

Co-creation with stakeholders

Method for calculating the environmental labelling of textiles

June 2026

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This is a report template designed to facilitate contributions from stakeholders.

Contributions to the consultation should be sent to the following address: ***affichage-environnemental@ademe.fr***

Respondents are asked to follow the order and numbering of the questions to facilitate processing.

The exact closing date for the consultation is 30 June 2026.

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Introduction

A collaborative development phase begins with the webinar organised on 9 June 2026. Following this webinar, the aim of this document is to gather and centralise initial feedback from stakeholders in order to clarify the priorities regarding the methodological work on the French environmental cost.

All the methodological topics discussed during this webinar and detailed in this document constitute a list of areas for improvement and additions, intended to enhance the environmental labelling scheme for the textile sector. However, this document in no way prejudices the inclusion of all these proposals in the next update of the regulatory framework.

Given the number and diversity of the topics covered, the success of this work depends largely on the contributions, feedback and opinions of stakeholders. Work priorities will also be defined according to the level of commitment and investment from the relevant stakeholders.

Thank you for your interest in the initiative!

Level 2

Understanding the Level 2 topic

This document first explains the subject, then sets out the consultation questions. You can read it and respond even if you are new to Level 2: this first section provides all the necessary context, and a glossary explains the technical terms.

Level 1: today's mandatory baseline

Today, the calculation is based on Level 1: a small number of parameters (5 to 10), which are easy to fill in, and default values where information is not provided. These default values are deliberately conservative (rather unfavourable), to encourage brands to provide their actual data. The current regulatory framework requires the use of Level 1 for the voluntary display of environmental costs. Should Level 2 be incorporated into the regulations, Level 1 will be the minimum standard to be applied.

Level 2

Level 2 is an advanced, optional version of the calculation. It allows a brand to provide more detailed and precise parameters to obtain a more accurate environmental cost and highlight its eco-design efforts. For example, instead of a default value for dyeing, the brand declares the type of dye actually used. Level 2 does not replace Level 1: it enhances it.

What is a parameter?

A parameter is a piece of data used in the calculation of the environmental cost (for example, the weight of the garment, its composition, the type of dye, or the rate of cutting waste). Level 1 uses simple reference parameters; Level 2 adds additional, more detailed parameters.

Reference parameters (Level 1)	Additional parameters (Levels 2 and 3)
Mandatory or optional	Optional
Easily accessible	Require a better understanding of the value chain and calculation methods, and/or verification
Examples: weight, composition	Examples: cutting loss rate, photovoltaic equipment in factories

According to the decree on the environmental cost of textile clothing products (Article 8).

The principle of batches

Level 2 parameters are introduced in successive batches: first batch 0, then batch 1, and so on. The first batches include the most useful and easiest-to-document parameters, those requiring the fewest data changes from brands. The aim is to begin quickly highlighting brands' eco-design initiatives and gradually expand the possibilities by adding new batches.

Evidence

When a brand declares a Level 2 value, it must be able to justify it in the event of an audit: this is the evidence (for example, a supplier's technical data sheet, a photo, or a certificate). The

challenge is to define what evidence is acceptable, and how to retain it without adding to the brands' workload.

Verification

To ensure the scheme remains credible, we must ensure that the calculation tools produce reliable results and that declarations are justified. The challenge is therefore to define robust verification methods without creating a system that is too cumbersome, too expensive or too slow, which would be reserved for major players?

The working group's guiding principles

- Consistency: with the PEF (the European method), Level 1 and Article 13 of the AGECE Act.
- Realism: taking into account time, resources and the actual availability of evidence in the factory.
- Progressiveness: moving forward in batches, with continuous improvement.
- Verifiability: selecting controllable parameters without requiring disproportionate measures.
- Value-based approach: rewarding a better understanding of the value chain, with reasonably conservative default values.

Glossary

Term	Definition
Environmental cost	The impact score displayed on the product, in impact points (the lower the better).
Ecobalyse	The government's reference tool that calculates the cost using the official method.
ADEME	Agency for Ecological Transition: oversees the method and the tool.
CGDD	General Commission for Sustainable Development, within the Ministry: regulatory framework.
DGCCRF	Administration responsible for combating fraud: carries out inspections.
Consultancy firm	Company that calculates scores and/or provides brands with a calculation tool.
Life cycle assessment	A method that measures a product's environmental impacts, from raw materials to end of life.
PEF	Product Environmental Footprint: the European method for calculating the environmental footprint of products.

AGEC (Article 13)	Anti-Waste Act: already requires certain information and evidence to be provided on products.
Upper default value	A conservative value used when actual data is not provided, to encourage reporting.
Batch	Set of Level 2 parameters, introduced progressively (batch 0, 1, 2...).
Evidence	Supporting documentation for a reported value (technical data sheet, photo, certificate...).
Reference products	Reference products used to test whether a tool calculates correctly.
Authorised declarant	A third party (often a design consultancy) that declares the score on behalf of a brand.

Expectations, questions and priorities regarding Level 2

- Does Level 2 meet a real need: to measure, test and reflect in the score the brands' eco-design and traceability efforts, which are currently invisible at Level 1?

☒ Yes

☐ No

Level 2 meets a real need only if the underlying model is capable of measuring the sustainability outcomes that policymakers and consumers expect. We support the principle that brands should be able to provide more accurate, product-specific and supply-chain-specific information, and that genuine eco-design and traceability efforts should be recognised rather than hidden behind conservative defaults.

However, Level 2 should not be presented as a solution to the more fundamental limitations of the current environmental cost model. At present, the model does not measure sustainability in a complete sense. It is primarily an LCA-based environmental impact score, with selected additional parameters. It still insufficiently accounts for key sustainability dimensions such as renewability, biodegradability, persistent plastic waste, microplastic pollution across the full life cycle, actual duration of service, positive land-management outcomes, biodiversity, soil health, animal welfare and wider social dimensions.

This matters because the current model can lead to outcomes that appear to contradict the policy objectives of France's environmental labelling initiative. In particular, it can communicate that fossil-based synthetic textiles are environmentally preferable to natural-fibre textiles, even where that outcome is driven by methodological choices, incomplete system boundaries, outdated or non-representative datasets, and weighting assumptions rather than genuine sustainability performance.

For natural fibres, this is especially problematic. The JRC has acknowledged in the ESPR textiles preparatory study that available datasets for raw materials do not currently allow fair comparison between fibre types, including because of unequal system boundaries and unresolved methodological limitations. Textile Exchange has also warned that comparisons between natural and synthetic fibres should generally not be made because the systems are fundamentally different and therefore not comparable.

Level 2 can therefore be useful only under strong safeguards. It should improve transparency and data quality, but it should not create false confidence in a single score that may still be based on incomplete or immature methods. A more detailed input system is not sufficient if the score continues to favour plastic textiles and fast-turnover business models while failing to recognise the full environmental value of renewable and biodegradable natural fibres.

We recommend that ADEME first clarify which sustainability outcomes the environmental cost is intended to drive: reduced overproduction, longer real use, lower fossil-resource dependence, lower plastic pollution, better circularity, and more responsible material production. Level 2 parameters should then be selected only where they demonstrably support those outcomes, are verifiable, and do not unintentionally reward synthetic fibres or ultra-fast-fashion models.

