



# **Impact Assessment Institute**

The Institute for Impact Assessment and Scientific Evaluation of Policy and Legislation

“Impartial Analysis for Policy Making”

**Study scrutinising the**

**Inception Impact Assessment on:**

Sustainability requirements for batteries Ares(2019)100807

## Main Findings

The Impact Assessment Institute has scrutinised the European Commission Inception Impact Assessment on Sustainable batteries. The following are the main findings:

- The IIA mostly presents a relevant background and an open field for assessment of a potential future initiative.
- The stated objectives are not fully consistent within themselves and with the Strategic Action Plan on batteries and require clarification in order to proceed coherently with further assessment.
- There is also a lack of clarity on the definition of sustainability in this context and the parameters to be used to measuring it, requiring further investigation and explicit clarification to stakeholders.
- Some data and analysis are quoted without reference to source or evidence.
- A clear preference for an initiative on the basis of an Ecodesign or Energy labelling Regulation is presented, which is a premature selection of the preferred option. Clarification of the objectives and full analysis of the options is required before selecting the type of initiative.

In summary, whilst the IIA is mostly neutral in its presentation of the subject matter, the preselection of the type of initiative is not correct at this early stage in the process before assessment has been performed.

## Visualisation

The following table provides a visual overview of the results of this report for each element of the evidence presented in the Impact Assessment, using an assessment from 1 to 7 to indicate the level of confidence (1 = highest, 7 = lowest confidence level).

Element	Assessment level & description (1...7)	Notes
Rhetoric	2 Minor questions identified on analysis and/or evidence	The outline to the IIA is generally neutral.
Assumptions	4 Concerns identified with analysis and/or evidence	Assertions on the most appropriate type of instrument are made without evidence or supporting arguments. Objectives require clarification.
Background data	3 Several questions identified on analysis and/or evidence	In some cases data is referred to or implied without reference or explanation.
Analysis	3 Several questions identified on analysis and/or evidence	Analysis of impacts includes some assertions that are not substantiated by evidence.
Results	4 Concerns identified with analysis and/or evidence	The outcome of the IIA is in some ways appropriately neutral, referring to the future assessment, but some of the text indicates that premature results and conclusions have been drawn. There is a stated preference for one type of instrument, that should preferably be decided only after full assessment.
Conclusion		

### Key to assessment levels

1	2	3	4	5	6	7
Correct analysis, fully evidenced	Minor questions identified on analysis and/or evidence	Several questions identified on analysis and/or evidence	Concerns identified with analysis and/or evidence	Substantial concerns identified with analysis and/or evidence	Serious concerns identified with analysis and/or evidence	Incorrect analysis / evidence absent

## 1. Introduction and General Comments

This study scrutinises the European Commission Inception Impact Assessment (IIA) on Sustainability requirements for batteries, published on 9<sup>th</sup> January 2019. This IIA is written in the context of the September 2017 New Industrial Policy Strategy, the activities of the European Battery Alliance launched in October 2017 and the May 2018 Strategic Action Plan for Batteries.

Our scrutiny focuses narrowly on the sustainability issues detailed in the IIA within this existing strategic context. However we also scrutinise the content and assumptions of the above mentioned broader initiatives wherever directly relevant to the content of this IIA.

## 2. Section A. Context, Problem Definition and Subsidiarity Check

The description of the context provides the necessary background and in particular the justification for the initiative on sustainability requirements deriving from the Strategic Action Plan.

The “Problem” section provides a brief and mostly well-referenced explanation of the projected increasing demand and therefore the increasing importance of this market. The exception is the reference to the number of “gigafactories” needed to meet the demand, which is not referenced nor is its relevance explained.

The explanation on dependence of raw materials contains a number of statements on their sourcing and the resulting implications, but no references to data and evidence. Although the assertions may be expected to be well-known, the reader of this IIA should be provided with sufficient information to review and scrutinise the information provided.

