Hall 4A





The prospects for the life-cycle sustainability of fans and ventilation units under the EU's Ecodesign Regulation

12 October 2022

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Circular Economy/Sustainability TF



Non-residential WG

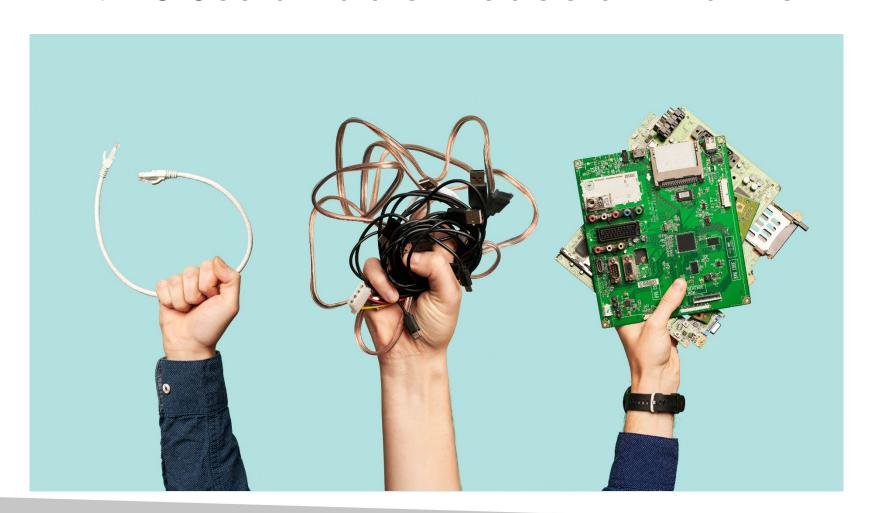


Residential WG



Fans WG

1. EU Sustainable Products Initiative



Sustainable Products Initiative

On 30 March 2022 the European Commission published its **Sustainable Products Initiative Package** to improve the sustainability of products:

Executive Vice-President for the European Green Deal Frans Timmermans said:

"It's time to end the model of 'take, make, break, and throw away' that is so harmful to our planet, our health and our economy. **Today's** proposals will ensure that only the most sustainable products are sold in Europe. They allow consumers to save energy, repair and not replace broken products, and make smart environmental choices when they are shopping for new ones. This is how we bring balance back in our relationship with nature and reduce our vulnerability to disruptions in global supply chains."

• Proposal for an Ecodesign for Sustainable Products Regulation

Other Documents:

- Communication on making sustainable products the norm
- Ecodesign & Energy Labelling Working Plan 2022-2024
- Proposal to revise the Construction Products Regulation
- Proposal for a Directive Empowering Consumers for the Green Transition
- Communication on an EU Strategy for Sustainable and Circular Textiles
- Communication on a Chemicals Strategy for Sustainability

2. Ecodesign for Sustainable Products Regulation



Ecodesign Regulation: Scope

"This Regulation shall apply to any physical good that is placed on the market or put into service, including components and intermediate products".

Except for food, feed, medicines, living plants and animals, and products of human origin.

NB: The transport exemption is gone & cascading is expanded.





Ecodesign Regulation: Framework





Delegated Acts



Energy-related Products (ErP)



- ENER LOT 1
- ENER LOT 5
- ENER LOT 10
- ENER LOT 11
- ENER LOT 21
- GROW LOT 2
- GROW LOT 6



Non-Energyrelated Products



Product/Sector Specific Legislation



Implementing Acts under revised Directive 2014/33/EU



Construction Products Regulation

under revised Regulation (EU) 305/2011

"The general approach is that this Regulation will set requirements where existing legislation does not, or where it insufficiently addresses environmental sustainability aspects. The legal principle that more specific rules will prevail over more general rules will therefore apply".

Ecodesign Regulation: Types of Requirements

Setting requirements Ecodesign = Delegated acts requirements Performance Information requirements requirements 'Pull' Labelling 'Push' Minimum Requirements Product passport

Information Requirements



'Pull' Labelling

(Information requirements/Labelling combined with 'Classes of Performance' can then be used to set minimum requirements).