- **What concrete benefits do you expect from Level 2?**

Answer: Level 2 could provide benefits if it is designed as a targeted, evidence-based improvement layer rather than as a way to legitimise the existing score. In principle, it could help brands and suppliers demonstrate real eco-design and traceability efforts that are currently invisible or insufficiently reflected at Level 1.

The most useful benefits would be:

First, better recognition of verifiable production improvements. Level 2 could reward real and documentable actions such as reduced cutting loss, improved process efficiency, lower-impact dyeing and finishing, verified renewable energy use, and more accurate product composition and weight data.

Second, better traceability. Level 2 could improve transparency across the full supply chain, including raw-material provenance, manufacturing locations, process routes and evidence quality. This should apply equally to natural, regenerated and synthetic fibres. For natural fibres, origin, production system and farm-level practices can materially affect sustainability outcomes. For synthetic fibres, traceability should include the origin of oil and gas feedstocks, extraction method, refining and petrochemical route, production geography, energy mix, process chemicals, water use, waste generation and regulatory context. Without equivalent traceability requirements for fossil-based fibres, the system risks placing greater scrutiny on renewable natural fibres while leaving major synthetic-fibre impact drivers invisible.

For example, ADEME could explicitly recognize the diversity of cotton production systems when improving raw-material datasets and traceability requirements. Cotton is not a homogeneous fibre: environmental impacts vary significantly depending on whether production is rainfed or irrigated, the local water context, soil management practices, yield levels and farming systems, including organic or regenerative approaches. The use of generic or regionally narrow datasets risks misrepresenting both risks and benefits. Level 2 should therefore allow, and progressively require, differentiation between cotton production systems where robust, verifiable data are available, in order to avoid systematic bias arising from averaged or non-representative assumptions.

Third, better representation of care and use. Level 2 could allow more realistic care assumptions, including lower washing frequency, airing, spot cleaning, drying flat, professional care where relevant, and fibre-appropriate maintenance. This is important for natural fibres because default care assumptions often fail to reflect real use.

Fourth, better treatment of durability and Duration of Service. Level 2 could help move the method away from simplified assumptions and towards evidence on actual use, repair, reuse, product longevity, time on market, and business models that avoid overproduction. This would be more aligned with France's objective to discourage fast fashion.

Fifth, better data quality and transparency. Level 2 could reduce reliance on conservative or generic defaults where robust primary data are available. It could also make visible the sensitivity of the final score to dataset choice, garment mass, durability assumptions, care assumptions, cutting loss and end-of-life modelling.

However, these benefits will only be achieved if Level 2 corrects the limitations of the current model (Level 1). More detailed data will not automatically make the score more sustainable or more reliable. If the underlying model remains incomplete, Level 2 may simply create a more precise but still misleading score. This is particularly concerning if the score continues to suggest that fossil-based synthetic textiles are environmentally preferable to renewable, biodegradable natural-fibre textiles because of unresolved system-boundary issues, outdated datasets, insufficient treatment of microplastics and persistent plastic waste, and weak recognition of actual Duration of Service and positive natural-fibre farming outcomes.

Therefore, we support Level 2 only if it is used to improve the scientific robustness, fairness and policy relevance of the method. It should prioritise parameters that are material, verifiable and clearly linked to the environmental objectives of the French framework.

- **What are your main concerns regarding Level 2?**

For example: an overly complex audit, excessive costs, a system that cannot be scaled up, deadlines incompatible with production, an excessive burden of proof, or a barrier for small brands.

Answer: Our main concern is that Level 2 may create false precision. A more detailed calculation is not necessarily a more accurate or more sustainable calculation if the underlying model remains incomplete.

The current environmental cost model does not yet measure sustainability in a complete sense. It is still largely based on an LCA-style single score, supplemented by selected additional indicators. Important sustainability dimensions remain insufficiently reflected, including renewability, biodegradability, persistent plastic waste, microplastic pollution across the full life cycle, actual Duration of Service, biodiversity, soil health, animal welfare, rural livelihoods, and positive land-management outcomes.

This matters because the current model can drive outcomes that appear contrary to the French government's objectives. If consumers are told that fossil-based plastic textiles are environmentally preferable to natural-fibre textiles, this may encourage substitution towards synthetic fibres and fast-turnover products. That would undermine objectives related to reducing overconsumption, tackling fast fashion, reducing plastic pollution and supporting circularity.

We are particularly concerned about the following points:

1. Level 2 could legitimise an immature model.

If methodological weaknesses remain unresolved, Level 2 could give the impression that the score is robust simply because more data have been entered. Better data cannot compensate for incomplete system boundaries, weak impact coverage or inappropriate weighting.

2. Level 2 may be costly and complex without delivering meaningful sustainability outcomes.

Brands, suppliers and tool providers may need to invest significant resources in data collection, evidence management and verification. In practice, the burden of compliance with fibre-related sustainability standards is often pushed down the supply chain. Brands may require suppliers to provide the data, suppliers may pass the burden further upstream, and fibre producers — including farmers and other raw-material producers — may ultimately bear much of the cost and administrative workload. Increased complexity is therefore likely to increase cost and data burdens across the supply chain unless the system is carefully designed. This burden must be justified by clear environmental benefit. Level 2 should not become a complex compliance exercise that rewards what is easy to document rather than what genuinely reduces environmental harm.

3. Dataset choice may remain a larger driver than real eco-design.

Experience with PEF testing suggests that dataset choice can swing results more than actual design improvements. ADEME should publish sensitivity testing showing the relative influence of dataset choice, product mass, durability coefficient, cutting loss, care assumptions, deadstock, country parameters and microfibre modelling on the final score.

4. Physical durability may be over-weighted.

The link between laboratory physical durability and longer real-world use is not proven. Many garments are discarded because of fit, style, low perceived value, lack of need, overproduction or changing consumer preferences, not because the product has physically failed. The more new garments are placed on the market, the more likely it becomes that garments are displaced before their physical life is exhausted. It would therefore be paradoxical to focus mainly on making garments mechanically stronger while doing too little to address overproduction, accelerated product turnover and premature displacement. Level 2 should not over-reward synthetic fibres simply because they perform well in strength-based tests.

5. Natural fibres may remain structurally disadvantaged.

The system-boundary issue remains unresolved: natural fibres carry the impacts of biological fibre formation, while fossil fibre formation over geological time is not equivalently represented. Land-use assessment may also penalise extensive farming systems simply because they use more land, even where pressure per hectare is low or where biodiversity, soil health and landscape-management outcomes are positive.

6. Microplastics and persistent plastic waste may remain under-addressed.

A credible method must distinguish synthetic microplastic pollution from natural fibre fragments and account for plastic persistence across production, use and end-of-life. Without this, Level 2 risks continuing to favour plastic textiles.

7. Verification could become disproportionate.

Evidence requirements must be realistic, risk-based and proportionate. Tool certification should confirm that calculation platforms correctly implement the official method, while brands should be responsible for the truthfulness and evidence base of their declared product data. The system should not create unnecessary barriers for SMEs or smaller natural-fibre brands.

8. Fit and size accuracy

Poor fit is a major reason for premature discard. While difficult to measure, ADEME could begin by assessing whether product measurements correspond accurately to stated sizes, and whether grading practices are consistent across sizes.

9. Brand and marketing practices.

Brand and marketing practices influence extrinsic durability, including practices that accelerate replacement, shorten perceived product relevance, or encourage excessive purchasing. These should be considered in the DEX work and in future evidence on actual Duration of Service.

