

The Electric Vehicles (Smart Charge Points) Regulations 2021

Lead department	Department for Transport (DfT)
Summary of proposal	The Department seeks to introduce measures which will set minimum mandatory requirements for all new private Charging Points (CPs) for electric vehicles (EVs) sold in Great Britain. The aim is to ensure those sold are 'smart' and provide greater security and stability for the sector.
Submission type	Impact assessment (IA) – 01/06/2021
Legislation type	Secondary legislation
Implementation date	Start 2023
Policy stage	Final
RPC reference	RPC-DfT-5075(1)
Opinion type	Formal
Date of issue	07 July 2021

RPC opinion

Rating¹	RPC opinion
Fit for purpose	The IA provides a rationale for intervention and presents a good range of options. The analysis builds upon evidence gathered through a combination of stakeholder engagement and consultation. While there is uncertainty in some of the assumptions used, the Department has provided additional sensitivity analysis to illustrate potential reductions in cost. The direct impacts on business have been identified, allowing the RPC to validate the EANDCB. The IA provides a clear justification for why the proposed measures must apply to all businesses.

Business impact target assessment

	Department assessment	RPC validated
Classification	Qualifying provision (IN)	Qualifying regulatory provision (IN)

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.

Equivalent annual net direct cost to business (EANDCB)	£6.3 million	£6.3 million <i>(2019 prices, 2020 pv)</i>
Business impact target (BIT) score	£31.3 million	£31.5 million
Business net present value	-£119.3 million	
Overall net present value	£486.5 million	

RPC summary

Category	Quality	RPC comments
EANDCB	Green	The IA identifies the direct costs to business as the initial familiarisation costs and the on-going manufacturing costs. While the IA would benefit from considering further impacts, none of these identified missing impacts are direct costs or benefits to business and therefore, do not affect the RPC's ability to validate the EANDCB.
Small and micro business assessment (SaMBA)	Green	The IA outlines the number of Small and Micro businesses (SMBs) that it expects to be present in the CP market. The likely costs to these businesses are presented and there is clear discussion of what exemptions or mitigating options have been considered and discounted. The IA would benefit from discussion of the specific operating practices of SMBs and whether they are more, or less, likely to produce smart CPs currently.
Rationale and options	Satisfactory	The IA sets out a rationale for intervening in the CP market, arguing that it is important to set a minimum standard during the early development stages of the market to ensure the full positive benefits that otherwise may go unrealised are delivered while also protecting the power grid from increased charging of EVs. The Department considers a good range of options, including two non-regulatory options.
Cost-benefit analysis	Satisfactory	The IA is supported by evidence, collected through stakeholder engagement and consultation. The Department clearly states the risks and assumptions associated with the policy and analysis. While there is uncertainty in some of the assumptions and analysis, the Department has provided additional sensitivity analysis to reflect this and illustrate the potential impact on estimates of costs.
Wider impacts	Weak	While the IA does include discussion on innovation and trade, it needs also to consider the competition and wider environmental impacts. The IA would also benefit from discussion of any distributional or equity impacts.
Monitoring and evaluation plan	Good	The IA includes a commitment to undertake a post implementation review (PIR) for this policy. The monitoring and evaluation (M&E) plan described covers process, impact and value-for-money (VFM) evaluations.

Summary of proposal

The Department is seeking to introduce regulations that will set a new minimum standard for CPs that are sold in Great Britain. This is part of the wider Government programme to increase the usage of EVs and reduce the reliance on petrol and diesel vehicles.

The Department has proposed four different options, two regulatory and two non-regulatory:

1. Mandatory requirement for all new private CPs sold to have ‘smart’ functionality, as well as cyber/data security, grid stability and supplier interoperability features. [Preferred option]
2. All aspects covered by the previous option but with stricter interoperability and charging requirements.
3. Voluntary compliance by manufacturers with moving to smart CP functionality and other device-level requirements.
4. Including smart requirements as part of Government grant schemes.

The main costs to business that the IA identifies are the increased manufacturing costs to CP producers, familiarisation costs and compliance costs. While the suite of benefits that are the reduction in the cost for consumers of charging EVs and for wider society the increase in the number of smart CPs will help to push forward with the adoption of EVs.

EANDCB

Direct and Indirect impacts

The IA states that the direct costs to business are the on-going increased manufacturing costs, which are assessed on a per CP basis, and the initial transitional costs covering familiarisation.

In addition, the IA identifies increased customer service due to increased consumer interaction with smart technologies as a cost to business. These are not monetised, as they are seen as difficult to quantify. As they arise from consumer behaviour, these RPC does not view this as direct costs to business. The IA also identifies a non-monetised benefit to business of a potential increase in export potential.

While the RPC feels that there are missing impacts (see *Missing impacts*) from the analysis that has been included in the IA, none of these are direct impacts to business. Therefore, these missing costs do not affect the ability of the RPC, to validate the EANDCB scores submitted by the Department.

Missing impacts

The IA acknowledges that there will be a need for enforcement of this new regulation, although does not include the costs of familiarisation for those who would be carrying out these actions. The IA would benefit from considering whether there would also be familiarisation costs to those responsible for enforcement.