The justification for action at EU level instead of nationally is briefly but coherently stated. The text continues with a discussion of the relevance of the Ecodesign Directive, Energy Labelling Regulation and Batteries Directive to the types of batteries in the scope of this initiative. It concludes that “Arguably, these are more appropriately addressed by the eco-design framework.” This assertion is not supported by arguments, evidence or references and is prematurely placed in the introductory section.

The legal basis is appropriately left open according to the type of measure that will eventually be decided based on the analysis for the final Impact Assessment.

## 3. Section B. Objectives and Policy options

The objectives require clarification. The objective of this (sustainability) initiative is quoted to be “to foster the production and placing on the EU market of high performing, safe, sustainable and durable (i.e. long-lasting) battery cells and battery packs/modules, produced with the lowest environmental footprint possible in a way that is cost-effective”. The relevance of each of these parameters can be assessed:

1. High-performing: this is one of the objectives of the Action Plan, in which it is however quoted as a parameter separate from sustainability. The text of this section of the IIA states “Better performing and more durable batteries reduce the overall environmental impact of electric vehicles and energy storage solutions and can increase vehicle autonomy”. No evidence for this is presented. As a potentially confounding example,

the materials and processes required to build higher-performance and more durable batteries may actually increase the environmental impact, depending on the specific technical parameters. The performance of batteries has not been shown to be a parameter that is coherent with sustainability.

2. Safe: in the Action Plan, safe is quoted as a separate criterion from sustainable, using the terms in this order “safe and sustainable”. Its inclusion in an initiative on sustainability therefore requires explicit evidence and arguments to confirm the intention.
3. Sustainable: this is by definition the legitimate subject of the initiative. In the Action Plan it is “notably” referred to in the context of the Circular Economy, indicating an interpretation of its scope.
4. Durable: this is not mentioned in the Action Plan. The point relevant to durability in item (1) above indicates that durability may not be coherent with sustainability.
5. Lowest environmental footprint: since environmental footprint can be expected to increase with the level of industrial activity, all other factors being equal, reducing footprint would by its nature limit the growth of industry, in contradiction to an objective of the Action Plan. Therefore for this metric to be relevant, its parameters need to be defined. For example, using lowest footprint per unit output would avoid this contradiction.
6. Cost effective: if this is used as a criterion for sustainability requirements, its parameters and boundary conditions require clear definition.

The objectives of the sustainability initiative as quoted in the IIA appear to coincide with all the main objectives of the Action Plan. As explained above, these are not all fully coherent in the context of sustainability.

If sustainability is to be defined according to its three core elements<sup>1</sup> (environmental, social and economic), a case could be made to include all the above parameters. If this is so, the case should be made explicit. If sustainability is more narrowly defined, for example geared towards environmental protection, this should be explicitly stated and the terms fully defined.

In summary, a clear definition of the term “sustainability” and the parameters included within it in the context of batteries should have been stated and is now required from the further assessment to be performed.

The five policy options presented in the IIA provide a broad spectrum of policy paths, which appear to cover all the relevant factors. The text also suggests a number of potential instruments. Appropriately for this stage of the initiative, no conclusions on these points have been written, providing an open basis for decision making based on evidence to be gathered and processed.

#### 4. Section C. Preliminary Assessment of Expected Impacts

The introduction to this section makes clear that the impacts are to be determined, signalling that no conclusions are to be drawn at the current early stage. This is consistent and appropriate. The text refers to “abundant literature” on impacts, which should be used to

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<sup>1</sup> United Nations Sustainable Development Goals “What is sustainable development”  
<https://www.un.org/sustainabledevelopment/development-agenda/>

contribute to a detailed impact analysis. Further assessment should take into account the potential for significant changes in the technology of battery chemistry, production and other aspects, that could deviate from the existing analysis. This points to the need to consider future-proofing any potential initiative to account for changes in the landscape, technology and other parameters subject to develop over time.

#### 4.1. Likely economic impacts

The text does not explain why “minimum performance and sustainability requirements”, if introduced “under the Ecodesign framework Directive”, “will aim at achieving minimum lifecycle costs”. As indicated in the section above, the selection of “performance” as an objective within this initiative on sustainability has not been justified in the IIA, nor has its meaning been defined. It is not stated whether external costs should be included in the cost calculations. If lifecycle costs are selected as the parameter, this could reduce the assessment of sustainability to a single numerical cost variable. This is a significant implication and requires in-depth investigation and presentation of the evidence before following such a path.