Performance Requirements



'Push' Minimum Requirements

Ecodesign Regulation: Types of Requirements

'ecodesign requirement' means a performance requirement or an information requirement aimed at making a product more environmentally sustainable;

The Commission shall, as appropriate to the relevant product groups and with due consideration for all stages of their life cycle, establish ecodesign requirements to improve the following product aspects:

- durability;
- reliability;
- reusebility;
- upgradability;
- reparability; (e)
- possibility of maintenance and refurbishment;
- presence of substances of concern;

- (h) energy use or energy efficiency;
- (i) resource use of resource efficiency;
- (j) recycled content;
- (k) possibility of remanufacturing and recycling;
- (1) possibility of recovery of materials;
- (m) environmental impacts, including carbon and environmental footprint;
- (n) expected generation of waste materials.



'information requirement' means an obligation for a product to be accompanied by information.

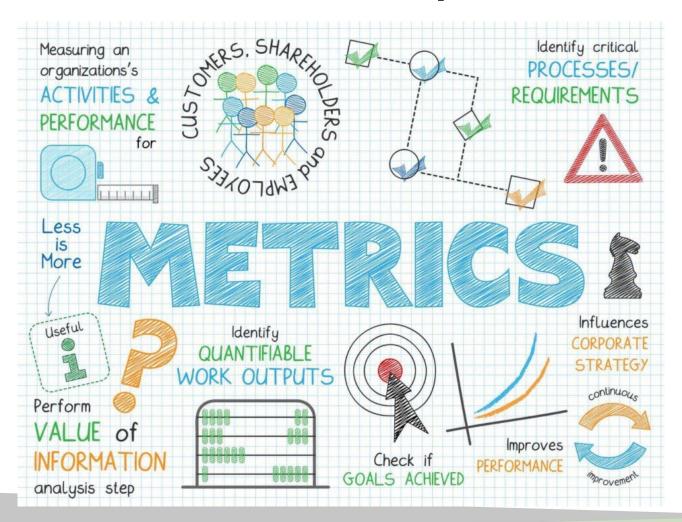
- as a minimum, requirements related to the product passport ... and requirements related to substances of concern;
- as appropriate:
 - information on product performance;
 - consumer information on efficient/sustainable installation, use, repair and maintenance and end-of-life;
 - end-of-life information for waste operators;

'performance requirement' means a quantitative or nonquantitative requirement for or in relation to a product to achieve a certain performance level.

- Minimum or maximum levels in relation to a specific product parameter;
- non-quantitative requirements that aim to improve performance in relation to one or more product parameters;
- Requirements related to functional performance.



3. Performance Requirements



Background: Product Environmental Footprints



European Commission





On 16 December 2021, the Commission published a revised Recommendation on the use of environmental footprint methods.

- The method covers 16 environmental impacts, including climate change and impacts related to water, air, resources, land use, and toxicity.
- The aim is that schemes related to the measurement or communication of Lifecycle Environmental Performance should use the Product Environmental Footprint (PEF), method and PEFCRs as a reference method for the measurement or communication of Lifecycle Environmental Performance of products and organisations. calculating their environmental performance based on reliable, verifiable, and comparable information.
- **N.B:** this Recommendation does not directly implement a specific methodology for the calculation of the Lifecycle Environmental Performance of products, as this is done to be done through product-specific regulations, i.e. under Ecodesign. However, this Recommendation may be referred to by EU legislation as a method for this.



Calls on Industry associations (such as EVIA) to:

- Should promote the use of the PEF method and related PEFCRs among their membership.
- Contribute to the review of public databases and populate these with high quality lifecycle data in line with the requirements on Environmental Footprint compliant datasets.
- Contribute to Commission efforts in the area of availability of high-quality Environmental Footprint compliant datasets.

