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HORIZON 2020 PROGRAMME - TOPIC H2020-LC-BAT-2019
Strongly improved, highly performant and safe all solid-state batteries for
electric vehicles.

GRANT AGREEMENT No. 875189



SAFELiMOVE – Deliverable Report

D8.1 – Cost model and production aspects of solid-
state batteries

Publishable summary

The rapid advancement of battery technologies has played a pivotal role in transforming various industries, from portable electronics to electric vehicles and renewable energy systems. As batteries continue to gain prominence, it becomes essential to understand their cost dynamics, which significantly impact their market adoption and competitiveness. Developing a cost model for batteries is crucial to comprehending the underlying factors influencing their production costs and ultimately driving their market price.

A cost model for batteries is a comprehensive analytical tool that aims to assess and quantify the costs of manufacturing batteries. It considers various components such as raw materials, manufacturing processes, labour, energy requirements, and geographic locations. By examining these factors in-depth, researchers and industry experts can gain valuable insights into cost trends, cost drivers, and potential areas for cost reduction and optimization.

In this context, this study aims to explore the development of a cost model for batteries. By analysing existing literature, and industry reports and collaborating with SCHOTT, CIDETEC, CICE, Saft, Umicore, and Hydro-Quebec, ABEE created a robust and accurate model to shed light on batteries' current and future cost trends. Through this cost model, we aim to provide a comprehensive overview of all-solid-state battery costs.

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Project partners:

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1	CICe	CENTRO DE INVESTIGACION COOPERATIVA DE ENERGIAS ALTERNATIVAS FUNDACION, CIC ENERGIGUNE FUNDAZIOA
2	SCHOTT	SCHOTT AG
3	UMICORE	UMICORE
4	HYDRO-QUEBEC	HYDRO-QUEBEC
5	SAFT	SAFT
6	RENAULT SAS	RENAULT SAS
7	TME	TOYOTA MOTOR EUROPE NV
8	IKERLAN	IKERLAN S. COOP
9	CEA	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES
10	CIDETEC	FUNDACION CIDETEC
11	TUB	TECHNISCHE UNIVERSITAT BERLIN
12	RWTH AACHEN	RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN
13	ABEE	AVESTA BATTERY & ENERGY ENGINEERING
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