Products for a circular economy

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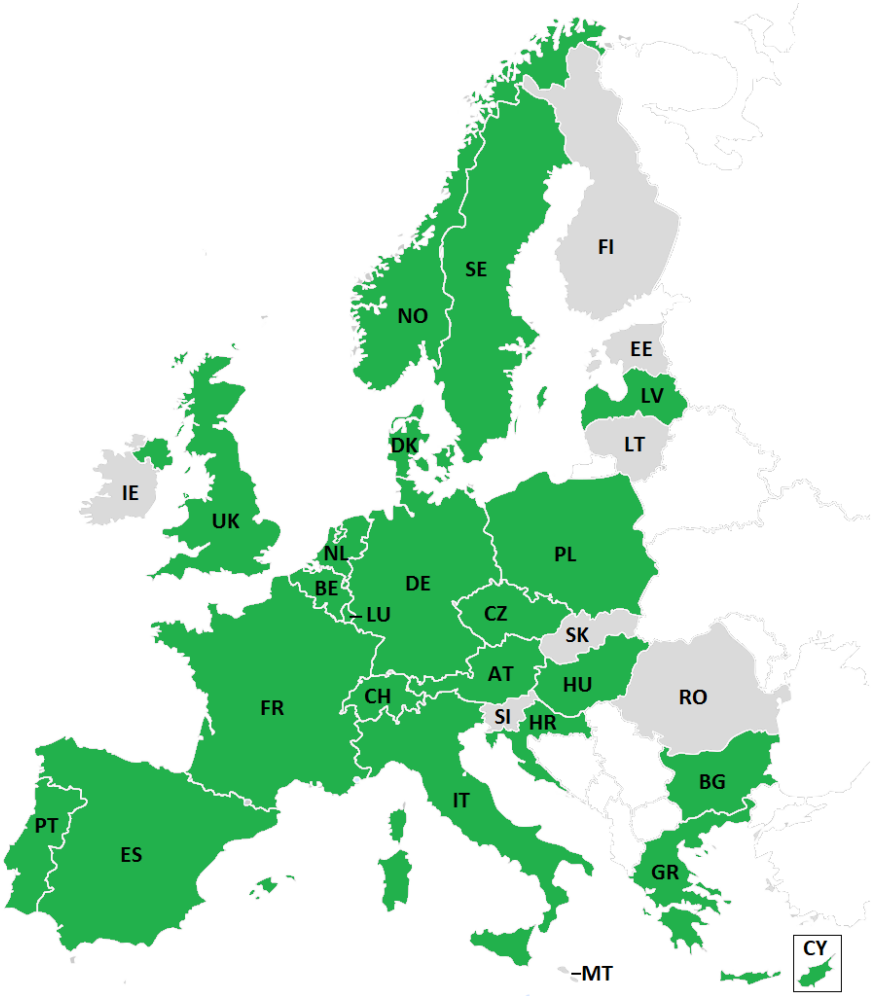
ECOS - European Environmental Citizens' Organisation for Standardisation



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ECOS - European Environmental Citizens' Organisation for Standardisation

Network of members and partners

Network of experts

Communication

Synergies Regulation-Standardisation

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Products in a circular economy

- Make products more durable by introducing **minimum durability requirements on key components**
- Ensure that essential parts of products are **easily replaceable, repairable and upgradable**
- Make products easier to recycling by **not combining different materials that are not compatible**
- **Ban the use of hazardous chemicals** in order to protect health and safety
- Ensure the reduction of **plastic use**

