

Carbon Neutral European Battery Cell Production with Sustainable, Innovative Processes and 3D Electrode Design to Manufacture EU Horizon: Project 101069705 — BatWoMan



Building a sustainable battery supply chain with digital battery passports

Dr. Veronika Siska Scientist AIT Austrian Institute of Technology Gmbh Veronika.Siska@ait.ac.at

















Goal: Clean Energy





Regulations & Initiatives

EU Legislation

- Ecodesign for Sustainable Products Regulation (ESPR)
- New EU Battery Regulation
 - Describes EU Battery Passport
 - Passport compulsory by 2027!

Initiatives

- CIRPASS (EU): cross-sectoral
- Battery Pass (German project with EU scope)
- Global Battery Alliance's Battery Passport
- Data spaces (Catena-X, Manufacturing-X, ...)
- And many more!



Battery

Catena-X

Pass



GLOBAL BATTERY ALLIANC

BATTERIES POWERING

BatWoMan project



Carbon Neutral European Battery Cell Production with Sustainable, Innovative Processes and 3D Electrode Design to Manufacture

- Horizon Europe, 2022 September 2025 September
- Goal: Sustainable, cost-efficient Li-ion battery cell production
 - Improvements for each production step
 - Model-assisted improvements and optimisation
 - Battery passport and dataspace



BatWoMan battery passport



Goal

- Validate guidelines and standards from related projects (BatteryPass, CIRPASS)
- Demonstrate passport using production data

Ideal "testbed"

- Realistic: production data from pilot factories
- Innovative: research project
- Green: Focus on sustainability
- Transparent: Few partners

Implementation started this summer.

BatWoMan battery passport Scope





BatWoMan battery passport Data sources





BatWoMan battery passport Users and their interactions







Thank you for your attention!

Dr. Veronika Siska AIT Austrian Institute of Technology





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