

European Commission Proposed EU Batteries Regulation Nickel Institute Position

Introduction

The Nickel Institute¹ takes note of the European Commission proposal for an EU battery regulation as published on 9th December 2020. Nickel producers are at the beginning and at the end of the battery value chain. Our member companies provide raw materials for battery technologies and recycle those once they reach the end of the life. They therefore play - and will continue to play - an essential role in the EU and global battery value chain. We believe that addressing our comments will ensure that the aim and objectives of the battery regulation are achieved.

The role of nickel in batteries

Nickel is contained in existing, well established battery technologies (e.g. in portable devices or in emergency systems). Nickel also plays a critical role in emerging battery technologies for electrical vehicles where it is used as cathode material in NMC or NCA batteries, the main technologies applied in electrical vehicles (EVs). Nickel provides an economic incentive for the recycling of batteries in general. Moreover, thanks to their longevity, possible second life and recyclability, nickel-containing EV batteries contribute to a circular economy.

Nickel Industry comments

Overall, we support the aim of the initiative and we welcome many aspects of the proposal. However, we have concerns in relation to some requirements that in our view should be modified to ensure that the objective of the legislation is achieved. In particular, we believe that addressing our comments is important to ensure a workable, effective and proportionate EU regulatory framework and avoid unintended negative consequences on nickel supply.

To this end, we would like to comment from the nickel industry's perspective on the following main issues: due diligence, material recovery and efficiency targets, recycled content, hazardous substances, data requirements and the battery footprint.

¹ Nickel Institute (NI) is the global association of the world's primary nickel producers. NI is the centre of excellence for information on nickel and nickel-containing materials. NiPERA Inc., the separately incorporated science division of NI, undertakes leading edge nickel scientific research relevant to human health and the environment. NI's identification number in the EU Transparency Register is 77947983421-21.

Due diligence requirements (Recitals 58-71; Articles 39 and 72; Annex X)

The Nickel Institute is actively engaged in the ongoing broader discussion around responsible sourcing. Our member companies are also engaged in initiatives to ensure compliance with internationally agreed responsible sourcing standards (e.g. OECD Due Diligence requirements) and that mining and production of nickel takes place in a responsible manner.

We agree that responsible and sustainable sourcing of raw materials is paramount. However, we are concerned that the new EU batteries regulation introduces ad-hoc requirements limited to a few raw materials used in the batteries value chain. Due diligence is not limited to certain raw materials or to specific products and technologies. Many nickel producers also have other metals and minerals in their portfolio. Each of those are used in a range of different applications. Introducing application-specific due diligence requirements opens the door for the multiplication of audits and reporting requirements for upstream parts of the supply chains, diverting resources from proper and efficient risk management. An aligned risk-based approach for all value chains and raw materials would be more appropriate. It will ensure regulatory consistency; avoid duplication; reduce unnecessary administrative burdens on companies and authorities to deal with different regulatory requirements for the same substances as well as create synergies.

To address responsible sourcing concerns we consider that a horizontal initiative by the European Commission would be more suitable than ad-hoc requirements under the battery regulation. The European Commission (DG JUSTICE) is already working on a broader framework for all raw materials and value chains. We understand that preparatory activities are ongoing, and a legislative proposal could be published in 2021. Such a harmonized horizontal EU framework would be the most efficient and effective measure to address the concerns that stakeholders have in various value chains for a wide range of raw materials.

Overlaps/inconsistencies between various policy instruments should be avoided (e.g. with the upcoming EC initiative on due diligence and sustainable corporate governance) to provide upstream actors in the supply chain with a more predictable regulatory framework, essential for securing long-term supply into the EU. This could for example be achieved by referring to the upcoming EC initiative on due diligence and sustainable corporate governance for all responsible sourcing related requirements.

Recycling efficiencies and Material recovery targets (Articles 57 ; Annex XII)

We fully agree on the importance of recycling metals contained in battery systems. The recycling should achieve the highest efficiencies possible from a technological and economic perspective and lead to an overall environmental benefit. However, to be workable and avoid unintended impacts, the recycling targets need to be realistic and achievable by the technologies applied in the market.

Recycling efficiencies (Annex XII – Part B)

For Li-based batteries, the proposal sets the overall minimum recycling efficiency at 65% by average weight by January 2025 to increase to 70% by average weight in 2030, covering not only metals contained, but also other non-metallic parts from the batteries. Such a target

would therefore require the recycling of other contained substances (e.g. oxygen) rather than simply the contained metals.

Before setting recycling efficiency targets for the batteries, there is a need to first agree on a methodology, where it is further specified what the efficiency targets apply to, followed by an impact assessment to understand the associated technological, economic and environmental implications. The outcome of the assessment should then build the basis for defining targets which are achievable and meaningful from an environmental, technological and economic perspective”.