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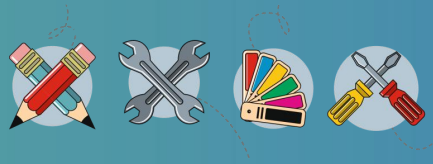
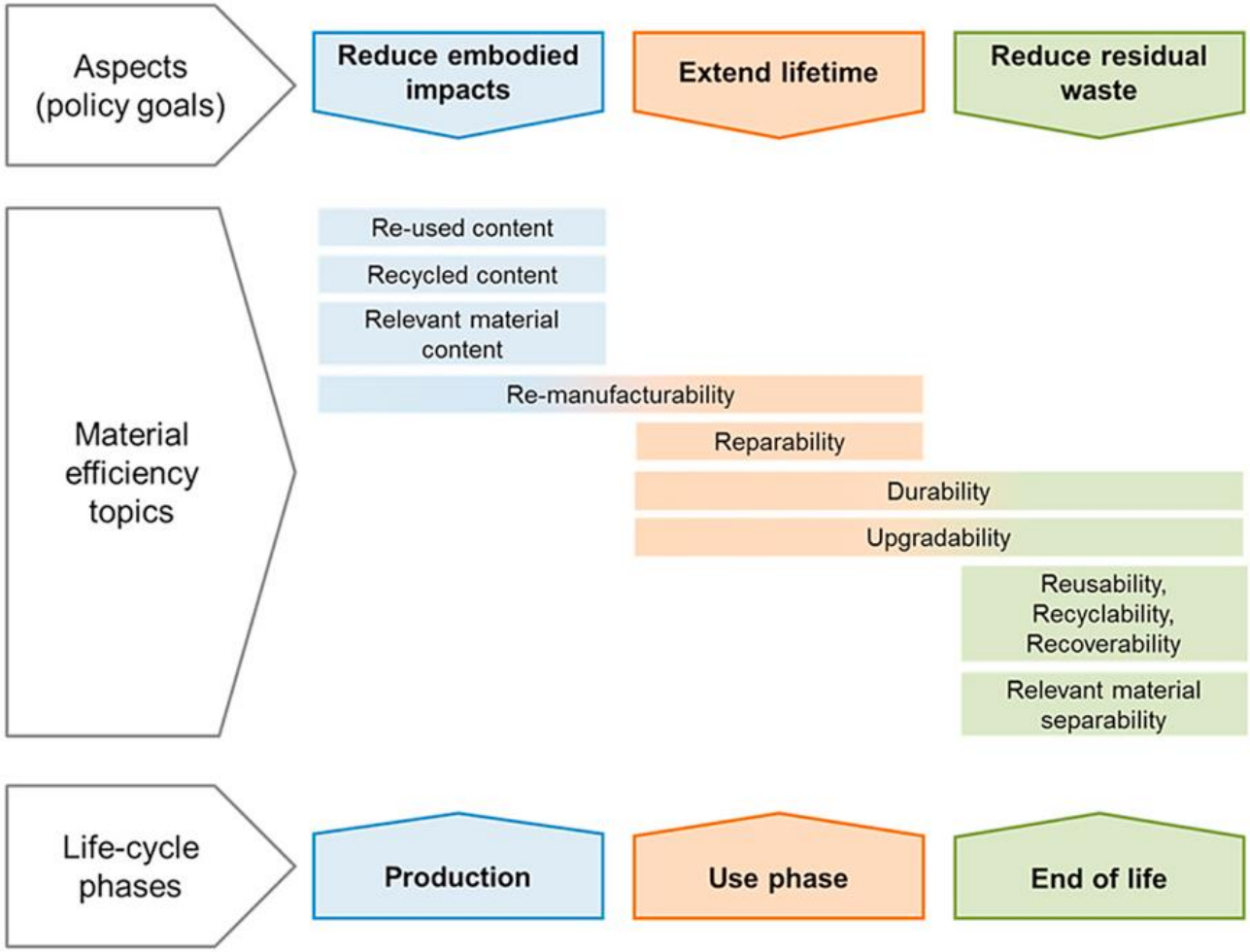
Material Efficiency





Our strategies

EU Policy

Ambitious ecodesign requirements based on circular principles

Standardisation

Assessment and test methods for resource-efficiency, which are appropriate and reflect real-life

