of recyclability and recycled content
- Product categories

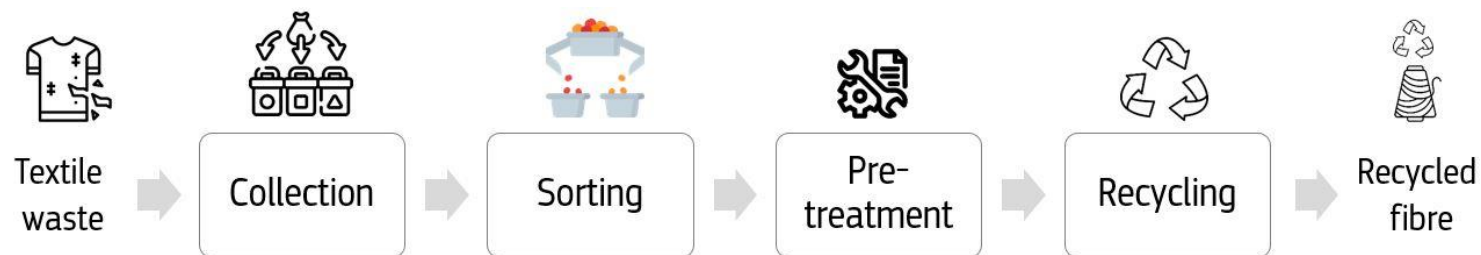


Recyclability

- Definition:

A recyclable textile apparel must have the following five characteristics, which apply as soon as it becomes waste:

- *It can be effectively collected;*
- *It can be sorted, i.e. segregated from other textile waste and sent to the subsequent suitable recycling pathways;*
- *It can be pre-treated before recycling, or can be sent directly to recycling without specific pre-treatment;*
- *Its fibre content can be used as feedstock for one or more recycling techniques at scale, either for the original or other purposes;*
- *It has no elements or substances in amounts that disrupt the collection, sorting, preparation for recycling and recycling, or that prevent the use of the recycled fibre.*



- Review and supplementation of the ecosystem description

Recyclability

- Updated status of recycling techniques for textile waste in 2024 based on stakeholders' inputs and new studies

Mechanical recycling of cotton, wool or synthetic fibres or blends	Shorter spinnable and non-spinnable fibres of the same type of the input material	TRL 9 (also in Europe).
Mechanical + thermochemical process for polycotton blends	Cotton fibres with the same characteristics of the virgin ones	TRL 9 (also in Europe).
Thermo-mechanical recycling of fibres based on thermoplastic polymers	Polymers in the form of granulate or fibres. The recycled fibres should be blended with virgin fibres.	TRL 9.
Chemical recycling of cotton	Wet or semi-dried cellulosic pulp.	TRL 7-9, the highest for pure cotton. In Europe, TRL = 4.
Chemical recycling for polyester and nylon	Polyester and nylon monomers/oligomers	PA6 recycling TRL 9 (also in Europe). PES recycling TRL 4-7. In Europe, TRL 5-6.
(Thermo-) Chemical recycling for polycotton fabrics	Pulp or PES fibres, polymers, or monomers.	Solvent-based dissolution and filtration, hydrothermal and enzymatic techniques, TRL 5-7.
Thermo-chemical recycling via pyrolysis and gasification	Syngas or pyrolysis oil which could serve to produce methanol for later polymer production.	TRL 9.

Note: Nylon (PA6), polyester (PES)



Recyclability

Base Case

Mechanically recyclable products, which is the most common technique at scale even if the recycling rates remain low at around 10%

BAT

Products that currently can be processed by other techniques implemented at scale

- (1) pure cotton textile apparel recycled via chemical recycling for the production of MMCFs,
- (2) PA6-rich textile apparel recycled via chemical recycling, and
- (3) acrylics and polyester rich blends recycled via thermomechanical recycling.

BNAT

Products that can be processed with techniques at intermediate maturity level



Recycled content

- Definition:

The proportion, by mass, of recycled fibres coming from ~~recyclable textile apparel disposed as post-consumer waste~~, from post-industrial, pre- and post-consumer waste, in a textile product.

Now considers:

- Post-industrial, pre- and post-consumer waste
- Secondary material coming from sources other than fibre-to-fibre recycling.

While F2F mechanical recycling of PES is operational at scale, the availability of materials remains insufficient for widespread adoption (in 2023, only 2%).

PET bottles currently provide a higher-quality source for recycled material compared to F2F mechanical recycling.

It is estimated that the recycled content target across the packaging market would mean 56% of the material available in 2030.

Recycled content

Base Case

Products with no recycled content

BAT

Products with recycled content coming from sources other than textiles waste

BNAT

Products identified with a closed-loop recycling in the sector

- Product characterisation: **denim** can incorporate up to 20% post-consumer recycled material, or alternatively 30% post-industrial recycled material



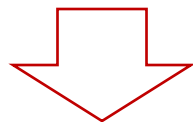
Product categories

Physical durability

- Woven
- Knitted

Recycled content

- Denim fabric can incorporate up to 20% post-consumer recycled material, or alternatively 30% post-industrial recycled material



The following tasks analysed three representative products, one for each of the defined product categories:

1. knitted products (**Knitted**),
2. products made of denim fabric (**Denim**), and
3. woven products made without denim fabric (**Other woven**).

Product technologies in the context of recyclability and recycled content - Q&A

Are there any questions/comments related to:

- Definitions
- Consideration of types of waste as eligible feedstock for recycled content requirements
- Base cases, BAT, BNAT



Task 5 on environmental and economic assessment

- Aim and structure of Task 5
- Modelling of Environmental and Societal impacts.
- Results of the environmental and economic assessment – contribution and scenario analysis.

