INCEPTION IMPACT ASSESSMENT

Inception Impact Assessments aim to inform citizens and stakeholders about the Commission's plans in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Citizens and stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to make available any relevant information that they may have, including on possible impacts of the different options.

TITLE OF THE INITIATIVE	Modernising the EU's batteries legislation
LEAD DG (RESPONSIBLE UNIT)	ENV.B3 – Waste management & Secondary Materials
LIKELY TYPE OF INITIATIVE	*Legislative*
INDICATIVE PLANNING	*Q4 2020*
ADDITIONAL INFORMATION	

The Inception Impact Assessment is provided for information purposes only. It does not prejudge 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

As part of the European Green Deal, COM(2019) 640 final of 11.12.2019, the Circular Economy Action COM(2020) 98 final of 11.3.2020, and the New Industrial Strategy, COM(2020) 102 final of 10.3.2020, the Commission aims to ensure a competitive, circular, sustainable and safe value chain for all batteries placed on the Union market in the context of the Circular Economy.

The growing use of batteries will play an essential role in ensuring the transition towards a climate neutral economy. This includes batteries for consumer electronics and communication devices, starting, lighting and ignition functions in internal combustion engines, and industrial batteries for electric vehicles and energy storage. Sustainable batteries respecting human health, environment and safety aspects, are the main building blocks for a competitive market for EU batteries in the future.

Batteries are a key element of the Commission's plans to improve the competitiveness of strategic value chains, and decarbonise the EU economy to achieve climate neutrality by 2050. Their use will support the electrification of road transport with clear benefits in terms of reduction of CO2 and in storing intermittent renewable energy. A reduction in GHG emissions during the entire life cycle of batteries will increase the expected CO2 emission reduction even further.

This initiative also builds on:

- The European Commission's reports on the evaluation and assessment of the implementation of the Batteries Directive[1]
- The Strategic Action Plan on Batteries adopted by the European Commission[2], which endorses the commitment to support the growth of high performing, safe and sustainable battery production, having the lowest environmental impact possible.

It is predicted that the number of batteries placed on the EU market will increase. The demand for batteries in the EU in 2030 has been estimated at around 500 GWh. In the years to 2030, it is expected that the demand for batteries for the light passenger vehicles sector will experience the highest growth rate. In 2050, conservative estimations place the total EU demand at 1500 GWh.[3]

1 COM (2019) 166 final and SWD(2019) 1300 final

2 Annex 2 to COM(2018) 293 final

3 Figures taken from 'Preparatory Study on Ecodesign and Energy Labelling of Batteries' , Task 2, available at: https://ecodesignbatteries.eu/documents

100 -350 GWh is the estimated range for the EU production in 2030. In both cases, the EU will become the second producer of lithium-ion batteries globally, after China. This will entail changes in the role of EU manufacturers at global level.

Such growth in the value chain will help meet current societal needs, such as decarbonising transport or decentralising the provision of energy. Nevertheless this growth will come with a number of important challenges that the new regulatory framework should address. This initiative will respond to identified limitations in the current EU policies. It aims to ensure the sustainability and competitiveness of EU batteries value chains, in the context of the circular economy.

Problem the initiative aims to tackle

The 2019 reports on the implementation and the evaluation of the Batteries Directive concluded that it has delivered positive results in terms of a better environment, the promotion of recycling and better functioning of the internal market for batteries and recycled materials.

However, limitations in some legal provisions or in their implementation prevent the Directive from fully delivering on its objectives. This is particularly true as regards the collection of waste batteries or the efficiency in the recovery of materials. Furthermore, the absence of a specific mechanism to incorporate technological novelties makes it difficult for the current Directive to keep pace with fast technological developments.

This initiative intends to pave the way for a sustainable and competitive value chain in the EU, addressing the social, environmental and health impacts generated, in particular given the expected growth in demand:

- Environment and health risks due to use of **hazardous substances** in batteries,
- The **GHG emissions** associated to manufacturing processes of batteries,
- The **use of resources** in the production of batteries and the difficulties to ensure that batteries and components stay longer in the economic cycles,
- The **responsible sourcing** of materials used for the manufacturing of batteries placed on the EU market.

Whilst exploring possible market failures, the Commission aims to assess the extent to which any new requirements entail increased costs that would influence acceptance by the market of batteries produced within the EU. Unless action is taken, markets use to be reluctant to pay-back sustainability requirements in products and processes.