Compliance

Proper enforcement and discouragement of circumvention

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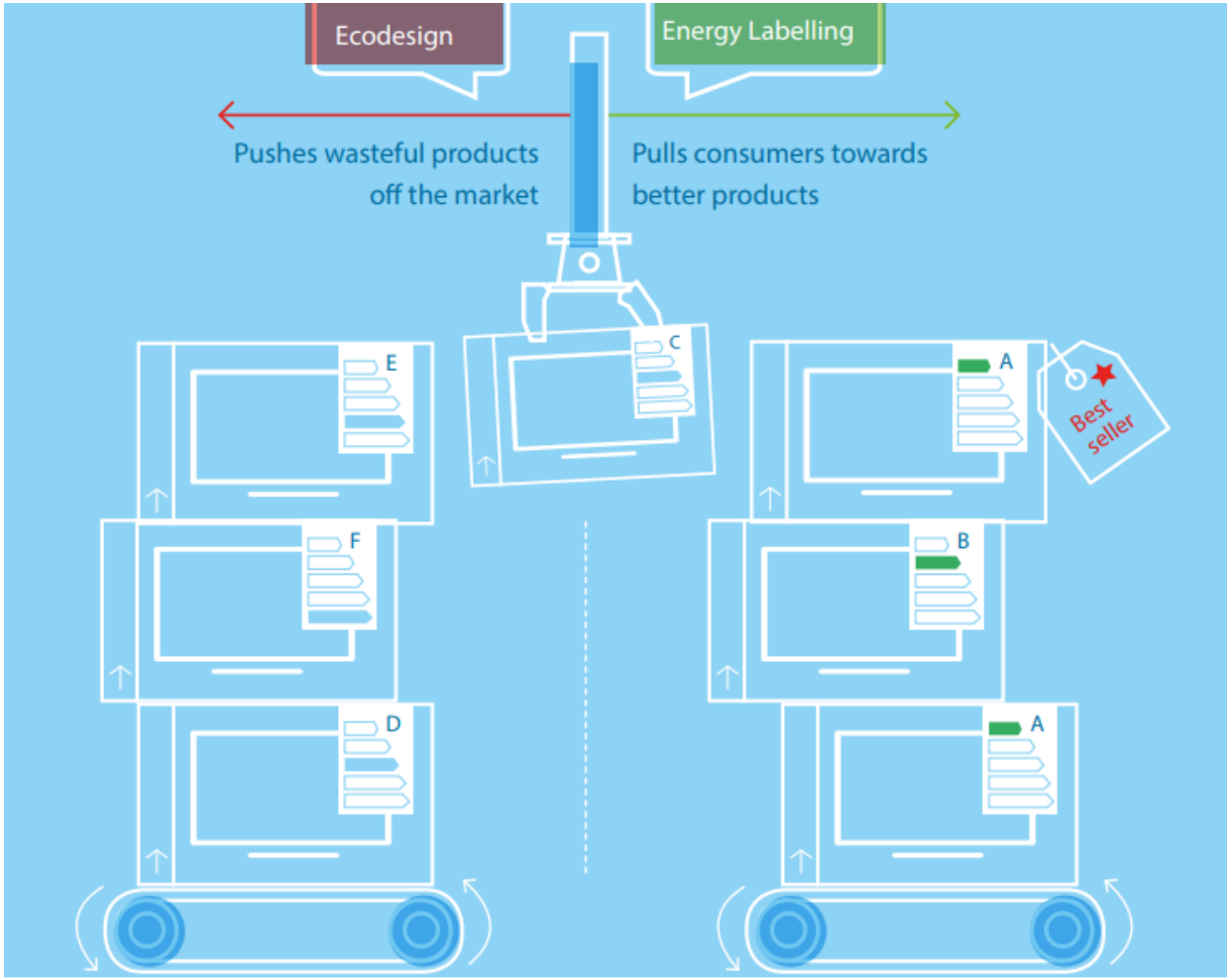
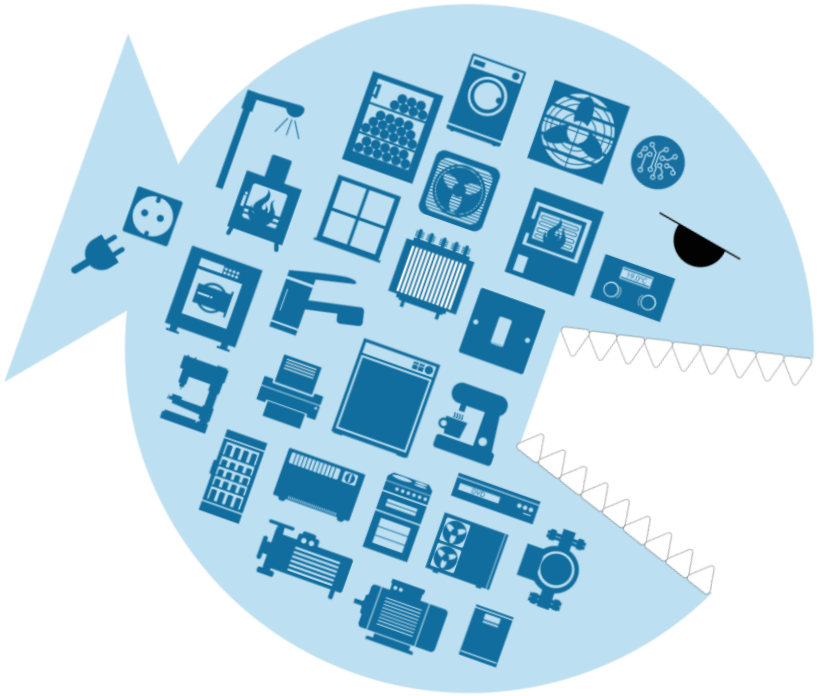
Ecodesign and Energy Labelling



