

# Batteries Directive Review – Feedback from Europe’s non-ferrous metals industry

## Introduction

The European non-ferrous metals industry is a key materials supplier and recycler for portable, automotive and industrial batteries. Metals in batteries play an essential role in Europe’s low-carbon transition, notably for e-mobility and energy storage. European demand for strategic battery metals is expected to increase significantly in the next decade.

We support the European Commission’s aims to ensure resource efficiency of batteries and minimise their environmental impacts. We believe this can be achieved in support of Europe’s low-carbon transition. Overall, the Commission should prioritise actions that promote a risk-controlled environment, where metals in batteries are used without harm to human health or the environment. Our key recommendations are below.

## Key recommendations

- Promote a risk-controlled environment** – When properly managed, consumers and the environment are not exposed to metals in batteries during the use phase. In Europe, batteries are also produced and recycled under strict conditions which ensure workers protection. The Commission should focus on controlling any outstanding risks metals in batteries pose for human health and the environment, without stigmatising their hazardous properties.
- Evaluate full impacts before substitution decisions** – Each combination of battery metals has been optimised for their essential role in established applications. Over 90% of battery chemistries available on the European market contain hazardous substances. Before any substitution decision, the Commission should assess required performance, lifecycle environmental impact and socioeconomic aspects.
- Encourage safe & efficient recycling of metals in batteries** – Europe’s metals industry is equipped to recover metals from all battery chemistries. Several already have high recycling rates. For example, 99% of automotive and industrial lead-acid batteries available for collection in Europe are recycled. The Commission should prioritise actions to promote the safe and efficient recycling of metals in all batteries.
- Ensure regulatory coherence** – The Batteries Directive is one of several policies regulating metals used in batteries. The REACH Regulation and ELV Directive already regulate the use of hazardous substances in batteries. The European Commission should aim to reduce regulatory overlaps between policy instruments.
- Align with plans for a European Battery Alliance** – The review of the Batteries Directive has to be aligned with the Commission’s plans for a European Battery Alliance, aiming at establishing a full value chain of batteries in the EU. A consistent regulatory framework will provide businesses with long term planning security for investments and maintain metals production in Europe.



## Promote a risk-controlled environment for European batteries

Each battery chemistry available today on the European market is based on a combination of metals:

- **Lead-acid battery (automotive/industrial)** – Lead, antimony
- **Nickel-cadmium battery (industrial)** – Nickel, cadmium
- **Nickel-metal hydride battery (industrial/portable)** – Nickel, rare earth metals
- **Lithium-ion battery (industrial/portable)** – Lithium, nickel, cobalt, manganese, aluminium, copper
- **Alkaline and zinc-carbon batteries (portable)** – Zinc, manganese

Over 90% of available battery chemistries contain hazardous substances in some form. However, all metals are contained in the battery within sealed units, minimising the risk of exposure to human health and the environment. In Europe, batteries are produced and recycled under strict conditions to ensure worker protection.

**Our recommendation:** The Commission's review should focus on actions to control any outstanding risks metals in batteries pose for human health and the environment. This will allow for their sustainable use in Europe's low-carbon transition, without stigmatising battery chemistries based on their hazardous properties alone.

## Encourage safe and efficient collection and recycling of metals in batteries

The Batteries Directive is as a key part of the EU's wider Circular Economy strategy. High quality European recyclers are equipped to treat the metals from batteries safely, without harm to human health or the environment.

The EU's primary aim should be to ensure that waste batteries are collected effectively and transferred to high-quality recyclers for safe treatment.

Mature battery chemistries are already efficiently recycled in Europe. For example, 99% of European automotive and industrial lead-based batteries available for collection are recycled in a closed-loop system.

Specialised metals recyclers have also developed technologies to recover metals from emerging battery segments (i.e. lithium-ion batteries in electric vehicles), where the business case allows.

**Our recommendation:** The Commission should prioritise actions to promote the safe and efficient collection and recycling of metals in batteries. Achieving a Circular Economy for all battery chemistries is as an essential step towards achieving a risk-controlled environment.



## Ensure regulatory coherence

The use of metals in batteries is regulated under several EU policies, including the Batteries Directive, End-of-Life Vehicles Directive and REACH Regulation. We recommend that the European Commission identifies regulatory overlaps to ensure a coherent and simplified legislative framework impacting EU battery technologies.

Any decision to substitute one battery chemistry for another must include an evaluation of required performance, lifecycle environmental impact, and socioeconomic considerations.

**Our recommendation:** The European Commission should work to improve regulatory coherence between the Batteries Directive, REACH Regulation & ELV Directive. The use of metals in batteries should be regulated consistently.

## Align the review of the Batteries Directive with plans for a European battery alliance

The European Commission's planned European Battery Alliance is an opportunity to 'establish a full value chain of batteries in Europe, with large-scale battery cells production, and the circular economy, at the core'. Maintaining metals production and recycling is of key importance to ensure a viable and competitive battery value chain.

Metals production is capital intensive and requires long-term investment cycles (15-25 years). The EU's legislative framework should provide planning security and predictability, recognising the metals industry's crucial role in producing and recycling battery materials.

**Our recommendation:** The European Commission should align its review of the Batteries Directive with its plans for a European Battery Alliance. The non-ferrous metals industry should be fully involved in the development and implementation of the EU Battery Alliance roadmap.