Levels of recovered materials (Annex XII – Part C)

The current battery regulation proposal defines targets for five metals. No targets are set for metals and minerals used in competing battery chemistries. There is a significant risk that these targets will trigger substitution by batteries with other chemistries with lower recyclability, leading to less efficient use of natural resources and higher environmental impacts, which are opposite to the objectives laid down in the EU Green Deal.

It is moreover not clear to what extent the potential impact has been considered of setting targets for recovered materials for five metals in one jurisdiction on international trade flows of waste batteries containing these metals.

We also noted that Annex XII defines specific mandatory material recovery targets for five metals to be achieved by 2026 and 2030. For nickel, these values are set at 90% in 2026 and to increase to 95% in 2030. However, the methodologies to calculate and verify these recycling efficiencies and recovery targets are not yet established and will only be set by the Commission at a later stage, via secondary legislation to be adopted by 31 December 2023.

The recycling of waste batteries involves various steps executed by different companies. Recovery and recycling efficiencies are confidential business information and are therefore not passed on to other companies in the supply chain.

Companies active in nickel recycling are operating highly specialized, complex processes with the aim of achieving maximum recycling efficiencies for a wide range of metals. Some of the operators also run integrated processes where both primary and secondary materials input is processed. Setting specific binding targets - without first agreeing on the appropriate methodology for calculating them and taking into account confidential business information - will create a high level of uncertainty on whether the targets can be met. This in turn can have negative impacts leading to market distortions and supply risk, affecting the EU battery value chain. We believe it would be more appropriate to:

- 1) define the methodology;
- 2) conduct impact assessments comparing costs and environmental benefits of different recycling and recovery targets and impact on international trade flows;
- 3) then derive adequate and verifiable targets.

Therefore, mandatory targets should only be defined following impact assessment studies, to evaluate and better understand both the economic and environmental implications related to all relevant objectives defined in the EU Green Deal.

Before setting mandatory recycling efficiency and recovery targets, the regulation should first define an agreed methodology to calculate and verify them. Dedicated impact assessments should be conducted to compare economic and environmental costs/benefits and to derive adequate targets.

Recycled content (Recitals 19-21, Article 8)

Article 8 defines a mandatory recycled content for nickel of 4% to be achieved by 2030 and 12% by 2035. It is further mentioned that the recycled content relates to *“the amount of cobalt, lead, lithium or nickel recovered from waste present in active materials in each battery model and batch per manufacturing plant”*. The methodologies to calculate and verify these targets will only be set by the European Commission via an Implementing Act to be adopted by 31 December 2025.

Firstly, the text of the proposal should be clarified to avoid diverging interpretations. We feel the wording to be unclear. Article 8 would benefit from a clarification, specifying unambiguously that the amount of metals that count as recycled content can be recovered from other waste sources than EV batteries.

We also understand that the intent of the recycled content requirement is *“to enhance the strategic autonomy and to increase resilience in preparation to potential disruptions”*. We also understand that the recycled content requirement is considered as a tool to further promote the recycling of battery waste, contributing to circular economy and resource efficiency. These are two important objectives that we fully support. However, we consider that the proposed mandatory targets for nickel are problematic for several reasons.

Although nickel is essential to battery technologies, it has not been identified as a “critical raw material” by the EU. The recently published *EU List of Critical Raw Materials* identifies only those metals for which there is scarcity and a supply risks, taking into account various factors such as production concentration, geopolitical aspects of supplying countries and existing recycling efficiencies. Nickel was deemed economically important for the EU but not at risk of supply. While the situation might be different for other battery raw materials, the EU supply risks for nickel were considered by the Commission to be limited.

Moreover, we believe that requirements in the EU battery regulation should consistently be set on the basis of agreed principles such as full life cycle thinking. Before setting mandatory EU recycled content targets, different options should be carefully evaluated and compared via a dedicated impact assessment to anticipate and better understand the environmental, economic and strategic implications of recycling within the batteries value chain (closed loop) versus recycling in other material streams (open loop).

We agree that a downcycling of metals, i.e. metals ending up in other cycles with lower quality requirements to the resulting material, needs to be avoided. Most nickel from end-of life products is currently recycled into stainless steel where it plays a very critical role, e.g., enhancing corrosion resistance and other properties and improving the durability of the final product. Recycled nickel has the same quality requirements as primary nickel metal which is also used as a raw material input into battery production. It therefore is critical to understand the environmental and economic implications from both open and closed loop recycling.