Energy savings so far



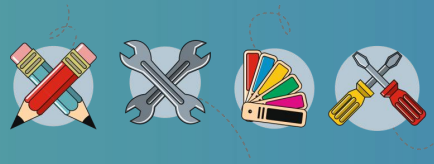
-175 million

tons oil equivalent

~ 9% of EU total

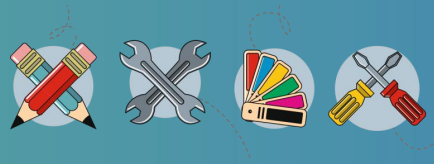
energy consumption

Consumers want repair…



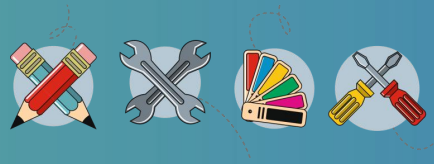
- Almost all Europeans (96%) think it is important that the EU uses its resources more efficiently.
- 77% of EU consumers would rather **repair their goods** than buy new ones.
- 47% EU citizens decided not to have a faulty product repaired in the past 12 months because the **repair costs** were too high.

…and they want it on the label



- Consumers paid strong attention to **durability and reparability** information at the point of purchase
- Almost 3x more likely to choose **highest durability** products
- More than 2x more likely to choose **highest reparability** products
- Lowest durability/reparability products became, respectively, widely unpopular