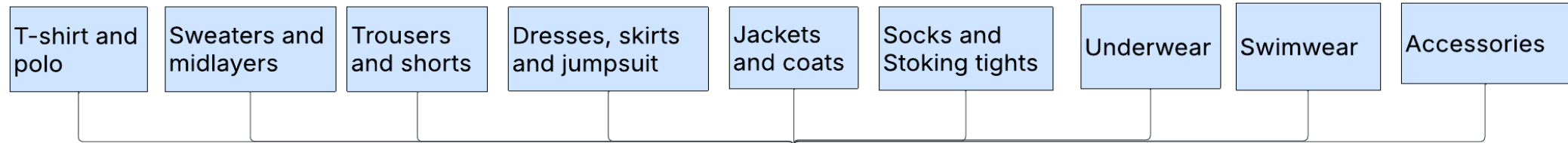


Aim and structure of Task 5

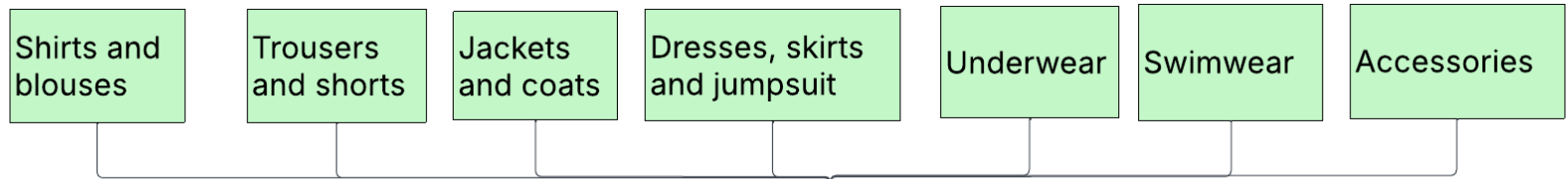
- The main aim of Task 5 is to describe the consumption of the products in the scope from the environmental and economic perspectives
- It includes the investigation of the impacts via Life Cycle Thinking approach with the:
 - Description of the model developed
 - Contribution analysis of the results
 - Perturbation analysis
 - Propagation of uncertainties
- Additionally, an analysis of the fragmented fibre release into the environment focusing on:
 - The products of textile apparel fragmentation
 - Impacts on the environment and human health
 - Sources and pathways due to textile apparel consumption
 - Analysis of pollution hotspots



