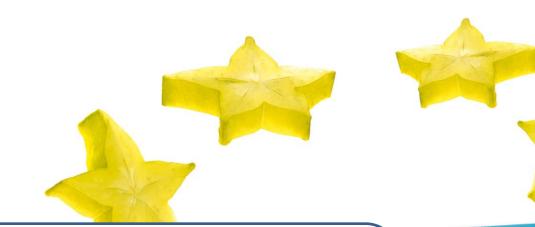
## Dr. Daniel Kiessling

Scientific Officer Information & Communication Technologies | Engineering & Natural Science

Kiessling@bayfor.org



# Future EU Funding Opportunities in the

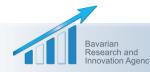
**BATTERY Sector** 





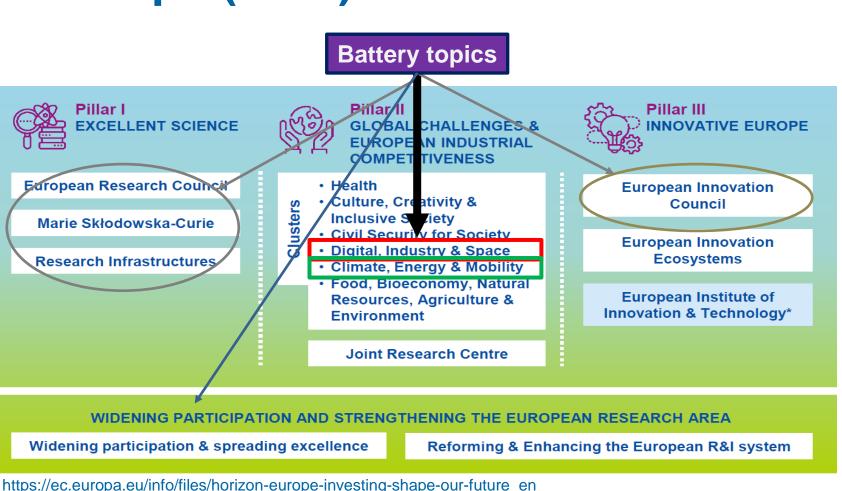
## your access through the Bavarian Research Alliance BayFOR





Competent Support for Excellent Research in Bavaria, Europe and the World

# Battery Topics in Horizon Europe (HEU)



Bavarian Research and Innovation Agency

Future EU Funding Opportunities in the BATTERY Sector Dr. Daniel Kiessling / BayFOR

14.02.2025 | 2

Bavarian

**Research Alliance** 

## **Horizon Europe – Pillar 2:**

### Global Challenges & European Industrial Competitiveness

- In Horizon Europe, Pillar II (Cluster 4 & Cluster 5) : up to 15 topics on Batteries,
- Deadlines in September 2025 and January 2026 Opening May 2025
- Funding rate all Horizon Europe:
  - ✓ for Research & Innovations Actions (RIA): 100 % (direct costs) + 25 % (oH)
  - ✓ For Coordination & Support Actions (CSA): 100 % (direct costs) + 25 % (oH)
  - ✓ for Innovation Actions (IA): for profit (SME): 70 % (direct costs) + 25 % (oH)

- for non-profit entities (Uni, RTO): 100 % (direct costs) + 25 % (oH)

• Collaborative research for RIA, IA:

min. 3 legal entities independent from each other, each in different countries:

- At least 1 legal entity of an EU-Member State +
- At least 2 other legal entities, established in Member States/Associated Countries
- From applied science to demonstration activities:

- from TRL 3 (Experimental proof of concept)  $\rightarrow$  to TRL 8 (System complete and qualified)

Bavarian

Research Alliance



## Disclaimer

Die folgenden Informationen beruhen auf Draft Papieren und können noch Änderungen unterliegen!

Die Veranstalter übernehmen keine Garantie auf Gültigkeit der Angaben. Gültig ist einzig das finale Arbeitsprogramm veröffentlicht durch die Europäische Kommission.

