

Ecodesign requirements for industrial products

Lead department	Department for Business, Energy and Industrial Strategy
Summary of proposal	Update ecodesign and energy-labelling requirements to realise the full potential energy and carbon emission savings from the new requirements for electric motors and welding equipment.
Submission type	Impact assessment (IA) – 18 December 2020
Legislation type	Secondary legislation
Implementation date	1 January 2021 and 1 July 2021
Policy stage	Final
RPC reference	RPC-BEIS-4447(2)
Opinion type	Formal
Date of issue	2 February 2021

RPC opinion

Rating ¹	RPC opinion
Fit for purpose	The evidence and analysis supporting the EANDCB and the SaMBA are sufficient. The assessment of both has been strengthened through consultation, although the SaMBA would benefit from further improvement. Other areas could also be improved, in particular post-implementation review (PIR) plans and assessment of wider impacts, including competition.

¹ The RPC opinion rating is based only on the robustness of the EANDCB and quality of the SaMBA, as set out in the [Better Regulation Framework](#). The RPC rating is fit for purpose or not fit for purpose.

Business impact target assessment

	Department assessment	RPC validated
Classification	Qualifying regulatory provision (OUT)	Qualifying regulatory provision (OUT)
Equivalent annual net direct cost to business (EANDCB)	-£18.0 million	-£18.0 million <i>(2016 prices, 2017 pv)</i>
Business impact target (BIT) score	£90.0 million	£90.0 million
Business net present value	£336.0 million	
Overall net present value	£415.0 million	

RPC summary

Category	Quality	RPC comments
EANDCB	Green	The EANDCB is based upon sufficient evidence and reasonable assumptions, and the assessment has been strengthened through consultation. The RPC considers the IA's classification of impacts into direct and indirect to be appropriate, although this would be improved by further discussion.
Small and micro business assessment (SaMBA)	Green	The IA provides a sufficient description of impacts on small and micro businesses and addresses exemption, disproportionality of impact, and mitigation. The assessment has been strengthened following consultation, with transition costs to small businesses monetised. However, the SaMBA would benefit significantly from further strengthening in certain areas.
Rationale and options	Good	The IA sets out the rationale clearly and provides a discussion of non-regulatory options, explaining why these have not been taken forward.
Cost-benefit analysis	Good	The Department has used consultation to gather additional evidence, enabling it to quantify transition costs and to refine its assumptions for the counterfactual. The IA monetises carbon savings.
Wider impacts	Good	The IA now usefully includes a section on trade impacts. Some areas of wider impacts could be strengthened, such as assessment of competition impacts.
Monitoring and evaluation plan	Satisfactory	The Department provides a high-level description of its plans for a post-implementation review (PIR). This section would benefit from detail on what will be done, when and how.

Policy detail

Description of proposal

The IA states that *ecodesign* legislation requires manufacturers of energy-related products to meet minimum requirements that should improve the energy efficiency and environmental impacts of their products (page 1). Energy labelling requires manufacturers to provide information on energy consumption (and other parameters) to allow consumers to make informed choices based on the energy efficiency of products. The legislation provides for secondary standards for specific products. In January 2019, the UK, as a European Union (EU) member state, voted in favour of new and updated *ecodesign* and energy-labelling requirements for electric motors and variable speed drives and electrical mains-operated welding equipment. Because the UK has left the EU and the EU exit transition period has ended, these requirements will not apply automatically in the UK and, therefore, UK legislation is required to implement the requirements.

Impacts of proposal

The IA monetises a cost of £186 million over the appraisal period in present value terms, reflecting additional manufacturing costs of meeting the increased energy performance requirements. These costs reflect more expensive component parts and/or more expensive manufacturing processes. Consumers or users of electric motors and welding equipment will incur higher purchase costs (as manufacturers pass on their costs) but will enjoy savings in energy usage over the lifetime of the products. Benefits are estimated at £710 million over the appraisal period in present value terms. Net energy savings account for the majority of the monetised benefits. Therefore, the societal net present value (NPV) is estimated at £524 million over 30 years in present value terms (£415 million in 2016 prices; 2017 present value base year).

In terms of business impacts, the IA estimates a net saving to business of £425 million - the difference between £186 million costs and £611 million energy savings. Nearly all of the costs and benefits to business occur in respect of commercial refrigeration products. The IA estimates an EANDCB of -£22 million (-£18 million in 2016 prices; 2017 present value base year).

EANDCB

Evidence and data

Missing costs. The RPC commented on the consultation stage IA that the Department should use the consultation to gather further evidence to enhance the assessment. In particular, the RPC suggested that the Department should aim to monetise transitional costs or explain more fully why it would not be proportionate to monetise them at the final stage. The IA now provides a fuller assessment of transition costs, including monetising the cost of reading and understanding the requirements (paragraphs 59-65).

Counterfactual. The Department has also used consultation to obtain evidence on the percentage assumed ‘additionality’. This term refers to the proportion of businesses that would not otherwise make the changes. (The IA assumes that many businesses will make the changes anyway as the regulations will be in force in the EU and the relevant markets are global). The consultation stage IA assumed 50 per cent additionality. However, information gathered from consultation indicated that 25 per cent additionality would be more appropriate. Primarily as a result of this, estimated costs and benefits at the final stage are around half of those estimated pre-consultation.

