

Research topic: The use of materials in new technology products (BID2)

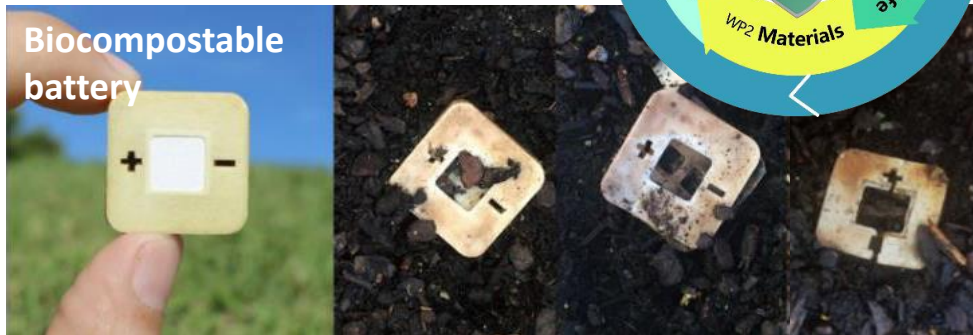
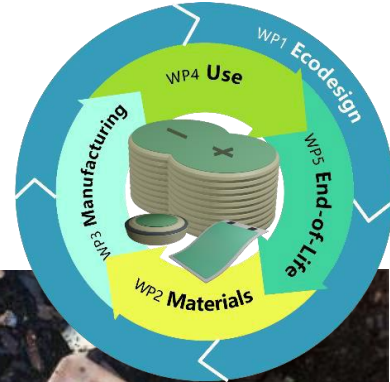
- Research line: Resource management for a Circular Economy
- Research group: Sostenipra

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Implications and potentials of new biodegradable batteries to the current market

The BIDEKO project aims to develop a new generation of ecodesigned and biodegradable batteries to overcome the environmental impacts derived from current primary batteries. This implies to perform an analysis of the current market for primary batteries and estimate the potential market for the new BIDEKO batteries, considering the environmental impact of all their materials as organic chemistries, or the biomaterials used for battery casings. Alternative paths for waste battery disposal will also be defined.

The study will evaluate the pertinency of the new regulation to disruptive battery concepts under development in this project and will provide inputs for future policy recommendations.

Main goal: To compare market implications of current primary batteries with new biodegradable batteries.

MAIN TASKS:

- 1) To perform a literature review about primary batteries (i.e. chemistries, market share, environmental footprint, etc).
- 2) To understand main market applications and product volumes of current primary batteries
- 3) To identify potential market applications and viability of new BIDEKO batteries.
- 4) To gather information about current and potential batteries supply chains, including waste disposal scenarios and regulations.
- 5) To write a peer-review paper for submission in a peer-review journal.