

Sustainable batteries in their full life-cycle A step forward towards circular economy and climate neutrality

10 December 2020 #EUGreenDeal

Batteries sustainable over their life cycle are key to achieve climate neutrality, sustainable competitiveness of the industry, green transport, and clean energy - goals that are at the heart of the European Green Deal.



Why do we need sustainable batteries?



Global demand for batteries is set to increase **14 fold by 2030** (compared to 2018 levels), mostly driven by electric transport



The EU could account for 17% of the global demand by 2030, the second highest worldwide



EU will become the **second** biggest global market for batteries, including in terms of **battery production**

For electric vehicle energy storage batteries

the EU would need 18 times more lithium in 2030

almost 60 times more lithium in 2050



5 times more cobalt in 2030

15 times more cobalt in 2050

and for rare earths used in magnets for e.g. electric vehicles, digital technologies or wind generators could increase tenfold by 2050.

What are sustainable batteries?

Sustainable batteries are: produced with the lowest possible environmental impact, using materials that have been obtained in full respect of social and ecological standards, long lasting and safe and that can be repaired or reused and repurposed.



How will batteries contribute to the green transition?

Sustainable batteries will: power clean electric vehicles (we need to reduce emissions in the transport sector by **90%** to meet our **2050** climate goals), support our drive towards renewable energy and reduce their carbon footprint and other impacts on the environment



The Batteries Regulation aims to:

- Harmonise product requirements for batteries
- Minimise environmental impact of batteries
- "Close the loop" by encouraging reuse and improving batteries collection and recycling
 of materials
- Provide legal certainty to unlock investments and boost the production capacity for sustainable batteries in Europe and beyond

This will be achieved by:

- Sustainability and safety requirements for batteries
- Performance and durability requirements
- Labelling and information requirements e.g. on hazardous materials
- End-of-life management increased separate collection, recycling and materials recovery



This will support development of circular and resource-efficient approaches, reduce dependency on virgin materials and the environmental impacts of their extraction and contribute to renewable energies achieving climate neutrality by 2050.

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of the following information.

© European Union, 2020

Reuse is authorised provided the source is acknowledged.

The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

For any use or reproduction of photos or other material that is not under the EU copyright, permission must be sought directly from the copyright holders. Images: ©Gettylmages