Representative products



Representative Product 1 Knitted



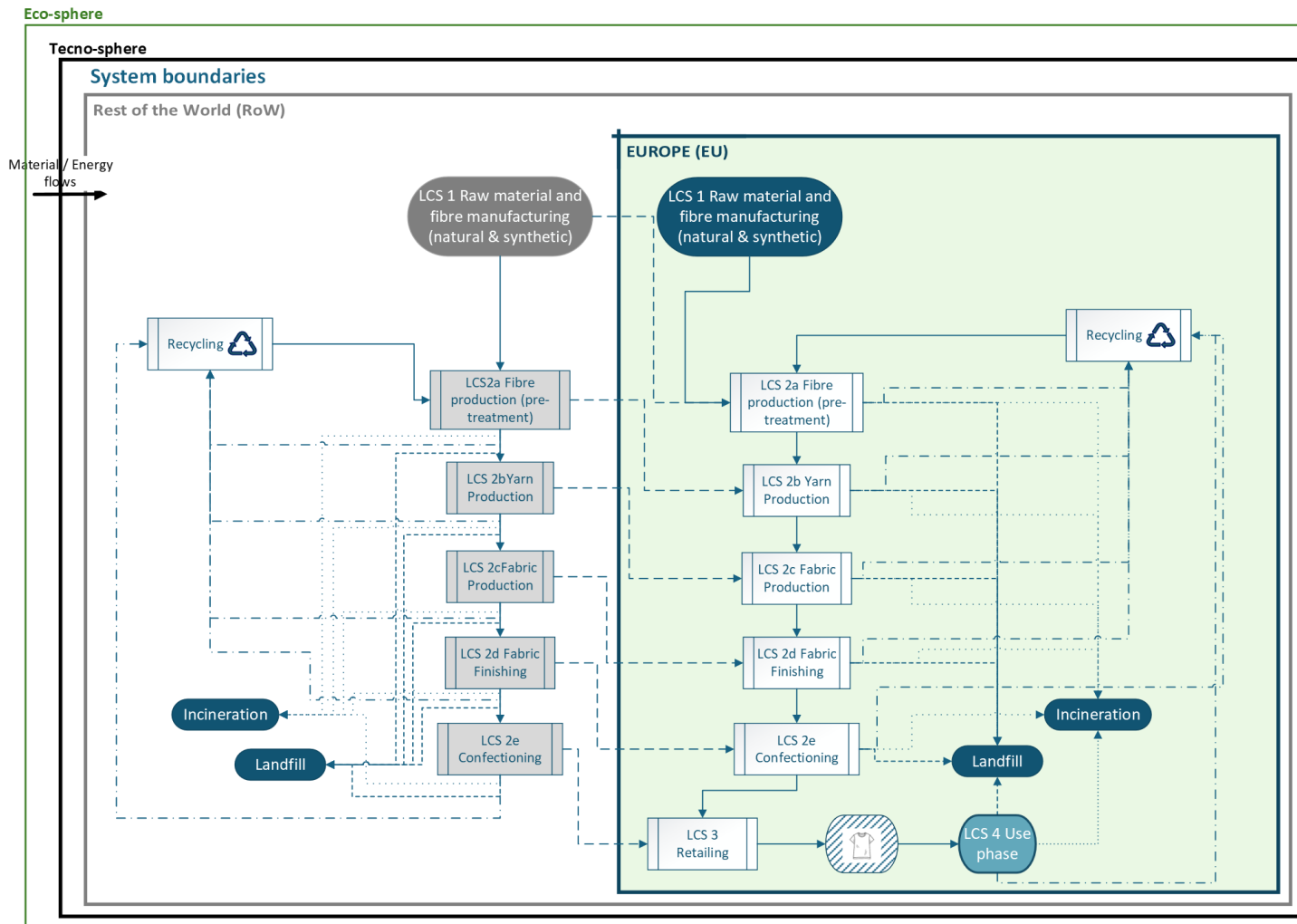
Representative Product 2 Woven



Representative Product 3 Denim



Framework – System boundary



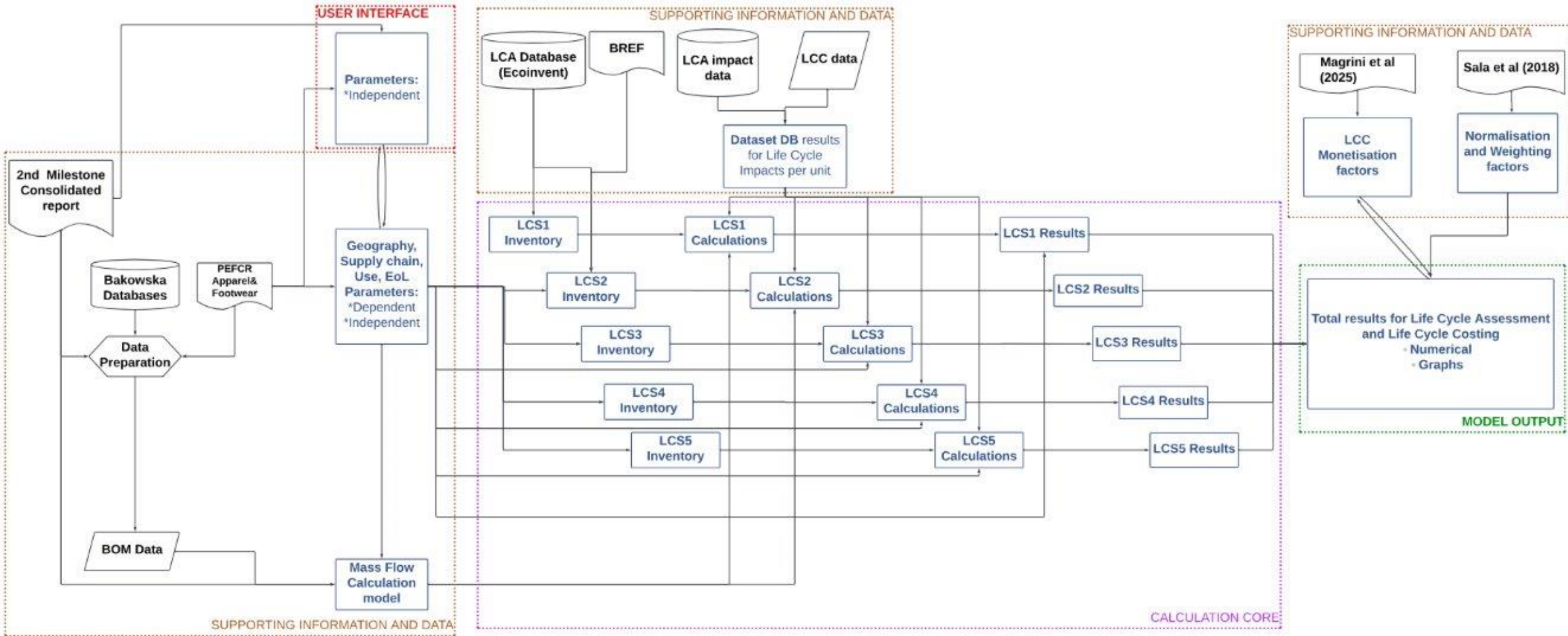
Functional unit: Body coverage using specified item, fulfilling consumer's needs for 6 years in EU. (6 years = longest service lifespan of products included in scope).

LEGEND

- Mass flows of RMs/intermediaries that are processed either within or outside the System
- - - → Dashed lines entering the (EU) system boundary are indicating flows of RMs/intermediaries/final product entering the system via transport
- · - · - · → Dashed and dotted line leading to the Waste management and EoL options



LCA/LCC Modelling framework



Tool description

- Excel based model
- Ecoinvent database used
- Values and assumptions based on:
 - PEFCR Apparel & Footwear
 - Ecoinvent database
 - EF3.1 documentation
 - Best Available Techniques (BAT) Reference Document for Common Waste Gas Management and Treatment Systems in the Chemical Sector
 - 2nd consultation feedback
 - Literature
 - Expert judgment and own elaborations



Sensitivity and uncertainty analysis

- Parameters were included based on the following criteria:
 - Parameters being independent
 - Parameters with contribution to final scores
 - Parameters relevant to the Design Options investigation (Task 6)
- Out of a total of 345 parameters, 98 were selected as relevant
- Perturbation and Monte Carlo simulations were performed to assess the variability and relevance of parameters and inputs data
- Perturbation 10% applied to parameters returned Sensitivity ratios < 1
- Monte Carlo Simulation (95% confidence interval) confirmed uncertainty $< 1\%$