# The following information is based on draft papers and may be subject to change!

The organizers do not guarantee the validity of the information. Only the final work program published by the European Commission is valid



#### Bavarian **Research** Alliance Battery topics Cluster 5 in 2025 – (Deadline 16. September 2025) Destination 2: Cross-sectoral solutions for the climate transition \ Batteries **Keywords** Identifier Topic Τ. В. Advanced recyclable Materials; Minimal CRM usage; Minimal auxiliary services required; Cost-effective next-generation batteries for long-duration CL5-2025-RIA 15.00 5.00 Low TRL only (NO Li-ion, Va- redox flow, 02-D2-02 stationary storage (Batt4EU Partnership) Sodium ion, molten Sodium-Sulphur) Increased EU capacities; Technology demonstrators; Circular/Sustainable Sustainable processing and refining of raw materials to CL5-2025-At least one: Battery grade metals and produce battery grade Li-ion battery materials (Batt4EU IA 10.00 2 20.00 02-D2-03 precursors: Electrode active materials Partnership) Scope: Lithium, Cobalt, Graphite, Nickel, Manganese, Phosphorus





Future EU Funding Opportunities in the BATTERY Sector Dr. Daniel Kiessling / BayFOR

#### Battery topics Cluster 5 in 2025 – (Deadline 04. September 2025)

Destination 5: Clean and competitive solutions for all transport modes \ Zero-emission road transport

			<b></b>			
Identifier	Торіс	Keywords	Т.	В.	C.	#
<u>CL5-2025-01-</u> <u>D5-03</u>	Safe post-crash management of road Light Duty Battery Electric Vehicles (BEVs) (2ZERO Partnership)	Vehicle design (integration of battery pack) (fire/crash) BEV condition assessment Re-use of crash batteries Fire handling / rescue procedures Address public safety concerns	IA	5.00	5.00	1
<u>CL5-2025-01-</u> <u>D5-04</u>	Extended lifetime of road Battery Electric Vehicles (BEV) (2ZERO Partnership)	Ageing + Degradation of critical components (EXCLUDING Cell!) User centric design for longer lifetime (retain car value) Economy-design concept evaluation (minimum use of resources) Prospective / Prescriptive maintenance and repair concepts	RIA	7.00	7.00	1
<u>CL5-2025-01-</u> <u>D5-05</u>	Road Battery Electric Vehicles (BEV) optimised user-centric solutions for energy efficiency design and consistent range throughout weather conditions (2ZERO Partnership)	Novel systemic approach on thermal management Targets LDV and LCV. User acceptance limits for diff. user groups (income, gender, age, location, usage pattern etc.) Minimize loss of range even under extreme weather conditions	IA	12.00	6.00	2

T: Type: B: Budgets / C: EU Contribution per project / #: Expected number of projects



Future EU Funding Opportunities in the BATTERY Sector | Dr. Daniel Kiessling / BayFOR

14.02.2025 | 6

Bavarian Research Alliance

#### Battery topics Cluster 5 in 2025 – (Deadline 04. September 2025)

Destination 5: Clean and competitive solutions for all transport modes \ Zero-emission road transport

Identifier	Торіс	Keywords	Т.	В.	C.	#
<u>CL5-2025-</u> 01-D5-06	Strategies, tools and concepts for optimised road Battery Electric Vehicles (BEV) long-haul logistics use cases (2ZERO Partnership)	Accelerated uptake of HD BEV Optimize battery size and charging strategy Real life operational demonstrators (existing fleet) Novel usage / application models	IA	5.00	5.00	1

#### Battery topics Cluster 5 in 2025 – (Deadline 04. September 2025)

Destination 5: Clean and competitive solutions for all transport modes \ Waterborne transport

Identifier	Topic	Keywords	Т.	В.	C.	#
<u>CL5-2025-</u> 01-D5-011	Demonstration of battery energy storage systems in existing and new vessels via novel energy storage and ship design concepts (ZEWT Partnership)	Long-distance autonomy for maritime vessels above 400 GWT Energy storage concepts, efficiency and in-route charging Modal shift of inland cargo transport Operation, degradation and failure modes of batteries under waterborne conditions	IA	15.00	7.50	2