While not a direct cost business, the IA would benefit from the inclusion of discussion of costs to manufacturers of the disposal of unsold, sub-standard CPs post the six-month transition period. For some producers, this may not be enough time to sell all of their existing stock and it is not clear whether they will be able to amend already manufactured CPs to be smart compliant.

In terms of wider societal costs, the IA would be improved by discussion of whether the increase in charging of EVs during current off-peak hours, will lead to a shift in what is deemed off-peak and as a result impact non-EV users through increased electricity prices during these hours.

SaMBA

The IA has estimated the number of SMBs that are likely to be CP producers, while also establishing the overall costs (both transitional and on-going) that is likely to be attributable to SMBs. The Department has considered several forms of mitigation and/or exemption for SMBs, explaining why none of these are acceptable options, as they would undermine delivery of the policy objective of creating an industry standard. The RPC also welcomes the inclusion of the discussion of SMBs as consumers of CPs, in addition to their role as producers.

At first glance, given the small number of SMBs that there are estimated to be, the costs that are attributed to them appear to be high without further context to say otherwise. The IA would benefit from the inclusion of evidence which provides context as to whether the costs estimated are indeed high, such as turnover for SMBs.

The IA would also benefit from discussion of the likelihood that SMBs are more (or less) likely to be producing smart CPs already, given that businesses of this size are typically new entrants to the market. Due to the developments in recent years and the prevalence of smart CPs, it might be the case that such firms are more likely to already exceed the minimum standard being proposed and the IA would benefit from providing evidence in this area.

Rationale and options

Rationale

The IA identifies a good rationale for intervening in the CP market, arguing that it is important to set a minimum standard during the early development stages of the market, to ensure the full positive benefits that otherwise may go unrealised are delivered. In addition, the IA identifies current information failures that prevent consumers from making fully informed decisions relating to CPs. It is also argued that intervention is necessary to protect the power grid from increased charging of EVs, while also providing cyber and data security for those using CPs. The IA supports the rationale with evidence relating to the current direction of the CP market.

The IA would be improved by discussing what actions other Governments are taking to improve the introduction of Smart CPs. In particular whether other countries have

already implemented similar legislation and manufacturers have already begun to adjust accordingly.

Options

The IA has included a good range of options, including two non-regulatory options.

Cost-benefit analysis

Evidence and data

The IA utilises evidence from the earlier consultation and from on-going engagement with industry bodies and the CP market. However, the IA would be improved through the inclusion of more evidence highlighting the different approaches taken in producing CPs and whether there is ability for those who currently produce non-smart CPs to easily retrofit their production capability to match those producing smart CPs.

Uncertainty, risks and assumptions

The IA clearly communicates the risks and assumptions relating to the policy and analysis. Many of the assumptions present have either been tested at consultation or directly with industry stakeholders.

Sensitivity analysis has been undertaken to explore both the effect of the uncertainty on the costs and to illustrate the potential impact on costs as a result. This covers the assumptions surrounding the proportion of the market already producing smart CPs, the usage of the 51% learning rate and the market share of smart CPs in the baseline.

The IA would benefit from exploring the elasticity effect of CPs and whether the increased cost of CPs, will affect consumers decisions to purchase alternative charging products, such as charging cables, instead of smart CPs.

Wider impacts

The IA considers the wider impacts on innovation, citing how the legislation will promote it, and international trade, where it highlights that the majority of the current UK CP market is supplied by international firms.

However, the IA needs to consider the wider impacts of the proposals across three other key aspects.

First, the IA needs to consider the likely effect on competition within the CP market. The legislation is likely to make some CPs currently sold non-compliant, leaving others in a position to gain from their competitors.

Second, the Department needs to consider the environmental impact of any increase in scrappage of CPs which are not compliant with the new minimum standard and remain unsold at the completion of the six-month transition period. If these unsold units are not able to be retrofitted to meet the new standard, then these may need to be scrapped as can no longer be sold in Great Britain.

Third, given the prevalence of EVs in Great Britain is likely to be greater in certain areas (cities for example) and demographics, the IA could be improved through considering what equity or distributional impacts there may be with this new legislation. For instance, in rural areas where EV ownership may be less likely than other areas of the country, the benefit of introducing smart CPs (in work or public spaces) may not be as high as those in urban areas.

Monitoring and evaluation plan

The RPC welcomes the commitment to undertake a post-implementation review (PIR) for this policy. We commend in particular the proposal that this review will include not only an initial process evaluation, but also a subsequent impact evaluation and if possible, a value for money appraisal. We are also pleased to note that the IA provides a list of potential metrics to be tracked to support the evaluation process.

In addition, the development of a theory of change is welcome, although it could be stronger in outlining the linkages between the activities (i.e., the new legislation) and the stated objectives of the policy.

Regulatory Policy Committee

For further information, please contact regulatoryenquiries@rpc.gov.uk. Follow us on Twitter [@RPC Gov UK](https://twitter.com/RPC_Gov_UK), [LinkedIn](#) or consult our website www.gov.uk/rpc.