

INCEPTION IMPACT ASSESSMENT

TITLE OF THE INITIATIVE	Ecodesign and energy labelling requirements for computers
LEAD DG (RESPONSIBLE UNIT)	ENER, C.3
LIKELY TYPE OF INITIATIVE	Commission implementing regulation (ecodesign) Commission delegated regulation (energy labelling)
INDICATIVE PLANNING	Completion of the Impact Assessment in the second quarter of 2018
ADDITIONAL INFORMATION	http://ec.europa.eu/energy/en/topics/energy-efficiency/energy-efficient-products https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-efficient-products/computers-and-servers

The Inception Impact Assessment is provided for information purposes only. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by the Inception impact assessment, including its timing, are subject to change.

A. Context, Problem definition and Subsidiarity Check

Context

Increasing energy efficiency is an important objective of the EU policy (more information at <https://ec.europa.eu/energy/en/topics/energy-efficiency>). A crucial policy instrument for achieving the 2020 and 2030 EU climate and energy targets is the setting of **minimum efficiency requirements for products** – through **ecodesign** –, in combination with **informing customers about their energy performance and durability** – through **energy labelling**.

Ecodesign and Energy Labelling regulations are key contributors in product policy supporting the Energy Union objectives and the transition to a Circular Economy. The Commission has flagged in the Ecodesign Working plan 2016-2019 that ecodesign implementing measures should cover resource efficiency aspects where appropriate, to ensure greater durability, accessibility, design for disassembly and reparability of products entering the market and therefore contribute to the transition towards a more circular economy.

Since the coming into force of the first ecodesign directive in 2005, a variety of energy-consuming product groups such as washing machines, refrigerators, etc. have been covered by ecodesign and energy labelling regulations. Moreover, each ecodesign and energy labelling regulation contains provisions for its future evaluation and possible revision, taking into account the experience gained with their implementation and technological progress.

Commission Regulation (EU) No 617/2013 of 26 June 2013 sets requirements on computers and computer servers. It was to be reviewed three and a half years after entry into force (i.e. by January 2017) and is part of the Ecodesign Working Plan 2016-2019. This process started in January 2016 with a review study, the conclusions of which will be presented to the Consultation Forum in the first quarter of 2018 (for more information please see <https://computerregulationreview.eu/>). Subsequently, an Impact Assessment will be carried out.

Problem the initiative aims to tackle

Ecodesign Regulation (EU) No 617/2013 covers personal computers, including desktops, laptops and tablets, and enterprise servers. Main problems that emerged include:

1. **Current requirements and measurement tests are no longer representative of real-world use:** requirements and test procedures are based on specifications developed almost ten years ago. Since then, with the emergence of compact mobile devices, manufacturers have leveraged power savings techniques to reduce power demand, particularly in idle-mode, by using new low power states such as “modern standby”. Updated criteria based on the energy efficiency in real-use situations should be considered.
2. **Current requirements do not permit a fair comparison between different models and possibly reward inefficient ones.** Differently from the approach to other products, where a ratio of the useful work per unit of energy used provides the indicator of energy efficiency, the current computer regulation caps the energy use for different product categories while not doing useful work. Various allowances for additional internal components are foreseen but technology evolution is progressively changing their absolute and relative contribution to overall energy use and efficiency. To address this, a new set of criteria, agnostic of internal architecture, components and technology should be considered.
3. **Poor reparability leading to premature obsolescence and increased waste:** the most frequent reasons of irreparable damage (e.g. from spilling liquids), premature obsolescence (e.g. because of aging of a non accessible battery) and the possibility of reusing still perfectly working power supplies should be addressed, thus reducing consumer expenditure and waste.
4. The current **complex requirements are also difficult to enforce:** streamlining them, where feasible, would

simplify the compliance control activity and increase compliance.

Basis for EU intervention (legal basis and subsidiarity check)

I. Legal basis

The Ecodesign Directive is based on Article 114 of the Treaty on the Functioning of the European Union, the legal base for measures for the functioning of the internal market. The Energy Labelling Regulation is based on Article 194(2) of the Treaty on the Functioning of the European Union.

II. Subsidiarity check

To ensure the free circulation of goods, it is appropriate to set EU-level rules on the ecodesign and energy labelling of energy-related products. If the EU did not intervene, Member States would set their own rules, which would be necessarily different due to the complexity of the technical aspects, thereby disrupting the functioning of the internal market.

B. Objectives and Policy options

I. Objectives

In particular on the basis of the results of the review, the impact assessment will examine solutions to:

- Take into account technological progress to more effectively decrease energy consumption in real use situations;
- Take into account market trends and streamline requirements and scope, to better inform consumers and procurers on the most efficient models available;
- Deliver consumer savings and new jobs from improving reparability, from using more sturdy models, from improving both computer and battery lifetime and from avoiding purchase of unnecessary chargers;
- Simplify requirements thereby reducing burden on suppliers and facilitating compliance control by market surveillance authorities in the Member States.