Direct/indirect impacts

The method used to apportion impacts on businesses into direct and indirect is consistent with that used in a previous *ecodesign* final stage IA and appears to be reasonable.² Energy savings to business users are treated as a direct benefit, on the basis that they would be automatic through purchase of the product and not dependent upon a change in behaviour. The increase in purchase price is treated as a direct cost to business users. The IA would be improved by further discussion of why impacts on business consumers should be treated as direct. In particular, it should cover why, in this specific case, it is appropriate to treat increased purchase costs as a direct impact and describe choices facing consumers, in terms of which type of electric motor or welding equipment to purchase and when (e.g. decisions on replacing older equipment). The IA would benefit from referring explicitly to RPC guidance on direct and indirect impacts.³

² RPC-4413(2)-BEIS ‘*The Ecodesign for Energy-Related Products (Amendment) Regulations 2020*’, 2 February 2020.

³ Available at: <https://www.gov.uk/government/publications/rpc-case-histories-direct-and-indirect-impacts-march-2019>

SaMBA

The IA includes a SaMBA that outlines why small and micro businesses (SMBs) could be affected disproportionately by the proposed regulations. Businesses would be affected by the transition costs of understanding new regulation and testing their products and amending them if non-compliant. The Department explores two possible ways in which the Government could mitigate the impact on SMBs: phasing the transition period or providing an exemption. The IA concludes that mitigation would not be appropriate for a number of reasons. These include:

- the consultation indicated that most SMBs have already prepared their products to meet the requirements;
- SMB users of electric motors or welding equipment will benefit from the proposed requirements through reduced costs over the lifetime of the products; and
- ecodesign requirements for welding equipment might be more challenging for SMBs, although it states (paragraph 163, page 64) that the EU IA found that SMB representatives supported the proposed regulations.

The IA also argues that a two-tiered market should be avoided, as it would make enforcement more difficult and create a perverse incentive, which might stifle growth. These arguments are much less persuasive as they could be applied to many measures. Nevertheless, and noting that the SaMBA has been strengthened since consultation by monetising transitional costs to smaller businesses, the IA provides sufficient overall consideration of impacts on SMBs, and mitigation.

The IA would benefit from addressing whether the balance of reduced energy costs and increased purchasing costs differs between large and small business customers. In particular, this should address whether small businesses are more likely to delay purchase of replacement equipment if the purchase price increases, and thereby experience smaller energy cost savings.

The SaMBA should, however, be strengthened significantly in its consideration of possible mitigation measures, such as longer transition periods or exemptions. This should take further account of the impact on businesses that would not otherwise be making the changes or for which the existing lead-in time for the regulations is insufficient to mitigate impacts.

Rationale and options

The Department explains that the UK agreed the EU *ecodesign* legislation after a lengthy EU consultative process. The Government also consulted UK stakeholders and carried out their own cost-benefit analysis prior to voting in favour of the EU regulations. The RPC welcomes the discussion of non-regulatory options, such as self-regulation and voluntary agreements, and the IA's explanation of why these have not been taken forward.

Cost-benefit analysis

Evidence and data

The IA would benefit from discussing how potential changes in ownership and onshoring could affect the percentage of the market covered by imports, since this would affect the assessment of the impact on business and the trade impact assessment.

Modelling

As with previous *ecodesign* IAs, the Department estimates impacts over a 30-year appraisal period, which is broadly the period over which it expects most of the existing stock of electric motors and welding equipment to be replaced and the full energy savings realised. The Department presents costs and benefits for electric motors and welding equipment separately, noting that its calculations were sourced from the BEIS energy-using products policy model. This approach takes into consideration the costs and benefits associated with updating existing *ecodesign* requirements for each product. Annex 1 to the IA provides an overview of the model.

Risk and uncertainty

Following RPC comments on the consultation stage IA, the Department has helpfully expanded the sections on sensitivity analysis and risk (paragraphs 87-91), with table 3 being particularly useful (page 34).

Wider impacts

Trade impacts

The RPC noted from the consultation stage IA that the proposals would have an impact on international trade, on the basis that:

- alignment with EU standards seemed likely to facilitate trade with the EU; and
- lower levels of regulation in the USA could mean a negative impact on trade with the USA.

The RPC commented, therefore, that the IA would benefit from an enhanced discussion of the potential trade impacts of the proposal in relation to different UK trading partners. The IA now includes a section on trade impacts addressing these points (paragraphs 80-84). In particular, the IA presents figures showing that trade in electric motors and welding equipment with the USA are at a much lower volume and value than with the EU.

Competition Assessment

The IA would benefit from further discussion of competition impacts, linked to the assessment of impacts on trade and SMBs. It would be helpful if the IA included a discussion of whether any manufacturers may be forced to exit the market due to lack of mitigation, and the impact this could have on competition and innovation.

Enforcement

The Department expects enforcement costs to the relevant market surveillance authority to be minimal given that requirements already exist for electric motors. The IA would benefit from providing providing further justification for this assessment.

Monitoring and evaluation plan

The IA describes, at a high-level (paragraphs 188-190 of the IA), the Department's plans for a post-implementation review (PIR). The section would benefit from some detail on what will be done and how, and a fuller justification, on proportionality grounds, for why the PIR would be primarily a qualitative assessment.

For further information, please contact regulatoryenquiries@rpc.gov.uk