Impact assessment: EF impacts and single score

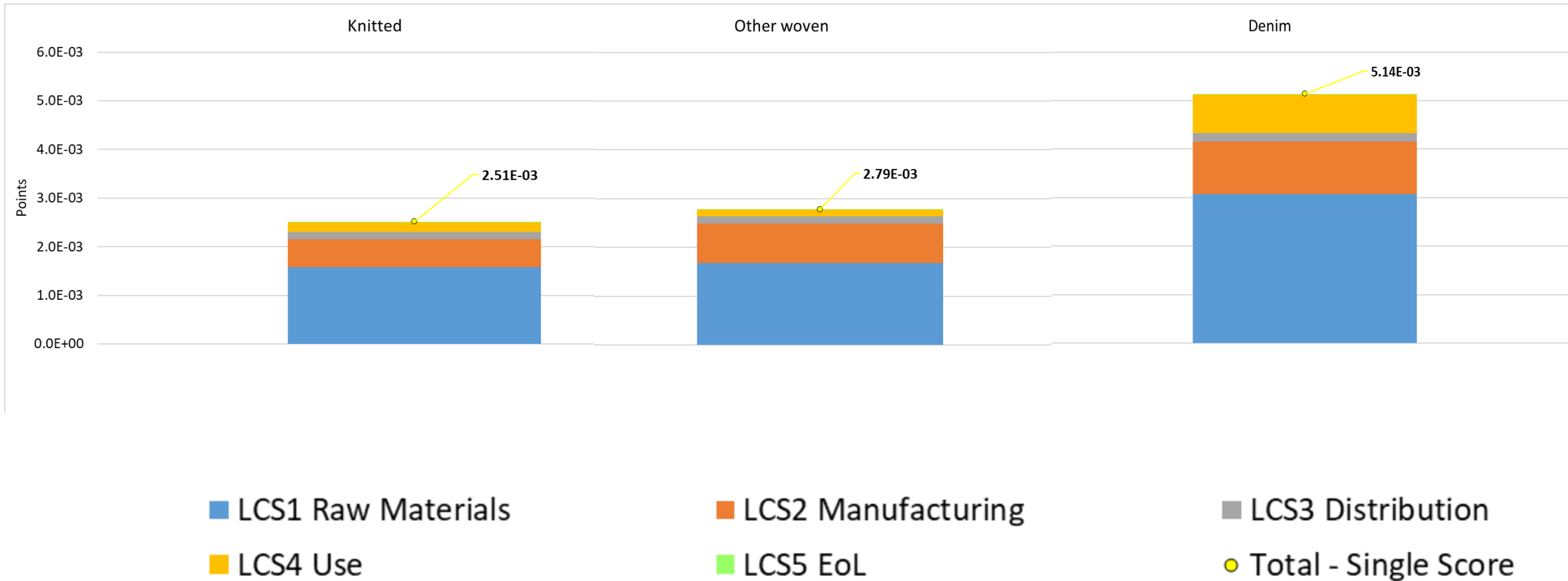
Environmental Impacts covered



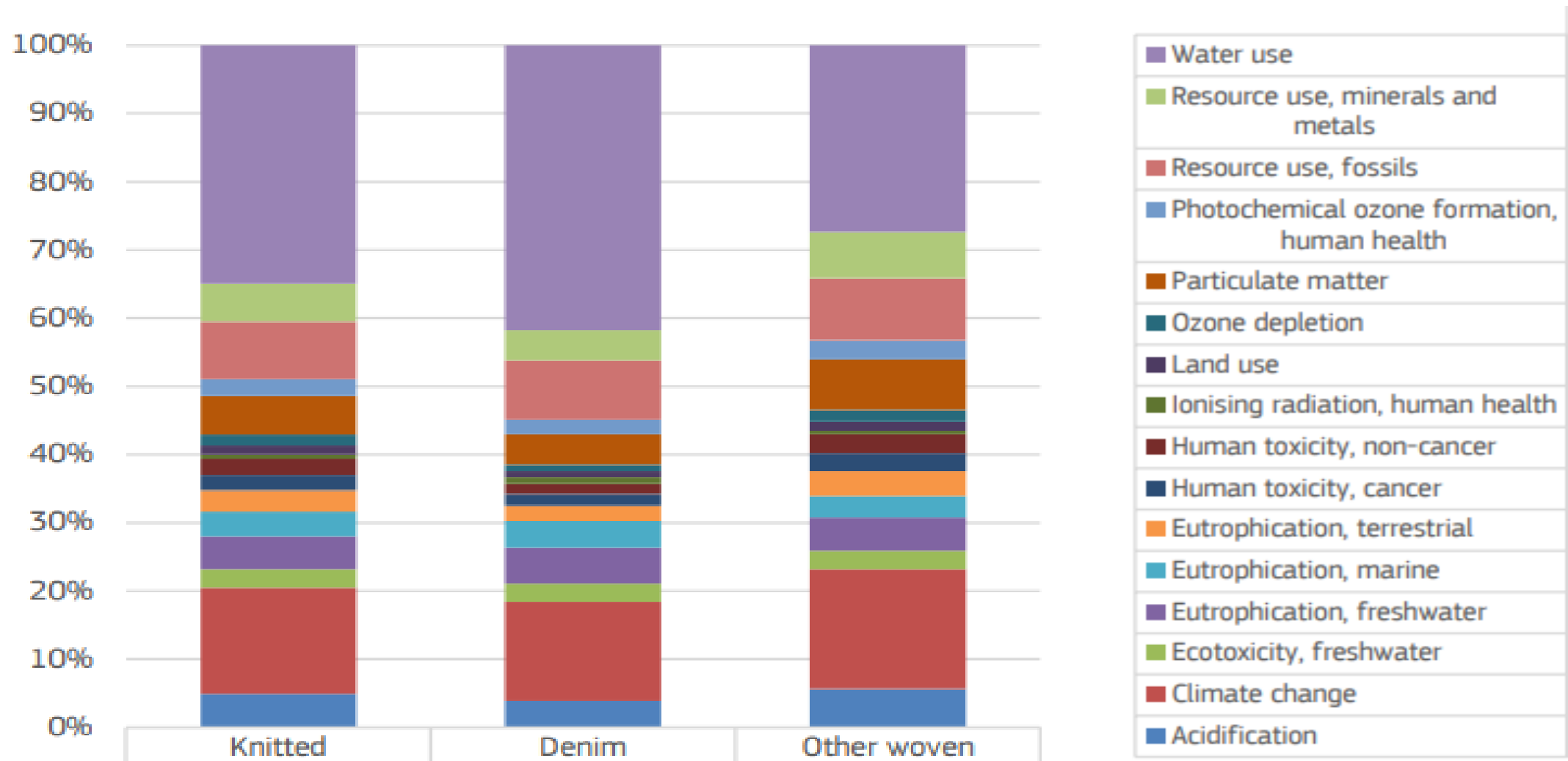
Results presented for the:

- 16 EF impacts categories separately possible
- EF single score

Results LCA – Base case contribution



Results LCA – Base case contribution of EF impact categories

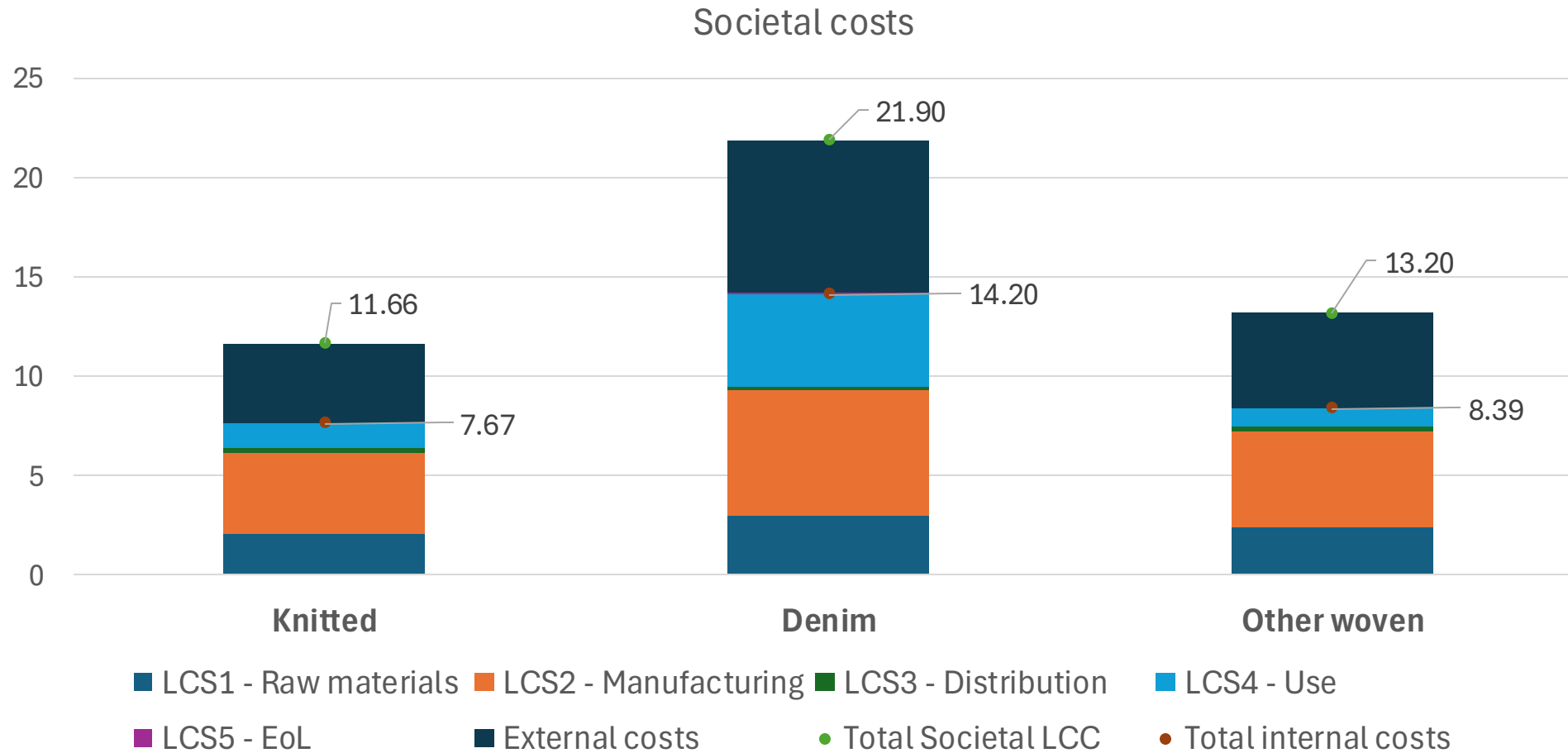


Societal LCC

- LCC was performed adopting 3 different perspectives (producer, consumer, society).
- When examining the perspective of the **society**, a **societal LCC** is performed, including the monetisation of the environmental impacts.
 - ✓ The system boundaries are from cradle to grave.
 - ✓ Neither tariffs nor taxes are included in this calculation.
 - ✓ Reference year for the analysis is 2022, and all cost figures refer to that year.
 - ✓ In LCS3 and LCS5 discount rate (3%) is applied.
 - ✓ For more information on the monetisation factors, see: Magrini et al., *Method for the ranking of potential requirements, based on expected impacts and costs*, Publications Office of the European Union, 2025, <https://data.europa.eu/doi/10.2760/1478580>