New types of requirements



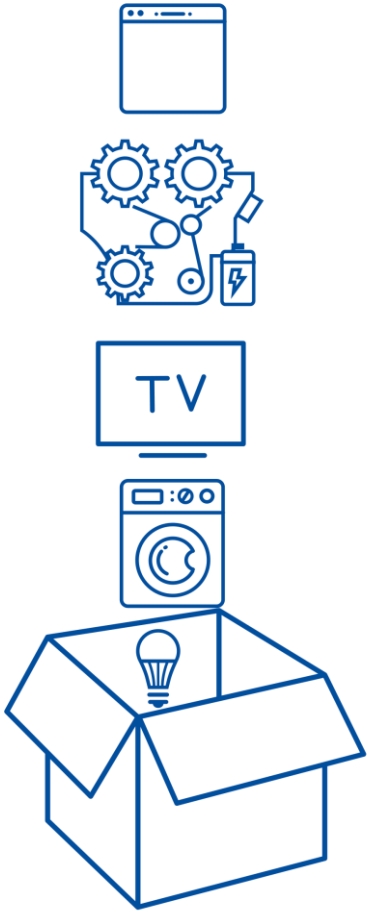
Energy efficiency

Energy efficiency + Resource efficiency

Package: which products?

- Fridges
- Washing machines
- Dishwashers
- Lighting
- TVs & Displays
- Servers
- Commercial fridges
- Electric motors
- Industrial fans
- External power supplies
- Welding equipment
- Power transformers
- Standby
- Compressors

= 14 Ecodesign measures
+ 6 Energy Labels



Package: repair precedents

- Availability of **spare parts**
  - Duration
  - Maximum delivery time
- **Easy access** to key components
- Repair & maintenance **information**
  - ✓ Disassembly map with exploded view
  - ✓ Manuals
  - ✓ Diagnostic fault and error codes
  - ✓ Wiring & connecting diagram

The challenge…

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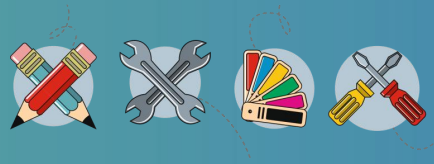
The content of **EN 45554**



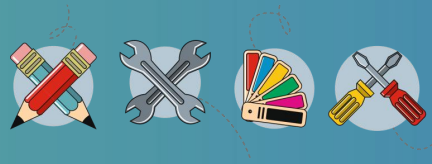
Design-related criteria

- Disassembly depth
- Fasteners and connectors(by type)
- Tools
- Working environment
- Skill level

Service-related criteria

- Diagnostic support and interface
- Availability of spare parts (target group, duration, interface)
- Types and availability of information (target group, comprehensiveness)
- Return models
- Data management
- Password and factory reset for reuse

Scoring a criterion – Tools example



Category	Class
Feasible with no tool, tool supplied or basic tools*	**A**
Feasible with product group specific tools	**B**
Feasible with other commercially available tools	**C**
Feasible with proprietary tools	**D**
Not feasible with any existing tool	**E**