10. A single score can mislead consumers.

Even where a natural-fibre product performs better on climate, durability, biodegradability, reuse or circularity, the final weighted score may still appear worse because of weighting choices or dataset limitations. Level 2 should therefore include transparency on score drivers and uncertainty, not only a single consumer-facing number.

For these reasons, we recommend that Level 2 be developed cautiously and transparently. It should be used to improve the method, not to obscure its limitations. Its purpose should be to reward genuine, verifiable eco-design and traceability efforts that support the policy goals of reducing overconsumption, discouraging fast fashion, reducing fossil-resource dependence, limiting plastic pollution, and supporting long-lived, repairable, renewable and circular products.

• Which Level 2 parameters do you consider to be a priority?

Which parameters provide the most value whilst remaining simple to complete and verify?

Answer: Level 2 should prioritise parameters that are both material to the score and aligned with public policy goals. We recommend prioritising:

1. Actual duration of service and extrinsic durability, including product range breadth, time on market, repair incentives, resale/reuse potential, and evidence from waste audits or DPP-enabled end-of-life data.
2. Care conditions, especially realistic washing frequency, drying, ironing, airing and maintenance assumptions by fibre and product type.
3. Cutting loss and production efficiency, because cutting loss is a real, measurable and documentable eco-design lever.
4. Raw-material provenance and traceability, including country and production system information for natural fibres, and equivalent origin and process-route information for synthetic fibres. For synthetic fibres, this should include the origin of crude oil and gas feedstocks, whether extraction involved fracking or other high-impact extraction routes, the refining and petrochemical pathway from crude oil or gas to intermediates and polymers, and the geography, energy mix, water use, chemicals and waste associated with the relevant production stages.
5. Microplastic and persistent plastic waste indicators, clearly distinguishing synthetic microplastic pollution from natural fibre fragments.
6. Circularity attributes, including renewability, biodegradability, actual reuse, actual recyclability and persistence at end of life.
7. Dataset transparency and uncertainty, including disclosure of which datasets are used, how old they are, whether they are representative, and how sensitive the score is to dataset choice.

Real-use patterns are an important determinant of environmental outcomes. We would be concerned if Level 2 focused mainly on parameters that are easy to measure but not meaningful for sustainability outcomes. For example, physical durability tests should not be over-weighted unless there is evidence that they predict longer real-world use. Most garments are discarded for reasons other than physical product failure, including fit, style, low perceived value and lack of need. IWTO's non-physical durability work shows that serviceable lifetime is central to apparel impacts and that almost two thirds of garments are discarded for reasons other than physical durability.

Cotton products for instance, are widely used across a range of applications because of their comfort, versatility and washability, which can contribute to high wear

frequency and extended use over time. These real-world usage characteristics are not necessarily captured by laboratory durability tests alone. Level 2 should therefore prioritise evidence on actual wear frequency, reuse and service life alongside technical performance indicators, in order to better reflect how different fibres perform in practice.

- Do you consider the parameters in batches 0 and 1 to be the right priority candidates: significant influence on the score, simple calculation rules, and evidence that is already available and easy for brands to gather?

Response:

- Do the reasonably conservative default values in Level 1 provide sufficient incentive for brands to report their actual values?

Answer:

How can we prevent a stakeholder from opting for the default value when their actual value would be unfavourable to them?

Answer:

No, not sufficiently in all cases.

The principle of conservative Level 1 default values is sound: where a brand does not provide actual data, the default should be cautious enough to encourage better traceability and reporting. However, this only works if the default value is genuinely conservative and representative for all relevant materials, processes and production geographies.

Our concern is that some Level 1 defaults, especially for polyester and other fossil-based synthetic fibres, appear to be too favourable. In particular, polyester datasets may be based on a specific state-of-the-art European polyester production plant and are therefore not representative of the majority of polyester production placed on the European market, much of which is produced outside Europe under different energy mixes, process conditions, pollution controls and regulatory standards.

If the Level 1 default dataset gives polyester products a favourable score, brands using polyester have little incentive to move to Level 2 and report more specific values. In practice, Level 2 may then be used mainly by brands whose actual values improve their score, while stakeholders with unfavourable actual values remain with the default. This would weaken the credibility and fairness of the system.

This is particularly problematic where default datasets are outdated, geographically narrow, non-representative or incomplete, or where they do not fully reflect relevant impacts such as fossil-resource dependency, crude oil or gas feedstock sourced from sanctioned or high-risk origins, microplastic pollution, persistent plastic waste and end-of-life leakage. A default value may appear “reasonable” within the current model, but still be insufficiently conservative from a broader sustainability perspective.

This issue is particularly important for cotton in relation to water-use indicators. Cotton is frequently associated with high water consumption in generic datasets, but this can obscure major differences between rainfed and irrigated systems and between regions with very different levels of water scarcity. A credible methodology should distinguish between irrigation and rainfall, and where possible reflect local water-stress conditions rather than applying uniform assumptions. Without this level of differentiation, the model risks penalising lower-impact cotton systems and misinforming both brands and consumers.

To prevent stakeholders from opting for the default when their actual value would be unfavourable, we recommend the following safeguards:

First, Level 1 defaults should be reviewed through sensitivity testing and representativeness checks. ADEME should disclose the origin, age, geography, technology assumptions and data quality of key material datasets. For polyester and other synthetic fibres, defaults should be adjusted so they reflect typical market production rather than best-available or state-of-the-art European production.

Second, where a dataset is not representative of the typical product placed on the market, it should not be used as a favourable default. In such cases, ADEME should either apply a conservative uplift factor or require Level 2 reporting for brands wishing to claim better-than-default performance.

Third, where actual data are available or reasonably accessible, brands should be expected to use them rather than default values, especially for high-impact parameters such as material composition, product weight, production route, energy mix, cutting loss, care assumptions and end-of-life-relevant characteristics.

Fourth, use of default values should be transparent. Supporting information should make clear whether a score is based mainly on generic defaults or on verified product-specific data. A highly generic score should not carry the same credibility as a score based on robust primary evidence.

Fifth, ADEME could apply a data-quality hierarchy. Verified primary data should receive the highest confidence. Supplier-specific but non-verified data could be accepted with caution. Generic defaults should be used only where better data are unavailable and should include a conservative margin.

Sixth, audits should focus on cases where default values are used for parameters that are likely to have a significant score effect. This would reduce the risk of strategic non-reporting while keeping verification proportionate.

In summary, Level 1 defaults should not become a safe harbour for favourable generic scores. For polyester and other synthetic fibres, the default datasets should be made more conservative where they are not representative of average market production. Otherwise, the system will not provide a real incentive for brands using polyester to move to Level 2 or to disclose actual supply-chain data.

Validation of the calculation tool and evidence to be provided

Reminder: The implementation of Level 2 will require certification/verification of the calculation tool, as well as verification tests of the evidence to be modelled, on a given sample.

- Do you think it is reasonable that the verification of a tool should first involve the verification of a Level 1 tool (equivalent to Ecobalyse), followed by a Level 2 tool?

Answer:

- ☐ Yes
☐ No

Comments:

- Would you accept tool certification carried out by ADEME? Why?

- ☐ Yes
☐ No

Comments:

- In the case of certification carried out by a certified third party, would you be willing to pay for this certification? If so, at what price point?

- ☐ Yes
☐ No

Comments:

- Do you consider it acceptable to have the tool re-certified every time you make a modification or update to it? If not, how often would you consider this acceptable?

