



EUROPEAN COMMISSION

PRESS RELEASE

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Energy savings and reduced emissions from new efficiency requirements for transformers

The Ecodesign Regulation adopted today by the European Commission will ensure that transformers become progressively more efficient as new power transformers put into service in the EU internal market will have to fulfil minimum energy efficiency requirements from 1 July 2015. The resulting energy savings have been estimated at 16TWh per year from 2020 onwards, which corresponds to 3.7 Mt of avoided CO₂ emissions. This is equivalent to saving half of the annual electricity consumption of Denmark (32 TWh) per year. Although power transformers are generally very efficient devices, cost-effective marginal improvements in their efficiency can yield substantial energy savings, taking into account their typical service life of 30 years or more. Given that the number of installed transformers in Europe in 2011 has been estimated at 3.6 million, a figure that is expected to increase to almost 4.7 million in 2025, the impact of today's decision will be considerable.

Michel Barnier, acting European Commissioner for Industry and Entrepreneurship, commented: *"Today's decision represents a good example of how we can pursue policies that successfully reconcile competitiveness and sustainability. By aligning EU legislation with that of other advanced economies, this regulation will help reduce greenhouse gas emissions. It will also help reduce electricity prices for consumers, while helping EU manufacturers continue to be competitive in global markets."*

Newly installed transformers to become more energy efficient

The Regulation covers small, medium and large power transformers used in electricity transmission and distribution networks or for industrial applications. This means that not all transformers are affected: for instance, single phase transformers are outside the scope of the EU legislation. The Regulation pioneers the introduction of minimum efficiency requirements for larger power transformers, which are normally manufactured as bespoke units. The minimum efficiency requirements for medium power transformers in this EU Ecodesign Regulation are comparable to those already in place in other advanced economies around the world.

Cost-effective and technologically feasible minimum energy efficiency requirements will be applicable from 1 July 2015 (Tier 1), and will become stricter by July 2021 (Tier 2). This transition period will give manufacturers, electricity companies and industrial users sufficient time to adapt. By eliminating the worst performing models from the market, the Regulation will force economic operators to procure more efficient models, with typical payback periods estimated at around 8 years. The gradual replacement of the installed base of transformers in the EU with more efficient models will result in substantial energy savings, as well as reducing CO₂ emissions.

Background

This new Ecodesign Regulation adds to the list of more than twenty already adopted Ecodesign Regulations¹ covering both household and industrial products, such as electric motors or pumps. Other Ecodesign Regulations for industrial products close to adoption include professional refrigeration and ventilation units.

All in all, it has been estimated that the combined effect of all Ecodesign Regulations will contribute to 1/3 of the EU's 2020 energy efficiency target.

More information available at:

[EU Ecodesign legislation](#)

[Ecodesign Europa website](#)

[Less CO₂: Ecodesign is as important as the Emissions Trading Scheme](#)

Contacts:

[Carlo Corazza](#) (+32 2 295 17 52) [@ECspokesCorazza](#)

[Sara Tironi](#) (+32 2 299 04 03)

¹ For an updated list of Ecodesign Regulation, see http://ec.europa.eu/energy/efficiency/ecodesign/doc/overview_legislation_eco-design.pdf