Results LCC – Base case contribution



Scenario analysis

- To test the influence of the consumer choice, additional scenarios (namely 'Worsening' and 'improving' scenarios) were run
- Results were mainly driven by the user behaviour, for which a dedicated analysis was conducted.

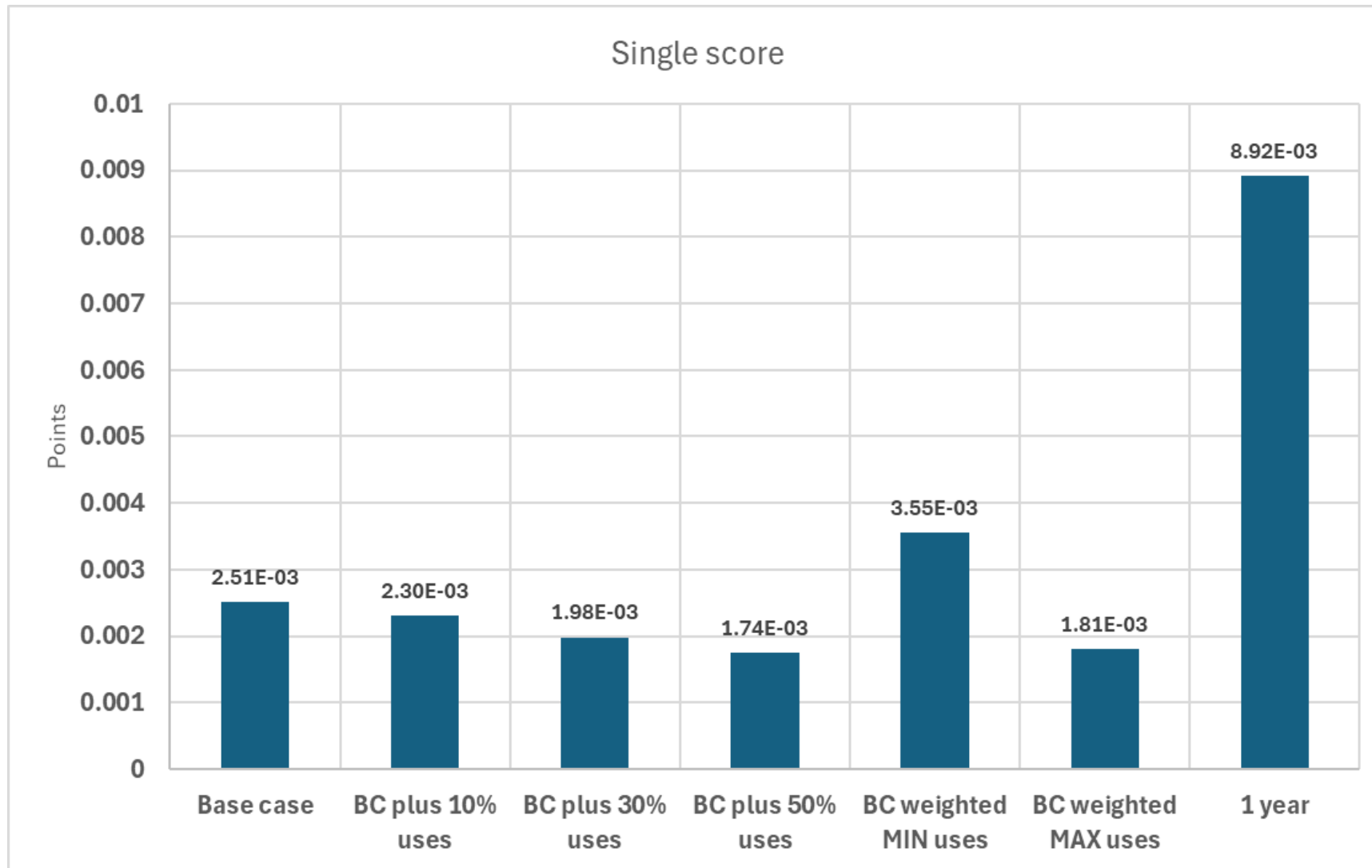
Improving scenarios

- Increase of number of uses before disposal equal to 10%/30%/50%
- Number of uses equal to maximum value of "number of uses" reported in the literature