- ☐ Yes
☐ No

Comments:

Ability to provide evidence

- On what sample of products do you consider it acceptable to carry out a Level 2 evidence check? What percentage of the catalogue, how many product references, etc...

Answer:

- Please enter any other remarks, comments or suggestions regarding Level 2 in the box below:

Answer: Level 2 should avoid creating an asymmetric traceability burden. At present, natural fibres are often expected to provide farm, country, production-system and

certification evidence, while synthetic fibres are frequently modelled through generic polymer datasets with limited visibility on crude oil or gas origin, extraction route, refining pathway, petrochemical intermediates, process chemicals, water use, energy source, waste generation or production geography.

ADEME should therefore develop equivalent traceability expectations for synthetic fibres. Polyester, polyamide and acrylic should not be treated as homogeneous materials where the origin and route of fossil feedstocks are unknown. A credible Level 2 system should require, or at least progressively enable, disclosure of fossil feedstock origin, extraction method, refinery and petrochemical route, polymerisation geography and data quality. Otherwise, Level 2 may increase documentation burdens for natural fibres while leaving significant synthetic-fibre impacts hidden behind generic defaults.

1. Generic template

The generic model can be tested for objects, particularly furniture, via the following URL:
<https://ecobalyse.beta.gouv.fr/#/object/simulator>

An example of a model for a padded jacket is available here: ([link](#))

Please note: at this stage, the generic model does not incorporate all aspects of modelling the environmental cost of clothing (manufacturing waste, enriched inventories, microfibres, durability, etc.). The aim is to demonstrate the possibility of breaking down a product into components and elements, a capability that could open up new possibilities for the future (modelling of multi-component garments, batches of garments, footwear, etc.).

- Please list here all your comments, questions and suggestions regarding the transition to modelling textile products using the Ecobalyse component module.

Comments:

2. New product categories

Home textiles

- Do you consider the product categories and the products listed to be comprehensive and consistent?

☐ Yes

☐ No

- If not, please list the missing products and their categorisation in the '1- PRODUCT CATEGORIES' tab of [the HOME TEXTILES contribution document](#).

Comments:

- Do you think it is necessary to define standard sizes (as with clothing) for each product?

☐ Yes

☐ No

Comments:

- Without standard sizes, the environmental cost must be calculated and displayed for each size variation of every product. Is this a problem for you?

☐ Yes

☐ No

Comments:

- If standard sizes need to be defined, for which products would you define them and what would those sizes be? Please enter this information in the '2- STANDARD SIZES' tab of [the HOMEWEAR contribution document](#).

Comments:

In order to model the life cycle of home textiles, we need to define parameters by product category (e.g. modelling parameters for sheets, including flat sheets and fitted sheets). Initial modelling assumptions (e.g. grammage, yarn size, loss rate, etc.) have been made in the "3- MODELLING PARAMETERS" tab of [the HOME TEXTILES contribution document](#).

Modelling parameters to be defined by product category

- Manufacturing

- Product mass (kg)
- Default accessories (composition and mass (g))
- Yarn count (Nm)
- Grammage (g/m²)
- Product volume (m³)
- Fabric (woven, knitted, non-woven)
- Production time (min)
- Production wastage rate (%)
- Dormant stock rate (%)
- Usage
 - Total number of uses (days)*
 - Number of uses before washing (number)*
 - Proportion of items ironed after washing (%)
 - Ironing time (min)
 - Proportion dried in a tumble dryer (%)

**Nombre total de lavages* =
$$\frac{\text{Nombre d'utilisation total}}{\text{Nombre d'utilisation avant lavage}}$$

- Do the initial modelling data pre-filled in the ‘3- MODELLING PARAMETERS’ tab of [the HOUSEHOLD LINEN contribution document](#) seem consistent to you for each product?

☐ Yes

☐ No

Comments:

- If known and shareable, please complete the “3- MODELLING PARAMETERS” tab for products for which you have the information from [the HOME TEXTILES contribution document](#). A document containing this information (even partial) in your own format is also accepted.

Sharing this information will enable us to compare our assumptions.

Comments:

- If known, please provide below the sources and bibliographic references enabling the definition of modelling parameters for household textiles (manufacture, use, end-of-life, durability)

Answer:

- Should the extrinsic durability of household linen be taken into account? Why?

☐ Yes

☐ No

Comments:

• If so, should we use the same method as for clothing, as set out in the [methodological guidelines](#)? Why?

☐ Yes

☐ No

Answer:

• Should the intrinsic durability of household textiles be taken into account? If so, which standard would you recommend? (Example: Durhabi)

☐ Yes

☐ No

Answer:

• Should the end-of-life be modelled in the same way as for clothing, but without exports outside Europe? Why?

☐ Yes

☐ No

Answer:

• What data (materials and processes) needs to be added to Ecobalyse in order to model household linen satisfactorily? Please complete the '1- MISSING DATA' tab in the [CONTRIBUTION METHOD AET - DATA.xlsx](#) document.

Comments:

Accessories

Regarding accessory products, modelling work has not yet begun. Your contributions will therefore be particularly valuable in enabling us to make effective progress on this topic.

Firstly, we invite you to complete the initial list of products presented during the

webinar. Secondly, we would like to collect the key parameters required for their modelling, particularly those relating to the manufacturing and usage phases. Even partial data can be very useful at this stage: weights, dimensions, grammages or any other available technical information will help to speed up the work.

• Do you consider the product categories and the products listed to be comprehensive and consistent?

☐ Yes

☐ No

• If not, please specify the missing products and their categorisation in the '1- PRODUCT CATEGORIES' tab of [the ACCESSORIES contribution document](#).

Comments:

• Please specify the standard sizes that make sense to you by accessory product category in "2- STANDARD SIZES" of [the ACCESSORIES contribution document](#).

Response:

Modelling parameters to be defined by product category

- Manufacturing
 - Product mass (kg)
 - Default accessories (composition and mass (g))
 - Yarn count (Nm)
 - Grammage (g/m²)
 - Product volume (m³)
 - Fabric (woven, knitted, non-woven)
 - Production time (min)
 - Production wastage rate (%)
 - Dormant stock rate (%)
- Usage
 - Total number of uses (days)*
 - Number of uses before washing (number)*
 - Proportion of items ironed after washing (%)
 - Ironing time (min)
 - Proportion dried in a tumble dryer (%)

$$* \text{Nombre total de lavages} = \frac{\text{Nombre d'utilisation total}}{\text{Nombre d'utilisation avant lavage}}$$

- If known, please enter the modelling data for the accessories in the '3- MODELLING PARAMETERS' tab of [the ACCESSORIES contribution document](#). A document containing this information (even partial) in your own format is also accepted.

☐ Yes

☐ No

Comments:

- If known, please provide below the sources and bibliographic references used to define the modelling parameters for accessories (manufacture, use, end-of-life, durability)

Answer:

- Should the extrinsic durability of accessories be taken into account?

☐ Yes

☐ No

Comments:

- If so, should we use the same method for clothing as that specified in the [methodological guidelines](#)?

☐ Yes

☐ No

- If not, which criterion(s) should be used?

Answer:

- Should the intrinsic durability of accessories be taken into account?

☐ Yes

☐ No

- If yes, which standard would you recommend? (Example: DURHABI)

Answer:

- Should the end-of-life be modelled in the same way as for clothing, but without exports outside Europe? Why?