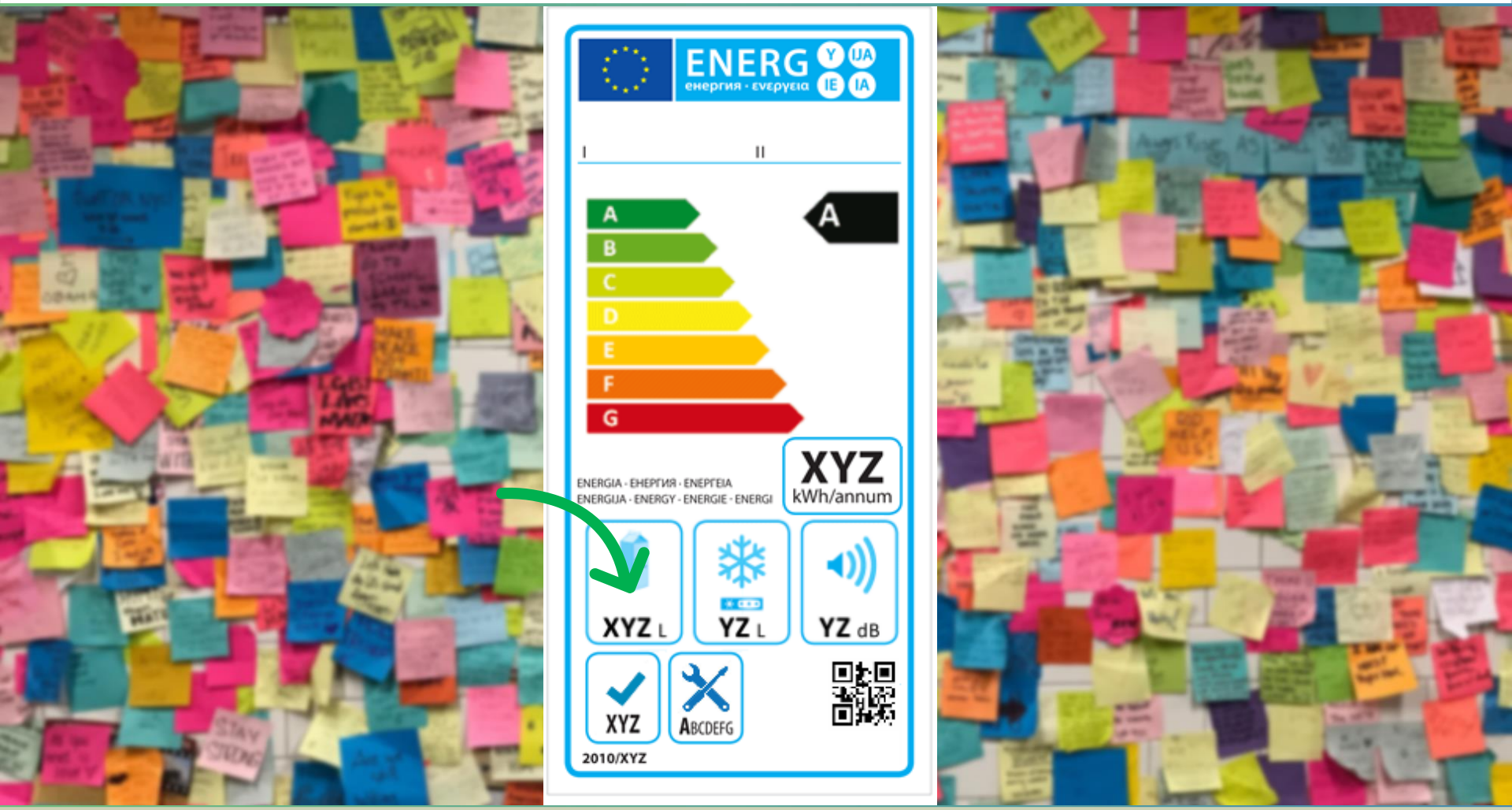
Overall Score

$$\text{Score} = \sum\left(Wpp \times \sum\left(Wi,pp \times Si,pp\right)\right) + \sum Wj \times Sj$$