Concerning information requirements, the Commission will assess whether the provision of better and more reliable information allows economic operators and consumers to make better, more informed choices.

Basis for EU intervention (legal basis and subsidiarity check)

It is proposed to base the new regulatory instrument on Article 114 (1) of the TFEU (Internal Market)

This proposal will support the delivery of existing and new objectives, i.e. ensuring the sustainability of batteries' value chains while ensuring the functioning of the internal market.

As underlined by the results of the evaluation of the Batteries Directive, there is significant stakeholders' support for keeping an EU framework covering the entire batteries life cycle. In addition to the broad recognition of the need to ensure the deployment of common rules for batteries, components, waste batteries and recyclates, stakeholders wished a fuller harmonisation of existing rules, including those of a very technical nature.

Stakeholders underlined that, if the existing EU provisions did not exist, similar measures would have been taken at national levels, as was the case before the adoption of the Directive. Such national action would likely have created technical barriers and been inefficient to deal with the current and future challenges created by the growing number of batteries placed on the EU market.

B. Objectives and Policy options

The ambition of this initiative is to lay down the conditions to ensure that a fully functioning and strong EU market for batteries can capture the opportunities arising from the expected growth of the market, promoting innovation and competitiveness, increasing environmental performance of economic actors and contributing to the wise management of resources. All the more given the role that this initiative could play as part of the EU post COVID-19 economic recovery strategy.

In the baseline scenario, all relevant EU and national policies and measures will continue to be in force. However, due to new market conditions (a 14 times growth factor, mostly triggered by new technologies which are not specifically covered in the current scope of the Directive) and new and increasing uses of batteries, the proper delivery of the objectives laid down by the existing legislation is unlikely even in the short term.

Different options for measures (including voluntary measures if appropriate) taking into account the recently adopted Circular Economy Action Plan as well as the feedback received during consultation activities could include the following elements:

- Updating current concepts and definitions (e.g. lifetime, hazardous substances),
- Defining sustainability requirements for batteries to be placed on the EU market, including responsible sourcing of raw materials, hazardous substances, carbon footprint,[4] mandatory level of recycled content and durability, reusability and recyclability conditions.
- Establishing objectives and measures to improve the collection, treatment and recycling of waste batteries and ensure materials recovery,
- Addressing non-rechargeable batteries with a view to progressively phasing out their use where alternatives exist.
- Establishing information and labelling requirements for both economic operators and end-users, in particular to provide guidance on the use and end-of-life stages,
- Modifying requirements for the implementation of extended producer responsibilities (EPR) obligations, including for the operation of national schemes and batteries producer responsibility organisations.

These options are mostly cumulative. Combinations of these options with varying degrees of ambition, and possibly others emerging from the analysis will be considered and compared in the Impact Assessment report with a view to identifying a retained option.

C. Preliminary Assessment of Expected Impacts

Likely economic impacts

The battery markets will grow significantly in the future. The economic operators concerned announced that production capacity in the EU in 2030 could reach 350 GWh. Other models, however, estimate that this capacity could be in the range of 100 -110 GWh. [5]

Such a large-scale market-driven industrial development will require huge investments and entail costs and revenues along the whole value chain, both inside and outside the EU.

Like the existing Batteries Directive, it is envisaged to regulate batteries covering their entire life cycle. It is likely that the possible measures will increase the costs to producers, in particular, with regard to measures associated with new sustainability requirements, stricter collection and treatment processes,

[4] Making use of the procedures developed in the implementation of Commission Recommendation 2013/179/EU on the use of common methods to measure and communicate the life cycle environmental performance of products and organisations

[5] Figure from 'Preparatory Study on Ecodesign and Energy Labelling of Batteries' , Task 2, available at: https://ecodesignbatteries.eu/documents

and the equipment needed for new recycling processes.

However, these costs may be partially offset by a reduction associated with more reliable sourcing and supply chains and with economies of scale in a stronger internal market. They may also be offset as a result of the envisaged measures to strengthen the EU secondary raw materials market, with lower prices and transport costs compared to virgin materials. This will have a positive impact on the efficiency of the EU industry, in particular the medium-sized and small companies with smaller market power.

Other economic impacts will be assessed during the impact assessment, like distribution of costs and benefits, and administrative burden (in particular on SMEs).

According to the information provided by stakeholders, the environmental performance of the EU batteries industry is to a large extent driven by the regulatory environment and by the support given to industrial innovation. The Commission will assess how industrial activities within the EU can adapt their processes and products to the proposed regulation and whether innovation approaches are sufficiently taken into consideration.