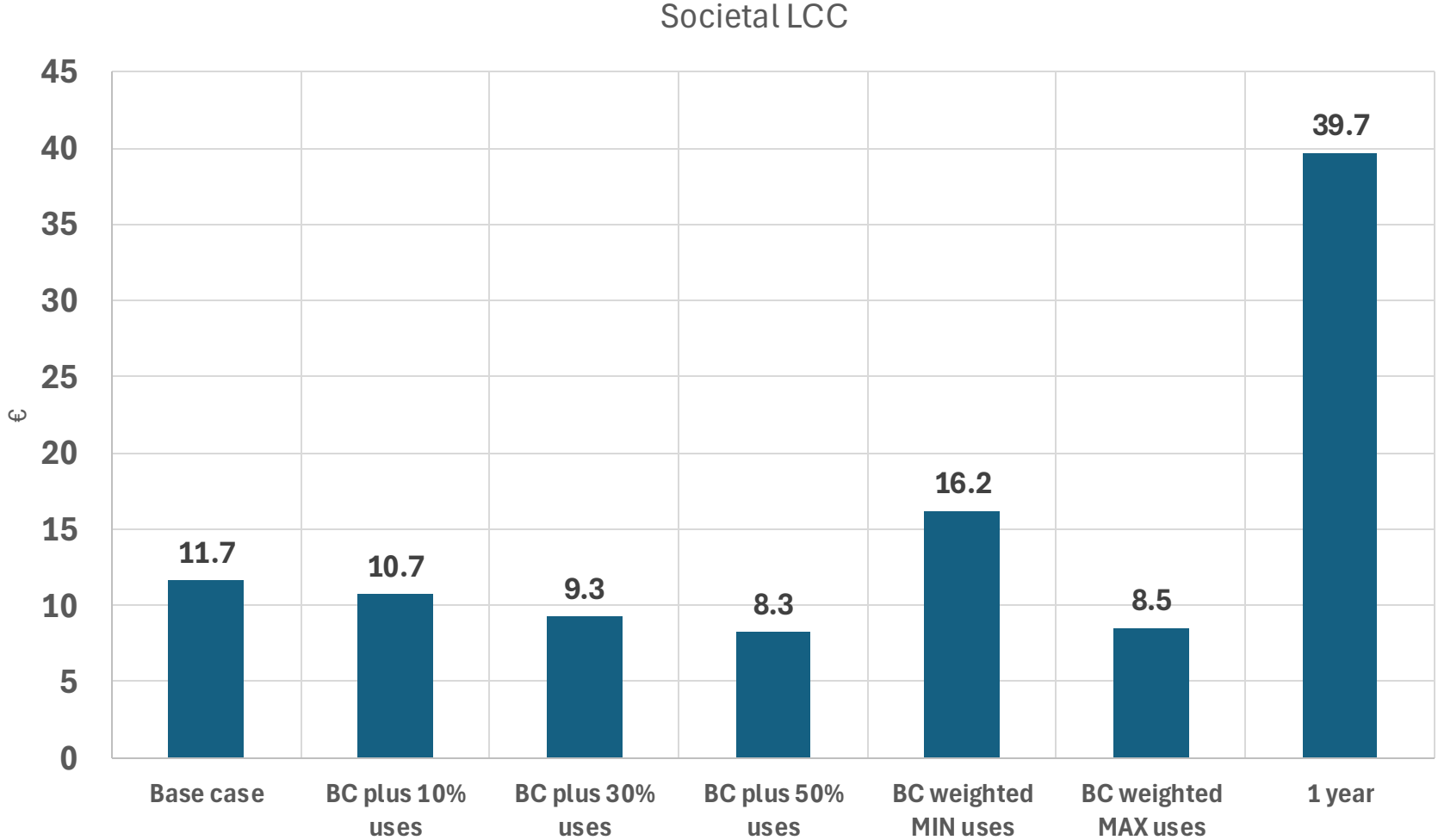
Worsening scenarios

- Product that is used only once and is subsequently disposed of
- Number of uses equal to the minimum values of "number of uses" reported in the literature.
- The consumer changes their textile apparel every year

Results LCA – Scenario analysis (excl. outlier) Knitted



Results LCC - Scenario analysis (excl. worst outlier) Knitted



Parameters/survey

- From **16 January to 23 March 2026**, registered stakeholders will be able to provide comments (in writing) to the working document via a dedicated questionnaire
- Questions on the LCA/LCC models based on the 10 groups of parameters:
 - Fibre composition
 - Loss factors for the various manufacturing and distribution processes
 - Geographic location of production of textile fibres
 - Geographic location of production processes
 - Economic values related to work, taxes and tariffs
 - Use stage
 - End-of-Life routes
 - Prices of fibres from various countries
 - Electricity and heat unit costs
 - Unit cost for HR
- When providing an alternative suggestion on the values please specify if it is based on:
 - (a) technical evidence (including direct measurements/published reference), provided to JRC
 - (b) expert judgement (based on sources/references not provided, e.g. for confidentiality)
 - (c) unverifiable expert suggestions

Environmental and economic assessment

Q&A

- Is there any specific aspect (e.g. additional scenarios, specific contributors) that could complement the results presented in the report?
- Is the level of granularity sufficient?
- Could the parameters values that are used in the assumptions be improved and if yes how?
- Could you provide data and specific parameter values that could improve the model?
- Any other questions?



Break 2





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Break until 12:00

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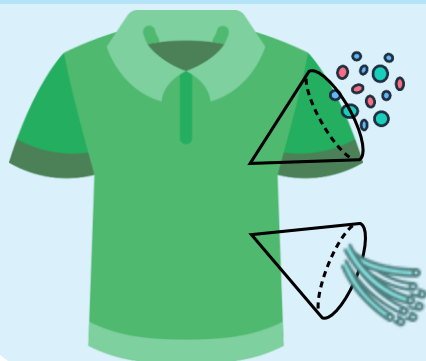
Fragmentation of textiles



Definitions

The fragmentation of textile apparel generates **particulate matter**. The particulate matter is described based on its **shape, size and composition**.

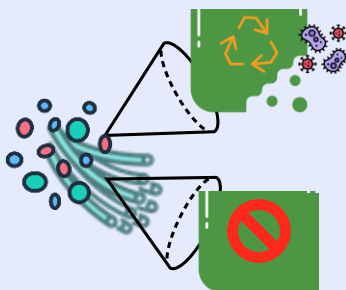
Classification based on shape and size



Particles: Shape may resemble spheres or irregular forms (e.g., fragments, flakes). Maximum length-to-width ratio ≤ 3 . All dimensions < 5 mm.

Microfibres: Elongated particulate matter. Length-to-diameter ratio > 3 . Length < 15 mm.