☐ Yes

☐ No

Answer:

- What data (materials and processes) needs to be added to Ecobalyse in order to model accessories satisfactorily? Please complete the '1- MISSING DATA' tab in the [CONTRIBUTION METHOD AET - DATA.xlsx](#) document.

Comments:

Lingerie

- Would a simplified Level 1 model supplemented by a Level 2 model, with the option to adjust the composition, quantity and mass of non-fabric materials, be satisfactory to you?

☐ Yes

☐ No

Comments:

- Do you find the modelling parameters for the bra and bustier, explained in the hidden slides (nos. 36 and 37) of the methodological webinar presentation, satisfactory?

☐ Yes

☐ No

Comments:

- Which textiles, accessories and processes are missing from the modelling of lingerie products? Please complete the '1- MISSING DATA' tab in the [AET METHOD CONTRIBUTION - DATA.xlsx](#) document.

Comments:

Sports products

- Do you think it is appropriate to segment clothing textiles and sports textiles according to the scope of the TLC/ASL EPR sectors?

☐ Yes

☐ No

Comments:

- If not, how would you define a sports item? Which products would be included, and why?

Answer:

- In the modelling, what needs to be adapted for sports products compared to clothing? For each step below, suggest the methodological changes to be made. A document containing this information (even partial) in your own format is also accepted.

- Raw materials

Comments:

- Manufacturing phase

Comments:

- Use phase

Comments:

- Intrinsic durability

Comments:

- Extrinsic durability

Comments:

- Other

Comments:

Workwear

- Do you have any comments or further information regarding the work carried out on the workwear?

Answer:

Footwear and leather goods

- Are you willing to take part in a bilateral meeting as part of the first phase of the investigation?

☐ Yes

☐ No

Comments:

- Which textiles, accessories and processes are missing from the modelling of footwear products? Please complete the '1- MISSING DATA' tab in the [CONTRIBUTION METHOD AND DATA.xlsx](#) document

Response:

- Do you have any recommendations or advice to share with us to help us anticipate and prepare as effectively as possible for the experiments on footwear and leather goods?

Answer:

3. Clothing

Extrinsic durability

- Do you find the definition and scope of the product range clear?

☐ Yes

☒ No

- Would you like to see a change to the defined threshold for the product range index? If so, in what way?

☒ Yes

☐ No

Comments: The definition and scope of the product range is useful for addressing fast fashion, but the definition should be clearer on SKU continuity, colourways, minor design updates, seasonal continuity, carry-over products and permanent ranges. The product range index should better reward long market presence and penalise very short SKU life. The function should avoid flat cut-offs where a product present for many years is treated similarly to one present for only several months. A logarithmic treatment of time on market / SKU life should be considered, because the environmental value of moving from a few weeks to several months is different from the value of moving from several years to decades. Long-running classic natural-fibre products should be recognised as evidence of durable design and reduced fast-fashion turnover.

- Do you have any comments or additional information regarding the inclusion of extrinsic sustainability in the environmental cost of textiles?

Extrinsic durability is central to natural-fibre and anti-fast-fashion policy. The connection between higher physical durability test performance and longer real-world garment life is not proven. Many garments are discarded for reasons other than physical failure, including fit, style, lack of perceived value, over-supply, low attachment and changing consumer needs. ADEME should therefore retain and strengthen extrinsic indicators such as market presence, product range breadth, SKU continuity, repair/reuse pathways, marketing practices, price/perceived value, resale and DPP-enabled evidence of actual Duration of Service.

We also recommend two measures: first, requiring a clear date of placing on the market and, where feasible, a garment assembly date in the DPP or supporting product data, rather than an ambiguous “manufacturing date”; second, undertaking waste audit studies to understand how quickly different garments are discarded after purchase and why.

Intrinsic sustainability

There are two distinct methodological approaches for assessing the intrinsic sustainability of textile products:

Approach A – Aggregated indicator with scoring and criticality thresholds

This approach, used in particular in the PEFCR and DURHABI, generates a score based on the product's performance in each test. All these scores are then aggregated to obtain an overall sustainability score. This score allows products to be classified into tiers. This approach has the advantage of encouraging continuous improvement by highlighting progress on each criterion and allows for a graded comparison between products. However, it involves more complex calculations and requires an understanding of the aggregation method.

Approach B – Pass/fail threshold system

This approach, proposed in particular by the JRC, REFASHION and CEN, involves defining a list of tests with minimum performance thresholds to be met for each test. The product either passes or fails each test individually depending on whether or not it meets the defined threshold. To be considered sustainable, the product must pass all the required tests. This approach has the advantage of simplicity: a product is either compliant or non-compliant. Depending on the stringency of the thresholds, this approach can be either too stigmatising (high thresholds excluding a large part of the market) or too permissive (low thresholds allowing products with low sustainability to pass).

• Which approach do you prefer?

Answer:

- ☒ Approach A – Aggregated indicator with scoring
- ☐ Approach B – Pass/fail threshold system
- ☐ Approach tailored to different stakeholders (to be justified)

Comments: We remain cautious about integrating intrinsic durability into a consumer-facing environmental score before the relationship between laboratory test results and actual Duration of Service has been sufficiently demonstrated. However, if ADEME proceeds with an intrinsic durability module, we prefer Approach A — an aggregated indicator with scoring and multi-level thresholds — over a binary pass/fail system. This preference is conditional: the scoring approach must be tailored by product category, fibre type, care label and use context, and should not be treated as a universal sustainability ranking.

This is a conditional preference, not an endorsement of intrinsic durability as a complete proxy for sustainability or product lifetime. A scoring system is preferable because it can recognise gradations in performance, reward continuous improvement, and avoid excluding products through a single binary threshold. This is particularly important for natural fibres, whose durability may be expressed through comfort, extensibility, repairability, care behaviour, emotional value and reuse potential, rather than through maximum performance on one mechanical test.

A pass/fail system risks becoming a minimum quality gate rather than a durability indicator. It may unfairly penalise natural fibres if thresholds are not fibre- and product-specific, while favouring synthetic fibres because of their performance in selected strength-based tests.

Any intrinsic durability approach must therefore be product-specific, fibre-specific, care-label-specific and validated against real-world evidence from consumer returns,

waste audits, wardrobe studies as well as current research in this area such as DEX and BOND study results.

• Which of the existing methodologies should serve as the basis for integrating intrinsic sustainability?

- ☒ PEFCR Apparel & Footwear
- ☐ DURHABI
- ☐ JRC (in progress)
- ☐ REFASHION (eco-modulation)
- ☐ CEN (being finalised)
- ☐ ESPR (under development)
- ☐ Combination of several methods

Reasons for your choice (technical, operational, economic criteria, etc.):

Comments: We recommend PEFCR Apparel & Footwear as the primary basis if ADEME decides to integrate intrinsic durability, because it is the most relevant EU-level framework and is more appropriate for harmonisation than a France-only approach. It also uses a scoring logic rather than a simple pass/fail threshold system, which better supports continuous improvement and reduces the risk of excluding natural fibres through binary thresholds.

PEFCR A&F should be used as the primary reference only if ADEME proceeds with intrinsic durability; it should not be adopted as a standalone consumer-facing proxy for actual lifetime without validation against real-world discard and use data.

