Ecodesign & Energy Labelling Package

All you need to know
Praised in countless evaluations, the Ecodesign and Energy Labelling policies are among the EU’s greatest successes.

The Ecodesign Directive removes the least efficient products from the market by setting standards that demand a minimum level of performance. Meanwhile, Energy Labels guide consumers towards the best products by giving them an A to G ranking. Result? Consumers make better purchasing choices and manufacturers are rewarded for innovation.

Ecodesign regulations first need to be adopted for each product category, and then regularly revised to remain consistent with technological evolution and sufficiently ambitious to challenge market players.

Several of the product-specific Ecodesign and Energy Labelling regulations adopted 5 to 10 years ago are in dire need of updating. The Ecodesign and Energy Labelling Package adopted in 2019 is a crucial and unique opportunity to modernise the policies, and ensure they continue to deliver.
The Package in figures

11 ecodesign regulations
6 energy labels
140 TWh saved per year from 2030 onwards, which is equivalent to 5% of EU electricity consumption
€20 billion saved on household and company energy bills per year from 2030 onwards
The Package is good for...

**consumers**
- Access to clearer Energy Labels in shops
- Big savings on energy bills
- Products that last longer

**the European industry**
- Additional income for the EU industry
- Innovation and competition driven by the new labels

**the environment**
- Massive energy savings
- Easier repair and recycling
- A more circular economy
What is in the Package?

The Package entails a series of Ecodesign and Energy Labelling regulations. Each product-specific measure will bring huge benefits. Some of these measures are being updated, while others have been created from scratch.
The complexity of the EU legislative set-up for lighting products (with four different regulations) is no longer adequate to support the wide uptake of the very efficient LED.

The updated requirements will facilitate market transformation and save around 42 TWh of electricity per year by 2030, nearly as much as the national electricity consumption of Portugal.

One of the major changes foreseen by this regulation is the replacement of inefficient fluorescent tubes mainly used in offices and industrial settings with their LED equivalent, which will trigger massive savings. Private and public consumers will save between 8 and 10 billion € a year on lighting expenditures by 2030.
The existing ecodesign rules have been insufficiently ambitious, and are now largely ineffective. Energy labelling introduced in 2010, while successful at the beginning, is now showing serious signs of obsolescence: nearly all TV models on the market are able to claim an A class, and there is a strong need for a stringent revision of the classes to anticipate future efficiency progress.

The regulations will now cover TVs, monitors and some signage displays which is a big improvement in terms of coverage scope, and the levels will better reflect market evolution, notably in terms of standby and on mode consumption. The estimated energy savings from this revision amount to 40 TWh per year by 2030, equivalent to powering 10 million electric cars for a year.

In addition, the new legislations include repairability and recyclability requirements, which are urgently needed to reduce the considerable environmental and resource footprint of such electronic devices. A ban on halogenated flame retardants in parts of the products is also included.

Half of domestic refrigerating appliances placed on the market in 2014 could claim one of the two top classes (A+++ or A++) on the label – a clear sign that the 10-year-old regulations in place are in urgent need of updating.

The revision will enforce fairer rules through more realistic calculations, as well as deliver about 10 TWh of electricity savings per year by 2030, as much as the residential electricity consumption of Denmark. In practice, European households will avoid an average 100 € of electricity expenditure over the lifetime of a new fridge or freezer.

In addition, manufacturers will have to facilitate the repair of these products by ensuring that key parts of the product can be replaced. A few spare parts such as door gaskets and thermostats will have to be made available for 10 years, and accessible with commonly available tools and without damaging the product. Measures are also foreseen to facilitate recycling and removal of hazardous substances.
Commercial refrigeration

NEW MEASURE

Supermarket fridges and freezers consume huge amounts of electricity, but significant savings potential is there. Simple measures such as installing doors on commercial fridges can save up to 40% of energy a year. While domestic and professional sectors are already implementing energy efficiency technologies, the sector of commercial refrigeration is lagging behind.

Besides the minimum performance set in place, professionals picking their appliances will be helped by an energy label which allows to compare products on a fair basis.