where

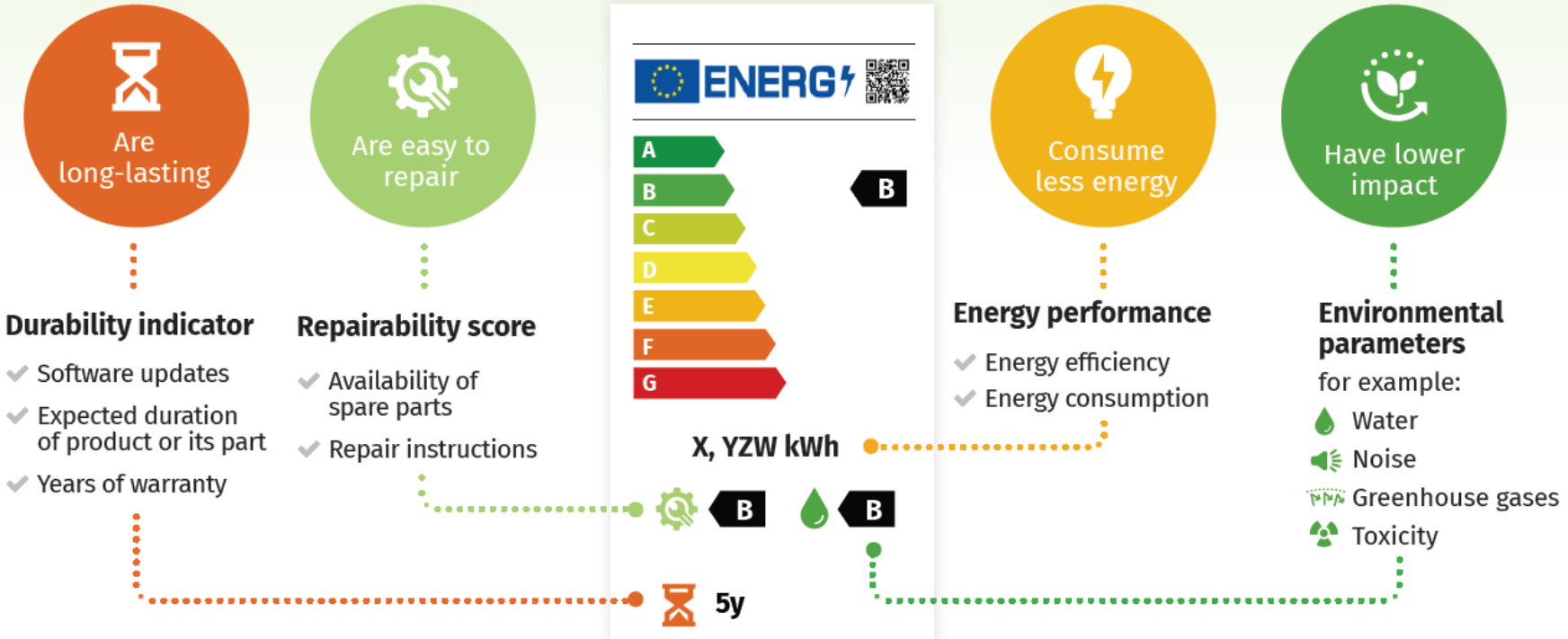
W_{pp}	is the overall weight of the priority part *pp*
W_i	is the weighting factor of criterion i assessed at priority part level
S_i	is the score of criterion i assessed at priority part level
W_j	is the weighting factor of criterion j assessed at product level
S_j	is the score of criterion j assessed at product level

The Label…


ENERG
енергия · ενεργεια
I
II
A
B
C
D
E
F
G
A
ENERGIA · ЕНЕРГИЯ · ΕΝΕΡΓΕΙΑ
ENERGIJA · ENERGY · ENERGIE · ENERGI
XYZ
kWh/annum
XYZ L
YZ L
YZ dB
XYZ
ABCDEFG
2010/XYZ

Expanding on aspect scope

THE ENERGY LABEL SHOULD GO **CIRCULAR** AND HELP EUROPEANS PICK **PRODUCTS** WHICH...



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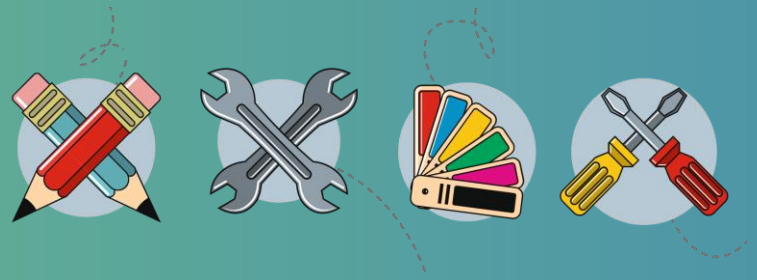
Expanding on aspect scope

Thank you!



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