This recommendation should not be read as full agreement that intrinsic durability is ready to be used as a proxy for actual lifetime. The link between laboratory durability performance and real Duration of Service still needs to be validated. Most garments leave use for reasons beyond physical failure, including fit, style, perceived value, lack of need, care behaviour and overproduction. The results from the DEX study should be explicitly incorporated once results are available, because care behaviour, use frequency, repair, reuse, product range, time on market and consumer behaviour are essential to real Duration of Service.

• If you have carried out test campaigns, can you provide estimates of costs and revenue per unit sold?

Attachments permitted

- ☐ Yes
- ☐ No

Comments:

• Do you have any contacts at laboratories or with industry players (in France or internationally) who could provide further information on the costs of durability testing?

Answer:

☒ Yes

☐ No

Contacts: Specific contacts can be provided separately.

• Do the costs of durability testing represent a significant barrier for your organisation/your clients?

☐ Yes, a major barrier

☒ Yes, a moderate barrier

☐ No, cost is acceptable

☐ Not applicable

• What solutions do you propose to ensure that small organisations are not penalised in terms of staffing, operational and logistical costs?

Answer: Yes, a moderate barrier overall, and potentially a major barrier for SMEs, small production series and small product ranges if testing is required SKU-by-SKU. The testing burden should be proportionate and based on risk, product families and existing quality assurance or certification data where available. Requirements should avoid duplicate testing where brand or fibre quality assurance specifications already cover relevant ISO/EN test methods. Larger producers, high-volume products and products relying on generic or non-representative datasets should carry a greater burden of documentation.

• Would you be willing to share anonymised sustainability test results for a range of products to establish a benchmark?

☐ Yes

☐ No

Comments:

• How long do you estimate it will take for your organisation to be ready to implement an intrinsic sustainability methodology?

☐ < 6 months

☐ 6–12 months

☐ 12–24 months

☐ >24 months

Comments:

- In your view, what are the main risks or areas of concern to be taken into account when integrating intrinsic sustainability into the AET?

Answer: The main risk is that intrinsic sustainability is treated as a reliable proxy for product lifetime or overall sustainability before this relationship has been scientifically demonstrated.

Physical durability is important, but it is not the same as Duration of Service. A garment may perform well in laboratory tests and still be discarded early because of fit, style, low perceived value, lack of need, care behaviour or overproduction. Conversely, a product made from natural fibres may have a long real-world lifetime even if it does not perform best in selected mechanical tests. Integrating intrinsic sustainability without validating it against actual use risks rewarding test performance rather than longer use.

A second concern is that generic thresholds or scoring systems could structurally favour synthetic fibres. Synthetic fibres often perform strongly in tensile strength, abrasion or other mechanical tests. If these tests are over-weighted, or if thresholds are not fibre-specific and product-specific, the method may penalise wool, linen, cotton, silk and other natural fibres for normal material behaviour that does not prevent long service life. This would undermine the objective of supporting more sustainable textiles and could inadvertently favour fossil-based fibres and fast-turnover products.

A third concern is false precision. Aggregated indicators can hide arbitrary weighting and weak assumptions, while pass/fail systems can be too blunt. Both can create the impression that intrinsic sustainability has been objectively measured, even where the selected tests do not predict real garment lifetime. This would be particularly problematic if the results are included in a consumer-facing environmental score.

A fourth concern is that intrinsic durability could distract from more important drivers of premature discard. Extrinsic durability, product range breadth, time on market, resale and reuse options, perceived value, care practices and business models are all highly relevant to whether a garment remains in use. The AET should not over-focus on laboratory physical tests while under-weighting the drivers of fast fashion and overconsumption.

A fifth concern is operational fairness. Testing requirements can be costly and burdensome, particularly for SMEs and smaller natural-fibre brands. Requirements should therefore be proportionate, risk-based and targeted to tests that are genuinely meaningful for the product category.

To reduce these risks, any integration of intrinsic sustainability should be cautious and evidence-based. Tests and thresholds should be product-specific, fibre-specific and care-label-specific. Physical durability should not be communicated as “lifetime” or “sustainability” unless the link with actual Duration of Service has been demonstrated. ADEME should prioritise validation through wardrobe studies, waste audits, Waste Audit Interviews and, in future, DPP-enabled end-of-life data. Until

then, intrinsic durability should be treated as one limited input into a broader longevity assessment, not as a standalone sustainability proxy.

- Do you have any suggestions, comments or additional information to bring to the attention of ADEME?

Answer: We recommend that ADEME proceed cautiously and use this phase primarily to build the evidence base for intrinsic durability, rather than immediately integrating a new consumer-facing intrinsic sustainability score.

The key knowledge gap is the relationship between laboratory-based physical durability tests and actual Duration of Service. This relationship is not yet sufficiently demonstrated. Before selecting an aggregated indicator or a pass/fail threshold system, ADEME should support and review empirical research that tests whether specific intrinsic durability parameters genuinely predict longer product use.

We therefore recommend prioritising the following work:

First, ADEME should support waste audit research and Waste Audit Interviews. These methods can connect discarded garments to real information on ownership time, number of wears, reasons for disposal, repair attempts, care behaviour, purchase price, product category, fibre composition and visible signs of wear. This would provide a much stronger evidence base than relying only on laboratory tests at the point of sale.

Second, ADEME should wait for and integrate the findings of ongoing projects such as DEX and BOND before making final methodological choices. These projects may provide relevant evidence on durability, product longevity and consumer use patterns. It would be premature to lock in an intrinsic durability method before this evidence has been assessed.

Third, any intrinsic durability testing should be validated against real-world discard data. Tests such as abrasion, tensile strength, bursting strength, pilling, colour fastness, dimensional change and seam performance may be relevant, but their importance will differ by product category, fibre type and care practice. They should not be aggregated or converted into thresholds unless there is evidence that they correspond to longer real use.

Fourth, ADEME should ensure that any future intrinsic durability method is product-specific, fibre-specific and care-label-specific. Wool knitwear, linen shirts, cotton T-shirts, polyester sportswear, coats and workwear do not fail, age or get discarded in the same way. A generic test set or common threshold system risks producing misleading results.

Finally, intrinsic durability should not be communicated as “lifetime” or “sustainability” unless the link with actual Duration of Service has been

demonstrated. Until then, it should be treated as a technical performance input and a research topic, not as a standalone sustainability proxy.

Packaging

- Are you in favour of incorporating default packaging, in line with PEFCR recommendations?

☐ Yes

☐ No

Comments:

Removal of the 'Jeans' product category

- Are you for or against the removal of this category from the methodology?

☐ Yes

☐ No

Comments:

Adjustment of care instructions

- Would you be in favour of adjusting the maintenance conditions according to the raw material?

☒ Yes

☐ No

Comments: Yes. This is essential for fair comparison. Natural fibres often require different washing frequency, temperature, drying and ironing assumptions from synthetics. Care conditions should reflect actual care-label instructions and real consumer practices, not a single conventional domestic-washing scenario. This is especially important where garments are aired between wears, washed less frequently, dried flat or professionally cleaned.

- If so, please suggest maintenance conditions by material and material mix?

Answer: Use fibre- and care-label-specific assumptions. For wool: lower washing frequency, airing between wears, wool/delicate cycles or hand wash where relevant, low-temperature washing, no tumble drying unless the care label permits, and reshaping or flat drying where recommended by the care label, particularly for some knitwear. Dry-cleaning should only be assumed where specified.

