

Taxonomie Circular Economy

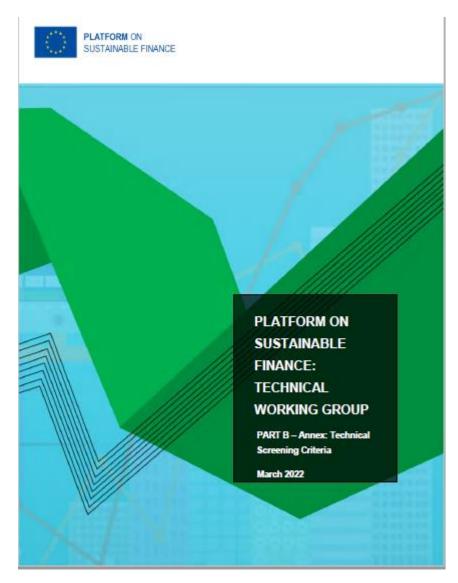
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Technical Regulatory Affairs, Vorwerk

13. Juli 2022

Taxonomie – technical screening criteria





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Taxonomie – Manufacture of electrical and electronic equipment



Description of the activity

Manufacture of electrical appliances. The activity is classified under NACE code C.26 and C.27 in accordance with the statistical classification of economic activities established by Regulation (EC) No 1893/2006.

Substantial contribution to transition to a circular economy

A. Where existing, the activity manufactures electrical and electronic products complying with all EU Ecolabel criteria, or the EU GPP comprehensive criteria applicable to that specific product category.

Taxonomie – Manufacture of electrical and electronic equipment - Funktionsbeständigkeit



B. Where product specific EU Ecolabel or EU GPP comprehensive criteria do not exist, the activity manufactures products complying with all of the following:

Design for long lifetime:

• The activity ensures that software components, software support and software/firmware updates are made available to users for the whole nominal lifetime of the item. The nomial lifetime of the item equivalent to the technical durability of the product, assessed upon EN45552:2020 General method for the assessment of the durability of energy-related products, based on the Annex B of the IEC 62308:2006 - Equipment reliability – Reliability assessment methods or on any product-specific standard relying on EN 45552:2020. The activity ensures that functionality is not lost through (lack of) software updates.

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Taxonomie – Manufacture of electrical and electronic equipment



- Reparatur

Design for repair and guarantee:

- Manufacturers ensure access to information to professional repairers.
- 'Professional repairer' means an operator or undertaking which provides services of repair and professional maintenance ofproducts under this activity.

Main aspects to be included in the information where applicable:

- the unequivocal appliance identification;
- a disassembly map or exploded view;
- list of necessary repair and test equipment;
- component and diagnosis information (such as minimum and maximum theoretical values for measurements);
- wiring and connection diagrams;
- diagnostic fault and error codes (including manufacturer-specific codes, where applicable); and
- data records of reported failure incidents stored on the product (where applicable).

- Ensure key spare parts (such as non exhaustive list motors, batteries, and any
 part essential to the good functioning of the product) availability for 1 additional year
 compared to legal requirements. For products covered by requirements on the
 availability of spare parts under Directive 2009/125/EC and implementing acts
 adopted under that Directive, key spare parts are considered to be those listed in
 Annex to the most recent implementing act for each product group
 - Where no legal requirement apply, key spare part should be available for at least 8 years after production ceases.
- Where no life safety or electrical risk exist, manufacturers provide clear disassembly
 and repair instructions (e.g., hard or soft copy, video) and make them publicly
 available, to enable a non-destructive disassembly of products for the purpose of
 replacing key components or parts for upgrades or repairs.
- The manufacturer provides commercial guarantee 1 additional year compared to legal requirements at no extra cost.

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Taxonomie – Manufacture of electrical and electronic equipment



- Remanufacturing

Design for remanufacturing:

- Where the products able to store data, data encryption is required, alongside a software function that resets the device to its factory settings and erases by default the encryption key.
- The stored data can be easily and fully transferred to another product.