The text states correctly that “these short-term and long-term effects need to be analysed and pondered properly”. However this needs to be done within a correct context of the well-founded and agreed parameters and aims, as also indicated in the previous section.

The remainder of the section identifies further areas for the ongoing assessment.

#### 4.2. Likely social impacts

As stated in the text of this section, it appears reasonable to state that “the introduction of minimum sustainability requirements will have an impact on working conditions in supply chains both inside and outside the EU”. However no evidence or reference is given for the statement that a predictable legal framework “is likely to drive employment creation”. Such a framework may help enable employment creation, if other factors are favourable, but cannot be assumed to drive it actively.

The statement regarding job creation due to recycling requirements is not accompanied by evidence or references. In particular, the statement that “strict requirements...can therefore only have a positive effect in related job creation.” is not substantiated. The estimate of jobs created for collection, dismantling and recycling may or may not be accurate, but does not take into account the net effect considering the cost of capital and potential alternative investment decisions. Figures on net job creation would provide a full picture of the social impacts, which depends on costs, benefits and investments, requiring a full economic assessment.

#### 4.3. Likely environmental impacts

The projection that minimum environmental requirements “should result in a more efficient use of energy and resources etc” is a reasonable expectation for eventual well-designed legislation with that aim in mind. The further statements in this section referring to synergies and consistency represent ideas rather than impacts and are not relevant to this section.

#### 4.4. Likely impacts on fundamental rights

The assertion that no impacts on fundamental rights are expected does not take into account the effects of sustainability requirements on working conditions, both inside and outside the EU, as referred to in the “social impacts” section. This should be taken into full account with a relevant assessment.

#### 4.5. Likely impacts on simplification and/or administrative burden

This section refers only to the upcoming assessment.

### 5. Section D: Evidence Base, Data Collection and Better Regulation Instruments

The sections detailing impact assessment and evidence base appear to cover the main aspects necessary for evaluation. However there is no overview of the resources and Commission services to be involved in the assessment. This is a many-faceted area and it is to be expected that many DGs may be involved, information which would be valuable for stakeholders.

The consultation plan appears to be comprehensive. As in all evidence-based initiatives, the form of the consultation and the way the results are used will be critical in determining the value created by the exercise.

Having set out an open and balanced set of policy options in section B, the section on the implementation plan states that the outcome is likely to be an Ecodesign and/or an Energy Labelling Regulation. This prejudices the assessment of the options and is an inappropriate step to be laid out in an IIA. This section should have been written in the conditional sense but unfortunately signals presupposition that is not fully aligned with evidence-based policy making.

### *Annex 1: Accompanying statement*

This report has been written according to the guiding principles of the Impact Assessment Institute: transparency, objectivity, legitimacy and credibility. It analyses the subject matter from a purely factual and scientific point of view, without any policy orientation. In respecting these principles it has been compiled following its written Study Procedures<sup>2</sup>.

The analysis is open to review and criticism from all parties, including those whose work is scrutinised. Contacts with all relevant parties are recorded to ensure transparency and to guard against “lobbying” of the results.

By its nature the report has a critical characteristic, since it scrutinises the subject document with its main findings entailing the identification of errors, discrepancies and inconsistencies. In performing this work, the intention of the report is to be constructive in assisting the authors of the subject document and its background information as well as all relevant stakeholders in identifying the most robust evidence base for the policy objective in question. It should therefore be seen as a cooperative contribution to the policy making process.

This report is also to be considered as a call for additional data. Peer review is an essential step laid down in the procedures of the Impact Assessment Institute and this is manifested in the openness to further review and to identify new data. Even at publication of the final version, the report explicitly requests additional data where the readily available data was not sufficient to complete the analysis, and is open to newly arising data, information and analysis.

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<sup>2</sup> <https://www.impactassessmentinstitute.org/procedures>