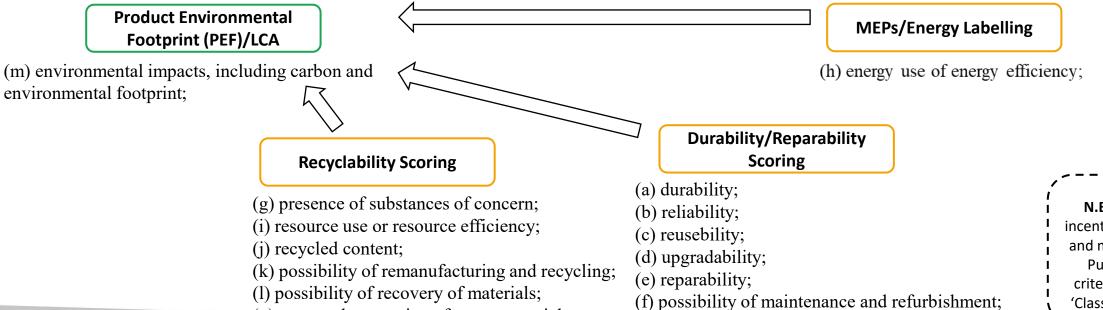


Revised EPBD life-cycle GWP declaration



Performance Requirements: Product Environmental Footprints

- To set 'performance'/'minimum requirements' the Commission will need to establish calculation methodologies for various aspects on which 'Ecodesign requirements' can be set.
- From the calculation methodologies 'Classes of Performance' can then be established on which a minimum requirement can be imposed on the basis of the 'Class of Performance' scales. For example, banning products scoring F-G on an A-G scale.
- Ultimately, the Commission is probably targeting the introduction of Product Environmental Footprint/Life-Cycle Assessment methodologies for products, which aggregate environmental performance across all of the aspects. (See recital (19)).



(n) expected generation of waste materials.

N.B: Member States' incentive/subsidy schemes and mandatory EU Green Public Procurement criteria will be based on 'Classes of Performance'.

Performance Requirements: Classes of Performance

Classes of Performance

Where an **information requirement entails the inclusion in a label of the class of performance** of a product ... the layout of the label ... shall enable customers to easily compare product performance in relation to the relevant product parameter and to choose better performing products. [for example the following].

Product Environmental Footprint (PEF)/LCA







EU COM 2012:Study on different options for communicating environmental information for products

Durability/Reparability Scoring

Reliability		Repairability	
Level	Initial lifetime (L ₀)	Level	% increase in lifetime (ΔL _R)
1	AA	1	XX%
2	ВВ	2	YY%
3	СС	3	ZZ%
4	DD	4	0%

Level	% increase in lifetime (ΔL _U)
1	XX%
2	YY%
3	ZZ%
4	0%

EU COM JRC 2021: MEErP review Task 1 & Task 2 Reports









French Repairability Index

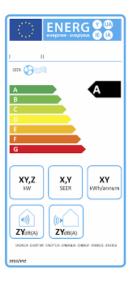


Table 2a: Reparability classes of smartphones and slate tablets

Reparability Class	Reparability Index (R)
A (most reparable)	R ≥ 4,00
В	4,00 > R ≥ 3,35
C	3,35 > R ≥ 2,55
D	2,55 > R ≥ 1,75
E (least reparable)	1,75 > R ≥ 1,00

Draft GROW LOT X EL
Delegated Act for
Smartphones/Tablets

Energy Labelling



4. EVIA CE/Sus. TF Activities

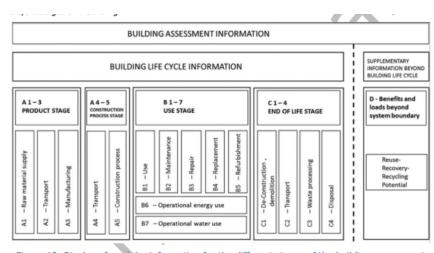
Planning Ahead



EU Institutional Timeline

- Until end of February 2024 Ecodesign Regulation co-decision process.
- March 2024 Indicative publication of Ecodesign Regulation in Official Journal.
- 2022-2025 Preparatory work on a new Ecodesign Working Plan.
- 2026-2030 Implementation of Ecodesign Regulation in revised ErP LOTs and sector specific legislation, i.e. GROW LOT 6, ENER LOT 11.

EVIA PEF Study for Ventilation Units and Fans



igure 12. Display of modular information for the different stages of the building assessment.

Source: EN 15978.2011. Sustainability of Construction Works – Assessment of environmental performance of buildings – Calculation method



Ventilating Europe

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