For synthetic sportswear and fleece, care assumptions should also account for washing frequency and microplastic fibre-fragment emissions. Care assumptions

should be evidence-based and should not penalise products that deliver odour resistance, thermoregulation or lower washing frequency.

4. Cross-cutting methods

Material, process and formulation data

- What data is missing from our database to enable us to model textile products satisfactorily? To answer this, please complete the document [CONTRIBUTION METHOD AET - DATA](#).

Comments: We want to highlight two research opportunities that will help improve Ecobalyse:

Ecobalyse needs better data on actual Duration of Service, reasons for discard, real use intensity, care frequency, repair attempts, reuse potential and the relationship between physical durability tests and real garment lifetimes. We recommend that ADEME consider Waste Audit Interviews as a research method to link discarded garments with ownership time, number of wears, reasons for disposal, care behaviour, purchase context, fibre composition and visible wear.

ADEME could also consider relevant Nordic research and tools, including Textilkompassen, where these provide evidence on fibre production, land use, biodiversity, soil health, ecosystems and circular potential. Such initiatives may help address current data gaps on the earliest parts of the value chain and improve Ecobalyse's treatment of agricultural systems for fibres such as cotton. Emerging evidence from organic and regenerative cotton systems suggests that production practices can influence soil carbon, water retention, input use and ecosystem health. While methodologies are still evolving, the framework should allow for the progressive inclusion of verifiable indicators that distinguish production systems delivering improved environmental outcomes.

- Which environmental labels would you like to include in the textile environmental cost, and what are their associated environmental benefits? Please provide this information in the [CONTRIBUTION METHOD AET - LABELS](#) document https://ademecloud-my.sharepoint.com/:x/g/personal/pierre_matteoni_ademe_fr/IQD9xLuuQ2M9RLmcJo1t-BU8AW-UFmvEnpXRYbWILy8aWGM?e=F04tWD We are also open to receiving external documents directly as file attachments.

Comments: We recommend that ADEME consider credible, independently verified textile labels and standards where the underlying criteria can be clearly mapped to Ecobalyse parameters. Labels should not receive a generic bonus simply because they exist. Instead, only the specific, verifiable environmental attributes behind a label should be recognised.

Relevant labels and standards may include, for example, Type I ecolabels such as the Nordic Swan Ecolabel and the EU Ecolabel, GOTS, and other robust textile or fibre-specific schemes where criteria are transparent, independently audited and linked to measurable environmental outcomes.

Labels could be useful as evidence for specific parameters, such as chemical restrictions, wastewater treatment, residue testing, resource management, traceability, fibre content, processing controls or environmental management systems. However, MTLC cautions against treating any label as a simple proxy for overall sustainability.

Certification should not replace product-specific data, and label recognition should not create unfair disadvantages for natural fibres or producers that deliver verified environmental benefits through other credible systems. ADEME should therefore assess labels at the level of their underlying criteria and evidence, not as blanket score modifiers.

- Do you have datasets specific to certain labels? If so, which ones, and can they be shared?

☒ Yes

☐ No

Comments: Potentially yes. Some label, certification and standards schemes may hold aggregated or anonymised data that could help improve Ecobalyse assumptions, for example on processing losses, chemical management, wastewater treatment, residue testing, certified supply-chain controls, fibre production or verified sourcing systems. Where such data are shared, they should be assessed for representativeness, geography, product category, fibre type, production route and certification scope before being integrated into default datasets.

This could include, for example, anonymised loss-percentage data from GOTS or other certification systems, provided the data are transparent enough to support methodological use and do not create a label-specific advantage unless the underlying environmental performance is demonstrated.

ADEME should also consider new or updated supply-chain-specific datasets being developed by Textile Exchange, including datasets linked to specific standards or programmes such as RWS wool, GRS recycled polyester and other fibre-specific systems. These could help improve data quality and traceability where they provide more representative information than current generic datasets.

However, such datasets should not be treated as automatic proof of sustainability because a certification or programme name is attached. They should be reviewed transparently for methodology, geography, production system, allocation, system boundaries, data quality, representativeness and uncertainty. Where robust, they

could be used to improve Level 2 calculations or provide more accurate alternatives to generic Level 1 defaults.

Any label-specific, standard-specific or supply-chain-specific dataset should be used to improve the robustness of the method, not to create automatic preferential treatment for a particular label, programme or fibre. The key requirement should be transparent, representative and independently reviewable data.

- Would you be willing to collaborate to help us analyse the labels in depth?

☐ Yes

☐ No

Comments:

Spinning: processes and losses

Currently, only one spinning process (with 3% losses) is considered for synthetic materials, and one conventional spinning process (with 12% losses) for natural or artificial fibres. However, these processes and loss rates can vary significantly depending on the materials and production lines (particularly for flax and hemp).

- Please suggest below any improvements or additions you consider necessary to make the spinning model more accurate in reflecting industrial reality.

Answer:

The term “artificial fibres” should be clarified. If ADEME means regenerated cellulosic fibres, such as viscose, lyocell, modal and acetate, the methodology should use that terminology rather than the broader and ambiguous term “artificial fibres.”

The spinning model should differentiate woollen, worsted, semi-worsted, cotton, linen/flax, regenerated cellulosic and synthetic filament/staple spinning routes. Loss rates should be fibre- and route-specific, not a single 12% for natural/regenerated cellulosic fibres or 3% for synthetics.

Transport

- Do you have any comments or feedback on the new method for accounting for transport? [Methodological explanation](#)

Answer:

Recyclability index

- Are you in favour of incorporating a recyclability index? Why?

☐ Yes

☒ No

Answer: No, not as a consumer-facing score modifier at this stage. We support further development of a recyclability and circularity indicator, but the methodology is not yet mature enough to affect the environmental cost score. It should first be tested as a pilot or supplementary information.

A recyclability score needs to measure actual recyclability and reuse potential rather than theoretical recyclability. The index should also recognise renewable and biodegradable fibres and should not reward technically recyclable synthetics while ignoring persistent plastic waste and microplastic pollution. A circularity indicator should address what actually happens to products at end-of-life, not only what might be technically possible under ideal conditions.

The index should recognise that using more land does not automatically mean higher environmental damage, particularly for extensive farming systems that may maintain grasslands, support biodiversity, store soil carbon and sustain rural livelihoods (also part of Circularity). Circularity and environmental cost should therefore be complemented by indicators for renewability, biodegradability, persistence, verified positive land-management outcomes and actual end-of-life fate.

Cotton also illustrates the need for a broader and more nuanced approach to circularity. In addition to mechanical recycling potential, cotton fibres can also be recycled chemically into man-made cellulosic fibres and are compatible with reuse, repair, downcycling and, under appropriate conditions, biodegradation. The methodology should reflect these multiple end-of-life and circular pathways rather than focusing narrowly on theoretical recyclability. In practice, fibre composition, product design and collection systems will determine which pathways are realised, and these factors should be incorporated into the assessment wherever possible.

If yes, please propose a set of specifications or a specific methodology. If no, please explain your reasons.

Answer: Use a circularity approach that captures actual collection, sorting, reuse, fibre-to-fibre recycling feasibility, recycled output quality, fibre composition, blend complexity, trims, coatings, and biodegradability/persistence. The WBCSD Circular Transition Indicators or similar approaches can provide useful inspiration because they consider circular material flows more broadly than the Circular Footprint Formula alone. Ecobalyse should better recognise renewable, biodegradable and non-persistent materials while still rewarding genuine recycling where it occurs in practice.