Furthermore, we consider that the targets in the Commission's proposal may be too ambitious. There are several highly influential parameters and it is difficult to predict how they will evolve until 2030. For example, the lifetime of currently used EV batteries; potential second life of batteries and how these would affect the availability of raw materials for recycling; how EV markets will evolve by 2030; how changes in battery chemistries will affect the availability of materials for recycling. Other parameters influencing availability of waste batteries and therefore recoverable metals have yet to be defined by the EU in secondary legislation, e.g. battery durability and performance requirements.

Targets are only set for four metals. No targets are set for metals and minerals used in competing battery chemistries. If access to secondary raw materials for the four metals is insufficient, it will make these materials more expensive and consequently lead to the batteries containing these metals more expensive. Higher costs and challenges related to meeting the targets will drive substitution of batteries with chemistries based on these four metals by batteries with other chemistries with lower recyclability, leading to less efficient use of natural resources and higher environmental impacts, which are opposite to the objectives laid down in the EU Green Deal.

For all these reasons, we believe that it would be more appropriate to:

1. define a sound methodology for the calculation & verification of recycled content targets
2. define durability and performance requirements
3. conduct impact assessments, taking into account:
 - a. the calculation methodology
 - b. performance and durability requirements, to evaluate costs and environmental benefits of different recycled content levels and material streams to be included into the recycled content calculations
 - c. impact on international trade flows of secondary raw materials
 - d. impact of requirements on costs of batteries put on the market in the EU versus outside of the EU
 - e. impact of not setting targets for competing batteries with a different chemistry
4. then decide at which level recycled content targets should be set.

Before setting mandatory recycled content targets for 2030 and 2035, the regulation should first define an agreed methodology to calculate and verify them. Dedicated impact assessments should first be conducted to compare economic and environmental costs; adequate targets should be decided on and determined if these should be mandatory.

Batteries carbon footprint (Article 7, Annex II)

We acknowledge the Commission's proposal to establish a battery footprint declaration, battery footprint classes as well as a footprint threshold as described in Article 7 and further outlined in Annex II. We appreciate that Annex II refers to the PEF Category Rules for Batteries and will use the work done as part of the PEF Pilot Program on batteries. We believe that the work done needs to be closely aligned with the relevant requirements set in global standards, more specifically the ISO 14040 series standards, in view of methodologies applied, data requirements and other relevant aspects.

The current wording in the proposed regulation (Article 7 §1) leaves a number of points open to different interpretations and is unclear, for example, how often life cycle assessments (LCAs) for batteries need to be conducted. While we acknowledge that the intention is to assess the batteries footprint of different EV batteries with different chemistries from value chains with different actors, we are concerned that the regulation might require value chain actors to conduct thousands of carbon footprint calculations for the same battery model. We therefore question whether there is a need to conduct carbon footprint calculations per batch, as described in the regulation proposal. The underlying global standard framework which was used for the establishment of the battery PEF CR provides some guidance in this respect.

The proposal specifies that the methodology for setting out a carbon footprint declaration will be enacted in delegated legislation no later than 1 July 2023 and specifies that carbon footprint declarations for battery operators - verified by independent third parties - will apply from 1 July 2024. This gives battery operators one year to collect all the necessary data - from a very complex supply chain, calculate the C-footprint and have these verified by a third party. Noting the complexity of the supply chain and calculation methodology, the importance of qualified resources, we question this timeline.

Carbon footprinting should occur at product level. Calculation should follow LCA principles (ISO standards). We further recommend reconsidering the compliance timeline, giving companies in the supply chain more time to implement the requirements.

Data requests

The battery regulation proposal introduces a wide range of data reporting obligations for battery operators. The proposal is likely to place significant data-sharing burden on upstream producers of raw materials (e.g., data on carbon footprint, responsible sourcing, recycled content, recovery rates). Common systems should be put in place to reduce the administrative burden on upstream actors and to facilitate efficient and harmonized sharing of data. Any mechanism should also be aligned with business confidentiality laws and competition law.

In view of data provision requirements in the value chain, common systems should be put in place to reduce the administrative burden on upstream actors and to facilitate efficient and harmonized sharing of data. Any mechanism should also be aligned with business confidentiality laws and competition law.

Hazardous substances (Articles 6 & 71)

Overlaps and duplication in legislation need to be prevented in order to achieve regulatory efficiency, as highlighted in the EU better regulation approach. The proposed approach on potential restrictions on hazardous substances under the EU Battery Regulation carries a risk of overlapping with the EU REACH regulation. In order to prevent inconsistencies and overlaps, we believe that there is a need to take a clear a decision on whether to set potential future restrictions under the REACH regulation or under the battery regulation.

In order to prevent overlaps and inconsistencies, a clear decision needs to be taken on whether restrictions on hazardous substances are set under the proposed EU Battery regulation or the EU REACH regulation

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