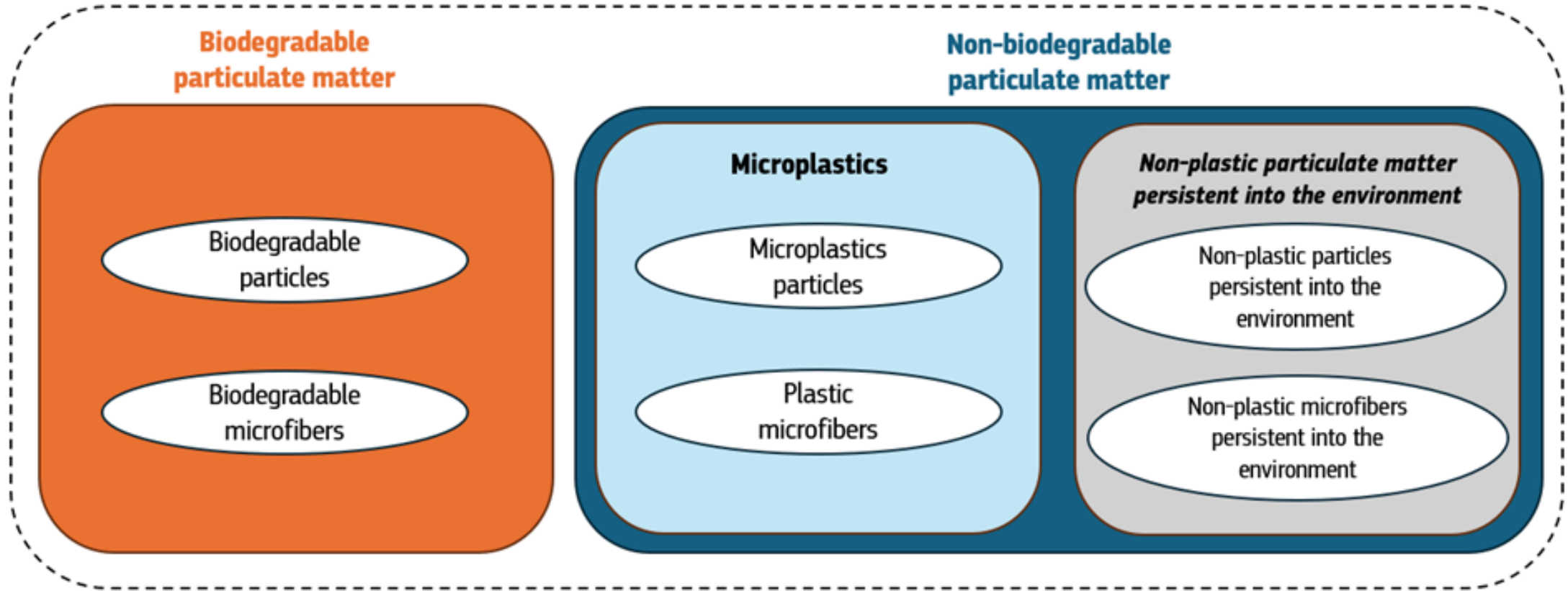
Classification based on composition



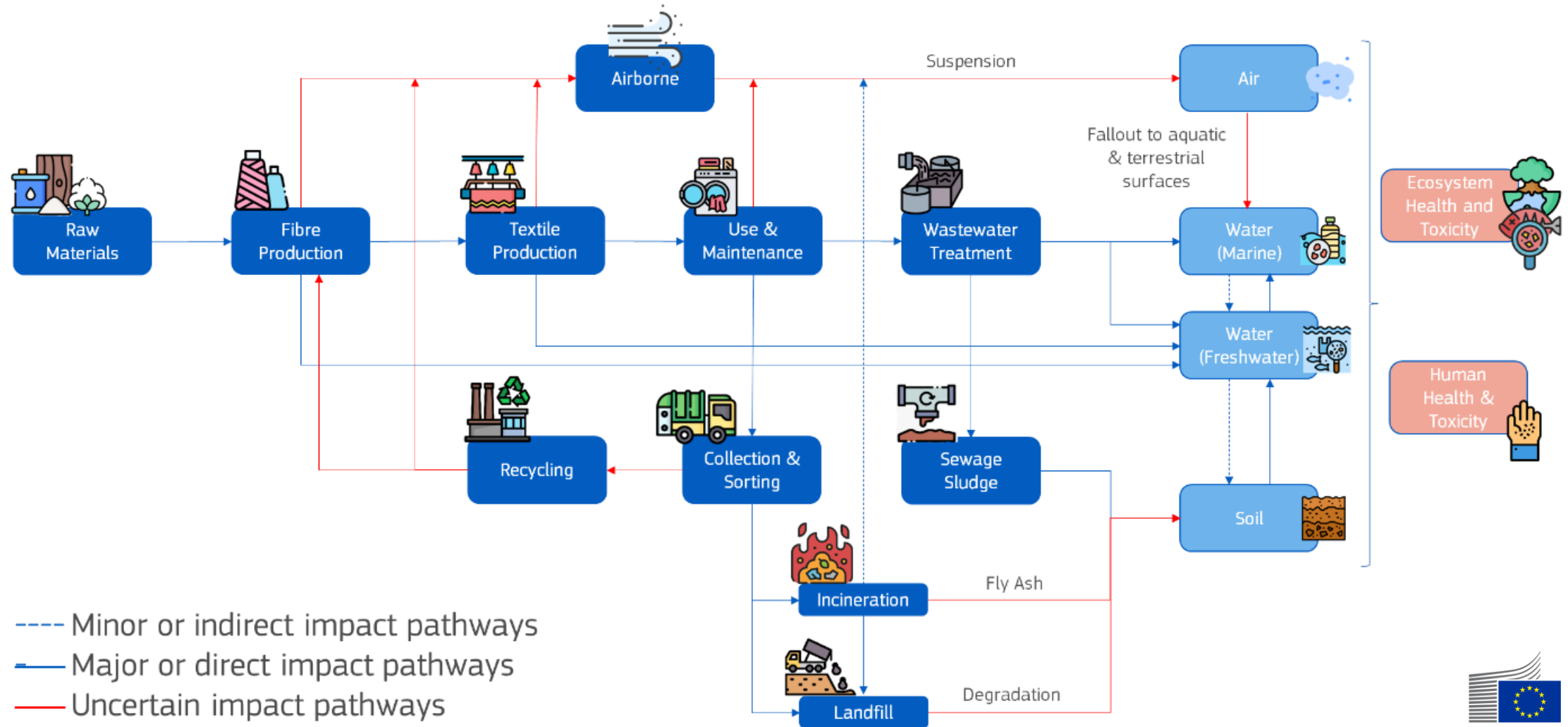
Biodegradable: Particulate matter that is broken down by living organisms (e.g., bacteria, fungi, moulds) into harmless substances under specific environmental conditions within a defined timeframe.

Non-biodegradable: Particulate matter that does not meet biodegradability requirements and therefore persists in the environment.

Definitions

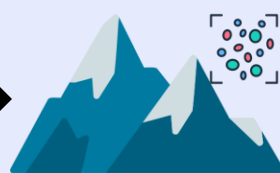
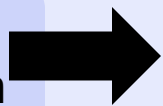


Sources and pathways due to textile apparel consumption

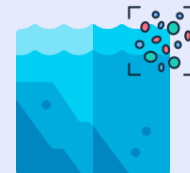


Impacts on the environment

Microplastics have been found in the most remote locations on Earth



Mountains



Ocean



Pola regions



Bloodstream



Soil ecosystems

- Impaired microbial activity
- Effects on reproduction of soil organisms
- Reduced seed germination and stunted plant growth
- Reduced earthworm biomass
- Changes to soil pH and soil stability
- Obstruction of water/nutrient uptake and disruption of ecological processes (e.g., nitrogen cycle)



Aquatic environments

- Digestive blockages in marine life
- Shifts in nutrient dynamics and changes in microbial communities (water/sediment)
- Threats to biodiversity via interference with reproduction
- Endocrine system disruption in marine animals
- Potential effects on oceans' carbon capture and storage efficiency



Atmosphere

- MP can act as cloud condensation nuclei or ice-nucleating particles, influencing:
- Cloud reflectivity
 - Rainfall patterns
 - Rain duration

Impacts on human health

Respiratory (inhalation)