II. Policy options

The impact assessment will compare the following policy options:

0 – Business as Usual (no revision of the existing Ecodesign regulation)

1 – Industry Voluntary Agreement

2 – Revision of the Ecodesign Regulation only

3 – Combined revision of the Ecodesign and a new Energy Labelling Regulations

III. Preferred solution

So far, no industry proposal came forward for a voluntary agreement (option 1). The review showed that using a new approach for setting efficiency requirements, i.e. based on the ratio of "useful work" done per energy unit (i.e. the efficiency in "active state") would address some of the problems mentioned above (option 2). Moreover, establishing a new energy label, in addition to a revised Ecodesign measure, would empower end-users and procurers, by informing them about the energy efficiency of different models and by providing some indicators for durability and lifetime extension, thereby orienting consumers' and procurers' purchasing decisions towards more efficient and more durable products (option 3).

C. Preliminary Assessment of Expected Impacts

The impacts listed below are those deriving from the preferred option as described above.

Likely economic impacts

I. On end-users

Policy Option 0 would entail a negative economic impact as none of the four identified problems would be solved.

Policy Option 1 cannot be assessed as no proposal is announced

Policy Options 2 and 3 would benefit consumers to different extents. However, Policy Option 3 seems to be the most beneficial for consumers (and procurers) as it would entail (i) better informed purchase decisions, (ii) lower energy bills (desktop computers) and (iii) lifetime extensions (mobile computers) that would also reduce waste.

II. On the industry

A combination of ecodesign and labelling requirements triggers competition as more efficient products placed on the market have a higher visibility (being in the top, green classes of the label), thus encouraging industry investments in research and development (as this would be offset by higher returns on investment).

III. On Procurers

Personal computers are used in almost all organisations. Policy Option 3 would bring positive economic impact, by facilitating the selection of the most efficient and durable products in the procurement process.

Likely social impacts

With Policy option 3, end-users, including businesses and households, will benefit from the regulations through the possibility of choosing between less efficient and less-durable products and more durable, repairable and efficient ones.

Likely environmental impacts
<p>Electricity consumption in the use-phase is the main environmental impact considered, however improved durability would result in better exploiting the embodied energy estimated to be about half of the total energy used along the product lifecycle.</p> <p>Without policy intervention, the review study shows that overall computer energy use in the use-phase is projected to increase from an estimated 59.8 TWh/year in 2016 to 66.5 TWh/year by 2030.</p> <p>Preliminary assessment in the review study showed that a revised ecodesign regulation on computers alone (Option 2) is estimated to save approximately 16 TWh/year by 2030 compared to BaU. A combination of a revised ecodesign regulation with an EU Energy Label with the inclusion of 'active mode' energy efficiency requirements could result in savings of 30 TWh/year by 2030. A number of material efficiency requirements, that consumers would largely appreciate, could increase useful lifetime, thus reducing WEEE (particularly from mobile computers the additional amounts of recycled materials would be: 30-60 tonnes of cobalt, 4-7 tonnes of lithium, 80-170 tonnes of copper and 0.2-0.6 tonnes of various precious metals).</p>
Likely impacts on fundamental rights
No impact expected.
Likely impacts on simplification and/or administrative burden
<p>Overall, the administrative burden is considered negligible with respect to the expected benefits. The regulation is directly applicable in all Member States, resulting in no costs for national administrations for transposition into national legislation.</p> <p>Disproportionate burdens for manufacturers are avoided, amongst others due to transitional periods which duly take into account redesign cycles.</p> <p>Combining energy labelling and ecodesign is expected to simplify the work of national market surveillance authorities in particular.</p> <p>Removing tablets and servers from the scope of the regulation and avoiding/reducing allowances should further simplify conformity assessment and compliance control.</p>
D. Evidence Base, Data collection and Better Regulation Instruments
Impact assessment
An impact assessment, which will be supported by external expertise, with additional technical information and market data collected and analysed, will be completed in support of the preparation of this initiative and to inform the Commission's decision.
Evidence base and data collection
Poor and incomplete data was found during the review study as result of non-compliance with information requirements. Data from the Energy Star programme database was used as the most relevant and complementary information source. Other studies and reports for the US market will provide additional data.
Consultation of citizens and stakeholders
<p>There has already been extensive consultation of stakeholders and experts, in particular during the review study, which is still ongoing. It included the establishment of a dedicated website (https://computerregulationreview.eu/) where all relevant documents can be found. A stakeholder meeting (including experts from Member States, industry associations, standardisation experts, consumer protection organisations and environmental NGOs) was held on 16 January 2017.</p> <p>The Commission will gain further stakeholder inputs through the Consultation Forum that will be held in the first quarter of 2018. This will be followed by the Impact Assessment study carried out by external consultants, during which additional technical information and expertise is being collected and analysed. In addition, an open public consultation on this topic will be conducted. For this purpose, a questionnaire will be drafted and published early 2018 on the Commission's central consultation page (https://ec.europa.eu/info/consultations_en). Stakeholders' positions and comments on the present inception impact assessment and through to the open public consultation will be analysed and be part of the impact assessment. Later, the draft measures will be subject to the 4-week Feedback Mechanism.</p> <p>A summary of the consultation activities' results will be published on the consultation page once all consultation activities are closed and in an Annex to the impact assessment report. Finally, a consumer understanding survey will be organised involving a statistically relevant sample of over 4 thousand citizens in 7 different EU countries to assess the impact of an energy label for computers on consumer purchase choices.</p>
Will an Implementation plan be established?
No, the regulation is directly applicable in all Member States.
A uniform implementation of ecodesign and energy labelling measures is facilitated through several initiatives, notably via the European administrative cooperation on market surveillance.