About 19 TWh of annual electricity use by 2030 can be saved, as much as the amount of electricity consumed by households in Belgium.

As in the case of fridges and freezers, provisions to facilitate repair and recycling are also foreseen.

≈ 19 TWh of electricity savings per year by 2030
Motors

Invisible but extremely powerful, the 2009 rules have pushed the motors market upwards and saved huge amounts of energy, equivalent to the residential electricity consumption of the UK and Austria combined.

With the upcoming update, the bar will be set even higher to continue stirring innovation and cover more types of motors.

10 TWh electricity each year will be saved, which corresponds to the electricity needed to power 100 million TVs.

≈ 10 TWh of electricity savings per year by 2030
Servers

NEW MEASURE

The number of servers and data centres in Europe is multiplying at a very quick pace. Many servers operate inefficiently when doing little or no work. The energy demands of the digital revolution will be difficult to sustain unless servers are made much more efficient.

The new regulation for servers is badly needed and can save about 9 TWh/year of electricity by 2030 which is as much as switching off 100 million lightbulbs left on all year long.

Provisions to support repair, reuse and recycling of servers were adopted in December 2019. As a result, manufacturers will notably need to provide firmware updates for eight years, as well as data deletion tools.

≈ 9 TWh of electricity savings per year by 2030
Washing machines and washer-driers

The 2010 regulations are clearly outdated: more than 55% of washing machines placed on the EU market are ranked A+++ on the label, hindering product differentiation.

The updates will save about 711 million m³ of water and 2,5 TWh of electricity per year by 2030, as much as powering 500 football stadiums for a year. At the same time European households will save 130 € on their bills over the lifetime of a new washing machine.

The provisions will also improve consumer information, as the measurement methods to determine the energy class of the label will be closer to real-life conditions, and reduce the duration of washing programmes.

Efforts have also been made to make these products easier to repair: manufacturers will have to provide professional repairers with spare parts for 7 years, as well as with technical documentation needed for repair.

Dishwashers

The 2010 regulations are also obsolete. The A+++ and A++ energy classes concentrated about 60% of models placed on the market in 2014.

The new requirements will save about 16 million m³ of water and 2,1 TWh of electricity per year by 2030, as much as charging 300 million smartphones over a year. Households will save on average 60 € each on electricity and water over the lifespan of a new dishwasher.

Like with washing machines, the product repairability and recyclability will be improved.
External power supplies

Every mobile phone or laptop, as well as many other products, require a power adapter (an "external power supply" or EPS) to convert household electricity to a lower voltage. In recent years, the explosion in the number of portable devices requiring such adaptors, combined with the lack of standardisation of the power supplies, has led to a wasteful substantial surplus of these in our homes. Unfortunately, decision-makers have not yet addressed this issue directly by requiring chargers to be "universal", so that we could use our existing EPS for a number of devices and thus reduce waste.

The new regulation for EPS covers a larger range of adapters, as well as improves their efficiency when charging, and reduces their power demand when they are plugged in but not charging.

About 4,3 TWh electricity will be saved by 2030, which corresponds to switching off 16 million fridges.

Transformers

Transformers are an integral part of any power grid as they transmit, distribute and allow for the utilisation of electrical energy. The energy performance of power transformers is currently being improved around the globe, and the EU rules have been revised.

Welding equipment

This measure concerns a professional product you have probably never seen in your life: welding equipment. With the new measure, 1,09 TWh electricity will be saved, which corresponds to charging over 150 million smartphones over a year.
### Top 5 energy-saving measures IN TWh/YEAR

- **Lighting**: 42 TWh/YEAR
- **TVs & displays**: 40 TWh/YEAR
- **Commercial fridges**: 19 TWh/YEAR
- **Domestic fridges**: 10 TWh/YEAR
- **Electric motors**: 10 TWh/YEAR

### Top 5 #RightToRepair measures

- **Fridges**:
  - 2 stars
- **TVs & displays**:
  - 3 stars
- **Washing machines**:
  - 3 stars
- **Dishwashers**:
  - 3 stars
- **Servers**:
  - 1 star
New look for the Energy Label!

Say goodbye to A+, A++, A+++,
we are going back to an A-G scale!