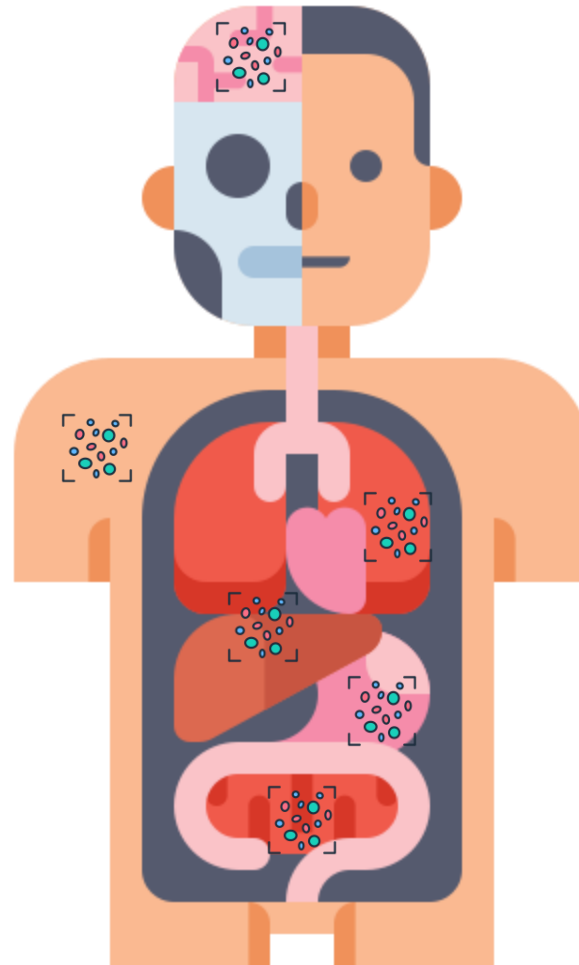
- Respiratory irritation
- Possible contribution to chronic conditions such as COPD and asthma

Dermal (skin contact)

- Skin irritation and inflammation
- Potential for endocrine disruption and reproductive toxicity

Immune / chronic disease risk

- Inflammatory responses potentially associated with a spectrum of issues, including cancer, reproductive difficulties, and developmental anomalies



Antibiotic resistance (microbial interactions)

- MPs may exacerbate antibiotic resistance by acting as breeding grounds / carriers for bacteria

Neuroendocrine & metabolic effect

- Disruption of circadian rhythms and melatonin production (sleep disorders)
- Interference with hormone regulation and metabolism, contributing to obesity and increased diabetes risk (via oxidative stress/inflammation)

Analysis of pollution hotspots and final consideration

The analysis of the literature showed that the **identification of hotspots**, where particulate matter (PM) is mostly released into the environment, is not currently possible. This is mainly driven by:



the absence of a **standardised definition** on **particulate matter biodegradability**, and



the lack of **standardised methods for the sampling, characterization and quantification** of these pollutants in all release points of the value chain.

Without **standardised methods**, the few current emission rates reported by the literature cannot provide a reliable identification of the **main emitting sources** upon which to potentially focus the optimized **mitigation strategies**. Since most of the studies are focused on microplastic there is the need to expand the scope of the studies to biodegradable PM and non- biodegradable PM persistent into the environment.

Fragmentation of textiles

Q&A

Are there any questions related to:

- The **definition** of fragmented textile as **particulate matter (PM)** and, PM characterisation based on **shape, size** and **composition**. In particular, the classification based on their **biodegradability** in biodegradable PM and non-biodegradable PM.
- The identified **sources and pathways** of PM originating from the fragmentation of textile products
- The lack of **standardised methods for the sampling, characterization and quantification** of these pollutants in all release points of the value chain.



Task 6 on design options

- Aim and structure of Task 6
- Overview of design options



Aim and structure of Task 6

Define and assess design options

Design configurations that address the identified hotspots and potentially improve the environmental performance of the products without disproportionate costs.

*These should be understood as **potential ecodesign requirements** and **not as final proposals**.*

Further steps: Task 7 and Impact Assessment.

- 1 Definition of design options (DOs)**
and of the potential information or performance **requirement** associated
- 2 Assessment of DOs**
Individually
Environmental (LCA) and economic (LCC, sLCC) assessment
- 3 Creation of paths**
Clustering of DOs that go in synergy
- 4 Assessment of the paths**
Environmental (LCA) and economic (LCC, sLCC) assessment



Overview of Design Options

Generic objectives	Specific objectives	Design Options (DOs)	(Potential) Ecodesign requirement
Decrease the environmental impact of products by diluting one-off effects	Extend products lifetime	DO1 – Product with an increased robustness	Information requirement on the robustness (robustness score)
Increase the availability of secondary materials	Increase the share of the waste going to recycling	DO2 – Product with a higher recyclability	Information requirement on the recyclability (recyclability score)
Decrease the environmental impact of raw materials	Increase the use of secondary materials	DO3 – Product with higher recycled content	3.1 Information requirement on recycled content 3.2 Performance requirement on the recycled content
Decrease the environmental impact of manufacturing	Decrease the environmental footprint of the manufacturing	DO4.1 – Product with a decreased environmental footprint	Information requirement on the environmental footprint during manufacturing
	Decrease the carbon footprint of the manufacturing	DO4.2 – Product with a decreased carbon footprint	Information requirement on the carbon footprint during manufacturing

Other considered Design Options

- Enhanced **repairability** to increase the service lifetime
 - Any item of textile apparel can be repaired
 - The complexity of repairability cannot be objectively quantified
 - Factors influencing it often conflict with the creative nature of the textile and fashion industry
 - Repair instructions: administrative burden for manufacturers, services are normally performed by professionals
 - Barriers: emotional attachment, fashion trends, and repair costs



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 - Barriers: emotional attachment, fashion trends, and repair costs
- **Information requirement** on repair services directly offered by the brand (if any), including their details and contact information, via the Digital Product Passport.

Not modelled since it would not affect all economic operators, adds minimal effort and burden on manufacturers while offering a benefit to the citizen.



Other considered Design Options

- **Sustainability of fibre production**
 - Preference of fibres: each type has specific characteristics to meet the demand of the supply chain and the users
 - Identifying the most sustainable production should consider:
 - trade-offs among the several EU strategies and action plans
 - systemic competition with other industrial sectors that use the same resources (avoid markets distortion)



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 - systemic competition with other industrial sectors that use the same resources (avoid markets distortion)
- Organic Regulation (EU) 2018/848 includes specific ambitious environmental criteria for the production of cotton, wool and silk
- **Voluntary information requirement** reporting of fibre content compliant with this EU regulation

Not modelled since it would not be mandatory



Other considered Design Options

- **Fragmentation of textile apparel**
 - Technical gaps should be first addressed:
 - Standardisation of the definition of particulate matter biodegradability.
 - Standardisation of measurement methods for sampling, characterization, and quantification of these pollutants in all release points of the value chain.
 - Identification of the main emitting sources along the whole value chain through standardised measurements.
 - Potential mitigation strategies should be based on the previous points and consider the driving factors of the main emitting sources.

A design option addressing it is not defined at this stage

Overview of design options

Q&A

Are there any questions related to:

- The aim of Task 6
- The definition of design options
- Repairability
- Sustainable fibres
- Other



Closing remarks



Thank you

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