Emissions of microplastic fibre fragments

- Please share any information, resources, data or suggestions that could help improve the existing methodology.

Answer: The methodology should explicitly distinguish synthetic microplastic fibre fragments from natural biodegradable fibre fragments. It should account for shedding during washing, wearing, drying and end-of-life, and it should not treat all fibres as equivalent. Synthetic sportswear, fleece, brushed fabrics and high-shedding constructions should receive specific attention. Natural fibres may fragment, but their environmental behaviour, biodegradation and persistence are different from fossil-based microplastics. They do not contribute to persistent microplastic accumulation and should hence not be merged into a single undifferentiated indicator.

In addition, microplastic pollution should be addressed across the life cycle, not only during laundering. Synthetic fibre fragments released during manufacture, wear, drying, washing, waste management, landfill, incineration residues and environmental leakage should be considered. Natural biodegradable fibre fragments should not be aggregated with persistent synthetic microplastics in a way that obscures the difference in persistence, toxicity and fate.

More information can be found here : Plastic, Microplastics, and Microfibres from Textiles: Practical Steps for the JRC Textile Products Preparatory Study (ESPR) 3rd Milestone https://iwto.org/wp-content/uploads/2026/03/IWTO_Position_Paper_Microplastics_JRC_3rd_Milestone_03112026.pdf

The global apparel industry is a significant yet overlooked source of plastic leakage. <https://www.nature.com/articles/s41467-024-49441-4>

End-of-life

- Do you have any comments or additional information regarding the proposed methodological changes? [Methodological explanation](#)

Response: End-of-life should distinguish reuse, donation, repair, recycling, downcycling, incineration, landfill, biodegradation and persistence. Natural fibres and synthetic fibres should not be treated as equivalent at disposal. The model should include persistent plastic waste and should use fibre-specific reuse/donation evidence where available. It should also recognise that wool and other higher-value natural-fibre products may have stronger reuse potential than low-value fast-fashion items.

Persistent solid plastic waste should be reflected explicitly. If a synthetic textile is landfilled, exported, lost to the environment or incinerated, the consequences of persistence and fossil carbon release should not be hidden within generic end-of-life assumptions. For natural fibres, biodegradation and return of biogenic material to

natural cycles should be assessed using evidence-based conditions and should not be treated as equivalent to persistent plastic waste.

- Should the end-of-life scenario be adapted for certain products? (Example: underwear, which is mainly disposed of as household waste)

☒ Yes

☐ No

Comments: Synthetic garments

- If yes, which products are affected, and what adjustments would need to be made? (With sources if possible)

Answer:

Natural fibre coats, sweaters, scarves and high-value natural-fibre products may have higher reuse/donation potential. Footwear and complex accessories need separate repair/reuse/recycling assumptions. Synthetic fleece/sportswear should include microplastic and persistent waste considerations.

5. Priority table

- Please complete the table below to prioritise each of the methodological topics from highest priority (P1) to lowest priority (P4).

	P1	P2	P3	P4	Not applicable
Level 2					
Transition to the generic model					
Addition of household linen					
Addition of lingerie					
Addition of sports products					
Addition of workwear					
Add footwear					
Add leather goods					
Modification of the extrinsic sustainability index	x				
Addition of the intrinsic sustainability index				x	
Addition of packaging					
Removal of the 'jeans' category					
Adjustment of washing conditions to the fabric					
Addition of new materials, processes and formulations					
Inclusion of environmental labels					
Adjustment of processes and yarn losses					
Modification of transport rules					
Inclusion of a recyclability index					
Further development of the criterion for microplastic fibre fragment emissions	x				
Adjustment of the end-of-life scenario	x				
Other					
Accounting for positive impacts	x				
Inclusion of manufacturing location	x				
Update of up-to date realistic LCA datasets for polyester	x				
Synthetic fibre feedstock origin and process-route traceability	x				

6. Additional comments

This section is intended for any additional comments, analyses, points for consideration, messages to be conveyed, or topics that may not have been covered in the previous sections. Please feel free to share anything that might contribute to the work and inform the next stages of our discussions.

Answer:

We would also welcome feedback in this section – both positive and negative – on the webinar held on 9 June 2026.

Response:

Ecobalyse can be an important tool only if it avoids reinforcing the plastification of textiles. The methodology should align with the objectives of encouraging products that are used longer, repaired, reused, recycled where feasible, and made from renewable, biodegradable and non-persistent materials. The next co-construction phase should prioritise: (1) actual Duration of Service evidence; (2) fair fibre- and product-specific durability treatment; (3) realistic care assumptions; (4) robust treatment of synthetic microplastics and persistent plastic waste; (5) transparent data-quality and LCA-integrity safeguards; (6) better fibre datasets ; and (7) circularity indicators that recognise renewability, biodegradability, actual reuse and actual recycling. The score should not be presented as a complete sustainability judgement where material impact pathways are omitted or weakly represented.

At the same time, the methodology should be mindful of broader system impacts, including livelihoods linked to fibre production. Cotton as the second most used fibre in textiles and the most widely used natural fibre, is a globally significant agricultural commodity supporting millions of farmers and workers, many in smallholder systems. While Ecobalyse is primarily an environmental tool, methodological choices that systematically disadvantage particular fibres may have indirect consequences for rural economies. This reinforces the need for a balanced, evidence-based approach that accurately reflects environmental performance across different production systems.

We welcome ADEME's efforts to improve on PEF by adding supplementary indicators for microfibres, export of waste outside Europe and fast-fashion-related durability factors. However, the fundamental system-boundary concern remains unresolved: natural fibres carry the impacts of biological fibre formation, while fossil fibre formation over geological time is not equivalently represented. The JRC has acknowledged shortcomings in raw-material comparability in its textiles 3rd milestone preparatory study; Ecobalyse should therefore avoid presenting cross-fibre single-score comparisons as definitive environmental truth unless these limitations are clearly disclosed and corrected through complementary indicators.

Furthermore, the single score can mislead. A garment may perform better on climate change yet receive a worse total score because land use, water use, ecotoxicity or other weighted categories dominate the result. ADEME should therefore provide impact-category transparency, uncertainty ranges and clear communication

safeguards so that consumers and policy users can understand what is driving the score.

We also encourage ADEME to clarify the policy goal of the methodology. If the objective is to reduce environmental impacts from textiles, the framework must address not only product-level optimisation but also production volumes, overproduction, rapid turnover and marketing practices that accelerate replacement. Product-level scores alone are unlikely to penalise fast and ultra-fast-fashion models sufficiently, because the largest differences often arise from business model, volume and speed to market rather than from the technical properties of a single product.

Finally, the methodology should be transparent about its value choices. LCA-based methods are not neutral facts; they are built on methodological choices, system boundaries, datasets, weighting factors and assumptions. Ecobalyse should therefore clearly state which outcomes it is designed to drive and justify the methodological choices accordingly.

A further gap is the absence of equivalent traceability for synthetic fibres. Sustainability discussions often require natural fibres to document origin, production system and farm practices, while fossil-based fibres are treated as generic polymers. This is not scientifically balanced. The environmental profile of polyester and other synthetic fibres depends on crude oil or gas origin, extraction route, refining and petrochemical pathway, production geography, energy mix, chemicals, water use, waste generation and regulatory context. Ecobalyse should not require detailed provenance for natural fibres while allowing fossil-based fibres to rely on generic, non-transparent datasets.