Taxonomie – Manufacture of electrical and electronic equipment - Dismantling



Design for dismantling

- Information on product's end of life management is publicly available, with all requirement information under EU directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). Dismantling information include the sequence of dismantling steps, tools or technologies needed to access the targeted component.
- The activity provides traceability information on SVHC, by complying with at least one
 of the two disclosure frameworks listed below:
 - Product information on substances is available publicly, in SCIP database or in a specific public tool provided by company
 - Product information on substances is available publicly, following IEC62474
 (for EEE) and future IEC82474 for all other sectors (dual logo project)

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Taxonomie – Manufacture of electrical and electronic equipment - Recyclability



Design for recyclability:

The activity manufactures products with demonstrated superior recyclability. Assessment of recyclability relies on EN 45555:2019 (General methods for assessing the recyclability and recoverability of energy-related products) or on any product-specific EN standard relying on EN 45555:2019. All following requirements are met:

- Product recyclability is above 80%. Product recyclability is measured according to EN 45555:2019 or on any product-specific EN standard relying on EN 45555:2019.
- Use of single polymer or recyclable polymer blend
- Plastic enclosures shall not contain moulded-in or glue-on metal.
- Materials which cannot be recycled together have the ability to be separated
- Improving recyclability rate shall not harm the durability of the system itself
- Joining, fastening or sealing techniques do not prevent the safe and readily achievable removal of the components indicated in WEEE or in Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators, when present.

Taxonomie – Manufacture of electrical and electronic equipment – hazardous substances



Proactive substitution of hazardous substances

The activity manufactures products which demonstrate proactive substitution of hazardous substances. All 4 criteria below are met:

- No SVHC in REACH Annex 14 in each article are contained in the product. Authorization
 to Annex 14 is not allowed. No Substances included in REACH candidate list (within 6
 months following the publication the last update of the candidate list in force on 1st
 January of the reporting year), except if essential use is proven or if use is allowed under
 RoHS as detailed in criteria n°2 of this section.
- RoHS exemptions are limited to the following three:
 - a) Lead in high melting temperature type solders (i.e., lead- based alloys containing 85 % by weight or more lead)
 - Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezoelectronic devices, or in a glass or ceramic matrix compound

3. Restriction on the presence of specific substances

The hazardous substances specified in table below shall not be intentionally added to or formed in the specified sub-assemblies and component parts at or above the stipulated concentration limit.

4. Halogen free products, which follow existing standards for all its components: cables (IEC 60754-3), plastic parts (EN50642), electronic components (IEC 61249-2-21 or JS709C), consumables (IEC 61249-2-21 and IPC J-STD-004B) and no Fluor gas and no halogenated flame retardants. Derogations for the use of TBBPA is allowed for Printed Circuit Boards only.

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Taxonomie – Manufacture of electrical and electronic equipment – Information



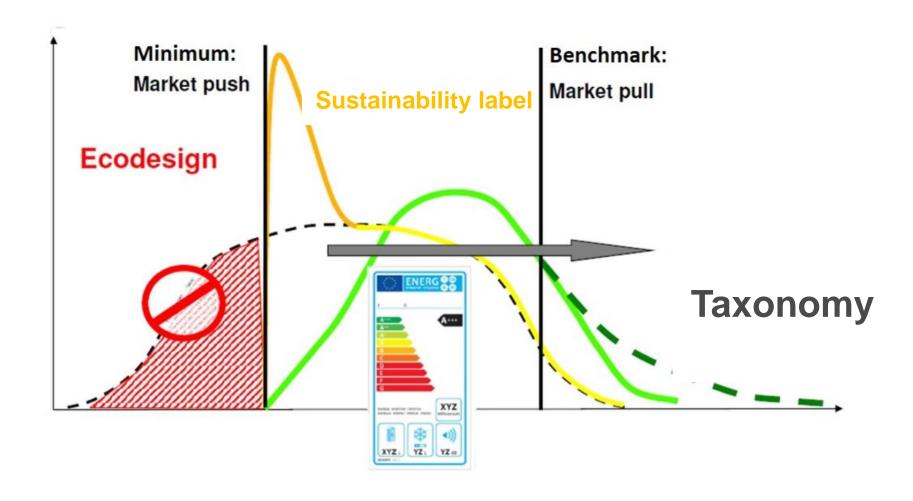
Information to customers:

The activity operator provides information to customers regarding options to use the product considering the environmental benefits, in particular the lifetime extension of the products associated with the different modes of the product

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Taxonomie – Ecodesign - Zusammenspiel





ESPR – Ecodesign for Sustainable Products Regulation



CHAPTER I - GENERAL PROVISIONS

Article 1 Subject matter and scope

This Regulation establishes a framework to improve the environmental sustainability
of products and to ensure free movement in the internal market by setting ecodesign
requirements that products shall fulfil to be placed on the market or put into service.
Those ecodesign requirements, which shall be further elaborated by the Commission
in delegated acts, relate to:

Anforderungen – ESPR - Produktdesign



(a)	durability;		Taxonomie - EN 45552
(b)	reliability;		Taxonomie - EN 45552
(c)	reusability;		Taxonomie - EN 45554
(d)	upgradability;		Taxonomie - EN 45554
(e)	reparability;		Taxonomie - EN 45554
(f)	possibility of maintenance and refurbishment;		Taxonomie
(g)	presence of substances of concern;		Taxonomie

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Anforderungen – ESPR - Produktdesign



(h)	energy use or energy efficiency;		Existiert bereits

- (i) resource use or resource efficiency; ? nicht definiert
- (j) recycled content; EN 45557
- (l) possibility of recovery of materials; EN 45555
- (m) environmental impacts, including carbon and environmental footprint;
- (n) expected generation of waste materials.





Klimaschutzziel 2025

Unser Ziel ist es, bis 2025 zwei Drittel unserer eigenen CO₂-Emissionen (Scope 1+2) einzusparen im Vergleich zum Basisjahr 2016. Die verbleibenden Emissionen werden wir kompensieren. Damit starten wir bereits im nächsten Jahr: Ab 2022 wird die Vorwerk Gruppe klimaneutral bezüglich ihrer eigenen Emissionen.

2/3

Reduktion

Wir reduzieren die CO₂-Emissionen aus der Produktion durch Einkauf von Grünstrom, Grüngas und Energieeffizienzmaßnahmen.







Kompensation Durch Investitionen in anspruchsv Klimaschutzprojekte gleichen wir

Durch Investitionen in anspruchsvolle internationale Klimaschutzprojekte gleichen wir die Menge an CO₂-Emissionen aus, die wir noch nicht reduzieren können.













Langlebig

Reparierbar





Energieeffizient

Recyclingfähig





Kobold VK118

zuletzt im Jahr 1983 hergestellt

2021

 300.000 Filtertüten werden noch immer verkauft







Thermomix 6 – Black Edition:

Unterschale aus 100% ABS-Rezyklat (800g)

CO₂-Fußabdruck:

ABS-Neuware

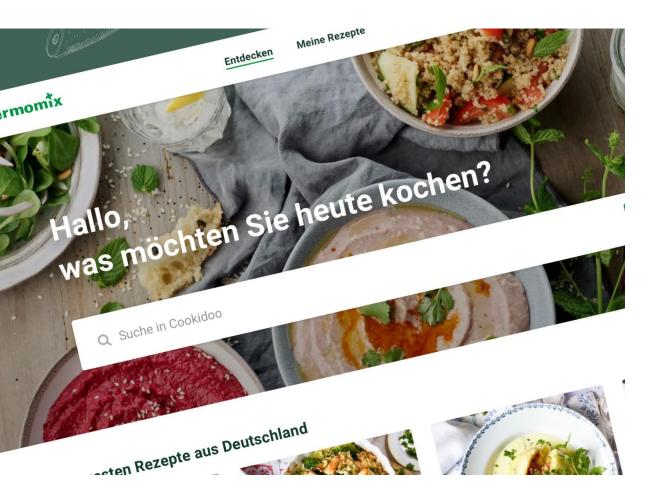
3,46 kg CO_{2e}

ABS-Rezyklat

0,22 kg CO_{2e}

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Wie dick wäre ein Kochbuch, dass alle Rezepte enthält?