Likely social impacts

The proposed measures will address the responsible sourcing of raw materials along the mineral supply chain with the aim to reduce the social impact of these activities within and beyond the EU.

The assessment will also take into account the impact on job creation. Exact estimations of job creation potential due to the increase of all the activities targeted by this initiative are not known yet, inter alia due to the novelty of some industrial approaches. Employment effects of 100 to 150 jobs per GWh of production capacity can be estimated,[6] taking into account existing evidence. This will have to be reassessed.

Particular attention will be paid to the impact of measures on end-users, as e.g. on price, safety or durability of batteries.

Likely environmental impacts

There will be impacts as regards:

- Better management of waste batteries, due to increased collection rates, resulting in reduced risks of deterioration of the environmental quality of water, soil and air and associated ecosystem degradation and health risks,
- Increase in the efficiency of materials use, due to the increased uptake of recycled content and lower use of virgin materials,
- Lower greenhouse gas emissions over the entire life cycle of batteries,
- Reduced risks from the use of hazardous materials due to a better characterisation and management.

Likely impacts on fundamental rights

There could be impacts from any measures on responsible sourcing, above all as regards the production of components outside the EU.

Likely impacts on simplification and/or administrative burden

Administrative burden incurred by businesses and enforcement costs incurred by public authorities are expected to vary depending on the option taken forward. The enforcement costs for the Member States

[6] Figure from 'Preparatory Study on Ecodesign and Energy Labelling of Batteries' , Task 2, available at: https://ecodesignbatteries.eu/documents

are likely to increase, as most countries are currently not actively enforcing existing targets.

The information and labelling requirements likely to be established by this initiative will entail additional certification and verification activities that the different actors in the value chain will have to carry out, with expected costs. These costs will be assessed.

At the same time, businesses will benefit from greater clarity and public authorities will have clearer enforcement obligations. Any relevant options for simplification and administrative burden reduction will be taken into consideration, including the generalised use of digital means.

D. Evidence Base, Data collection and Better Regulation Instruments

Impact assessment

The Impact Assessment carried out in support of this initiative will aim to continue, complete, and expand the analysis made under the "Sustainable Batteries - EU requirements" initiative[7] launched by the Commission in 2018. It will analyse possible options to help the policy makers' decision-making process. It will take into account the results of the evidence and data collection process detailed below, as well as feedback from the consultation processes.

Evidence base and data collection [max 10 lines]

The Commission has collected and analysed information from a number of sources:

- The studies and the consultation processes underpinning the assessment and evaluation of the 2006 Directive,[8]
- The studies carried out in the context of the eco-design process, which focused mostly on the possible sustainability criteria for batteries [9]
- The extensive consultation processes which took place during and following up to the Strategic Action Plan on Batteries,

In addition, two studies are being carried out and are planned to be completed by May 2020

- A study assessing the feasibility of measures addressing shortcomings in the current EU batteries framework, and
- A study addressing particular topics on batteries (legal statuses, restrictions, etc).

Consultation of citizens and stakeholders

As part of the preparation of the reports on the Implementation and the Evaluation of the 2006 Directive, the Commission carried out consultation activities consisting of a 12-week public consultation,[10] consultations with Member States experts, stakeholders and relevant NGOs. In addition, expert-group meetings and targeted interviews provided for a more detailed and technical perspective (see relevant annex to document SWD(2019)1300.

The Eco-design preparatory Study for Batteries also included an 8-week public consultation[11] and targeted interviews.

The Commission will carry out further targeted consultations with Member State experts, stakeholders, NGOs and consumers' associations, in addition to welcoming the feedback on this Inception Impact assessment.

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7 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1996-Sustainability-requirements-for-batteries

8 Relevant documents are published at https://ec.europa.eu/environment/waste/batteries/evaluation.htm

9 See them at https://ecodesignbatteries.eu/documents

10 See https://ec.europa.eu/info/consultations/public-consultation-evaluation-batteries-directive_en

11 See https://ec.europa.eu/eusurvey/runner/EcodesignBatteries2019

Will an Implementation plan be established?
The initiative aims to reach a high degree of harmonisation in relation to the provisions on the main areas presented above. The possibility to lay down national obligations requiring for instance implementation plans, although reduced, remains open. The nature of the provisions in the proposal will be determinant in this respect.