Advanced rechargeable batteries are a key enabler for the transition towards low-emission mobility and decarbonized energy generation. Without them, the target of a climate-neutral economy by 2050 and the 2°C Paris Agreement goal cannot conceivably be reached. Indeed, batteries’ applications in the automotive, industrial vehicles and energy sectors are key tools for this transition. In the transport sector, the hybridization and electrification of vehicles reduce CO2 emissions, while the use of batteries in industrial vehicles supports both decarbonization and noise reduction. In the energy sector, batteries are necessary to store renewable energy and contribute to the stability of the electrical grid. Moreover, batteries power everyday applications, such as smartphones, tablets, power tools, and robots and have become a significant job engine for millions of people around the world.

How can the EU accelerate the transition to a decarbonized society: Ensure a coherent, science-based and effective regulatory environment that will enable European players to execute on their mission to produce safe, high-performing as well as environmentally and ethically sound batteries.

With the European Green Deal, the European Commission has confirmed the strategic importance of developing a thriving EU battery industry, and the objective of creating a regulatory framework that can now execute on the Strategic Action Plan on Batteries1.

ENABLING TECHNOLOGIES FOR THE ACHIEVEMENT OF THE CLIMATE-NEUTRALITY OBJECTIVE

It is in this context and with the appropriate regulatory framework that the European battery industry intends to make significant investments into new factories to manufacture battery cells that are needed in a decarbonized electricity and mobility infrastructure and to, hence, establish a European “battery ecosystem” as aspired by the European Batteries Alliance.

Due to their high energy and power density features, especially advanced rechargeable, and above all lithium-based, battery technologies are going to play a major role in a renewables-based electricity generation and electric vehicles market.

The vast majority of these battery chemistries are based on the use of cobalt and cobalt compounds as important materials to produce high-energy active (cathode) materials.

MATERIALS FOR CLIMATE-NEUTRALITY: PROTECTION OF WORKERS AND THE ENVIRONMENT

Whether the European Green Deal or ambitions for a green recovery after COVID-19, the battery sector is central to the EU’s future industrial ambitions. Batteries will be used in everything from decarbonizing industry and transport, to load balancing renewables-led electricity grids, and having a manufacturing base will be a driver of growth.

There is a risk that the 5 Cobalt Salts Restriction could undermine this ambition. The sector recognizes there is a need to regulate the hazards from handling cobalt in the workplace, but this needs to be done proportionately, or it risks making the EU a less attractive destination for investment in this crucial sector. RECHARGE would recommend setting a binding OEL instead of implementing the proposed Restriction for the following reasons:

• **Concern 1:** Battery materials, like cobalt and cobalt compounds, are regulated under both OSH and REACH. There is a risk that regulations are made under both that could apply simultaneously to the same substance, creating confusion and complexity in supply chains, as well as significantly increasing the costs to industry. For example, given that many national OELs on cobalt compounds already exist, the Restriction would create double regulation. This is also true for complex products with multiple regulated substances, where different obligations and procedures apply. An example would be the ongoing REACH or CLH dossiers for NMP, cobalt and cobalt compounds, and lithium carbonates, while at the same time the Occupational Safety and Health Framework Directive 89/391/EEC is working on a harmonization of Occupational Exposure Limits (OEL). These and other battery-relevant material hazards are also currently reviewed under the Carcinogens or Mutagens at Work Directive 2004/37/EC or even the Biocidal Products Regulation EU 528/2012.

• **Concern 2:** Albeit REACH has classified batteries as “articles with no intended release”\(^2\), the current chemicals management approach neglects mitigation and hazard-control measures to a large extent. Because battery materials are contained within sealed units, chemical risks are limited to the professional workplace. The high European standards for worker and environmental protection as well as advanced factory design have already contributed to the achievement of an unsurpassed emission and dissipation control system. A European chemicals management strategy must also consider the risk level associated with hazards if European industries shall remain competitive at global scale. In this regard, risk-control must be at the center of the European chemicals strategy.

\(^2\)Explanatory note REACH, *articles with no intended release*: under normal or foreseeable conditions of use, end-users will not be exposed to chemical substances.
EU Commission Consultation on the 5-Cobalt-Salts Restriction

In their study on cobalt compounds, the Risk Assessment Committee (RAC) and Socio-Economic Analysis Committee (SEAC) have proposed several options for workers’ exposure values (RO1a to RO1d). RECHARGE is pleased that SEAC chose not to take forward RO1c and RO1d. We noted previously that RO1d was not technically feasible.

For the following reasons, RECHARGE cannot support RO1a and RO1b as effective risk management measures:

- The REACH restriction approach is not equivalent to a binding OEL (bOEL), even if the exposure thresholds were similar. Contrary to bOELs, the scope of the restriction is limited to the identified compound(s) and hence does not represent an effective, overarching prevention measure.

- Predictable and streamlined regulation is an important prerequisite for industry investment in batteries and its supply chains. The proposed restriction could have the unintended consequence of disincentivizing long-term investments in the EU battery sector or making the EU battery sector uncompetitive globally.

- The double regulation associated with the implementation of both cobalt salts restrictions (REACH) and bOELs (OSH) is expected to result in higher costs for the battery industry. For detailed information on cost related to cobalt REACH restrictions and bOELs, please see the positions of the Cobalt Institute.

WHY AN OEL WOULD BE BETTER

A binding Occupational Exposure Limit, even if set at the same level as a Restriction, offers several advantages:

- All workers exposed to cobalt and cobalt compounds in the workplace would be covered, not just those using the 5 cobalt salts.

- Companies would make one set of investments to meet the requirements of the OEL, rather than making one set for the Restriction and another for a future OEL, but without
knowing the OEL requirements until after they are required to have implemented the REACH Restriction.

• It would be simpler to monitor because industry would measure total cobalt rather than trying to measure concentrations of cobalt salts in environments using a range of cobalt compounds.
• It would spread fixed investment costs across more workers at a wider range of facilities, making the costs and benefits more proportionate.

RECOMMENDATIONS FOR A BETTER CHEMICALS MANAGEMENT LEGISLATION

The advanced rechargeable and lithium batteries industry, as represented by RECHARGE, is poised to continue working with the European Union and its institutions on establishing a chemicals regulatory framework that will pave the way for the Union’s technology and sustainability leadership ambitions. For that reason, RECHARGE believes there needs to be greater coherence in the interfaces between climate, chemical and workplace regulations.

1. RECHARGE calls upon the European Union to harmonize the implementation of the different pieces of chemicals management legislation. Risk-control must be at the center of the EU chemicals strategy.
2. RECHARGE supports the Better Regulation principle, opting for the regulation that has proven to best protect workers and the environment from potential risks. In the case of cobalt compounds, risks are associated with the manufacturing and end-of-life treatment of batteries but not with their use. Under Better Regulation, the reference regulation would therefore be the Occupational Safety and Health Framework Directive.
3. RECHARGE supports the implementation of OELs as outlined by the Occupational Safety and Health Framework Directive as the most effective mean to protect workers and the environment from battery substances, such as cobalt.

Conclusion

Because the potential risks associated with substances used in batteries are limited to the professional workplace, RECHARGE promotes the implementation of harmonized Binding Occupational Exposure Limits under the Occupational Safety and Health Framework Directive as the most effective chemicals management measure. In contrary, restrictions under REACH will hamper technological advancements and will jeopardize continued investments in a European battery value chain.