T: Type: B: Budgets / C: EU Contribution per project / #: Expected number of projects



Future EU Funding Opportunities in the BATTERY Sector Dr. Daniel Kiessling / BayFOR

14.02.2025 | 7

Bavarian

esearch Alliance

#### Battery topics Cluster 5 in 2026 – (Deadline 13. January 2026)

Destination 2: Cross-sectoral solutions for the climate transition \ Batteries

Identifier	Торіс	Keywords	T.	В.	C.	#
<u>CL5-2026-</u> 01-D2-01	Development of sustainable and design-to-cost batteries with (energy-)efficient manufacturing processes and based on advanced and safer materials (Batt4EU Partnership)	Low Cost, Electromobility, Adaption and Flexibility in Design and Production, EITHER "Liquid electrolyte Li-ion + cathode LMFP or HLM" OR "Sodium-ion batteries"	IA	24.00	8.00	3
<u>CL5-2026-</u> 01-D2-04	Integrating advanced material, cell design and manufacturing development for high-performance batteries aimed at mobility (Batt4EU Partnership)	Manufacturing transition/adaption from (Gen3) liquid electrolyte Li-ion to HP (solid-state) Li-ion Increase diversity of chemistries and cell design Anodes: Si-C composite OR Li metal	RIA	30.00	10.00	3
<u>CL5-2026-</u> 01-D2-05	Accelerated multi-physical and virtual testing for battery aging, reliability, and safety evaluation (Batt4EU Partnership)	Short development of cells and systems Increased reliability and safety Standardisation Focus: EV with potential to expand to other areas	IA	15.00	7.50	2
<u>CL5-2026-</u> 01-D2-07	Joint topic with India on recycling of EV batteries	t.b.a.	RIA		N/A	

T: Type: B: Budgets / C: EU Contribution per project / #: Expected number of projects

Future EU Funding Opportunities in the BATTERY Sector | Dr. Daniel Kiessling / BayFOR

Bavarian Research Alliance

#### **Battery topics Cluster 4 in 2025 – (Deadline 23. September 2025)**

Destination 2: Achieving technological leadership for Europe's open strategic autonomy in raw materials, chemicals and innovative materials \ Raw Materials \ Safe and Sustainable by Design

Identifier	Торіс	Keywords	Т.	В.	C.	#
<u>CL4-INDUSTRY-2025-</u> 01-MATERIALS-61	Technologies for critical raw materials and strategic raw materials from end-of-life products (IA)	Recovery and Selling of secondary raw materials Several Waste Streams (WEEE, batteries, vehicles, wind turbines etc.)	IA	24.00	5.00	4
<u>CL4-INDUSTRY-2025-</u> 01-MATERIALS-51	Development of safe and sustainable by design alternatives to PFAS (IA)	Provide new knowledge, update policies, Areas: Electronics/grids; Construction; Textiles; Automotive (incl. Batteries)	IA	30.00	7.00	3

Destination 4: Achieving open strategic autonomy in digital and emerging enabling technologies AI in Science

Identifier	Topic	Keywords	Т.	В.	C.	#
HORIZON-CL4- INDUSTRY-2025-01- DIGITAL-61	AI Foundation models in science (RIA)	Discovery and prediction of new materials, Foundation model for materials science as basis for subtasks, Provide 4 use cases – one could be high cap. batteries	RIA	12.00	4.00 to 6.00	3
		. D. Dudnoto / C. Ell Contribution non uncipat / #. Eur			_	

T: Type: B: Budgets / C: EU Contribution per project / #: Expected number of projects



Future EU Funding Opportunities in the BATTERY Sector Dr. Daniel Kiessling / BayFOR

Bavarian

esearch Alliance

# Additional funding sources (two examples)

>Innovation Fund (€1 billion call for electric vehicle battery cell manufacturing)

- <u>https://cinea.ec.europa.eu/funding-opportunities/calls-proposals/innovation-fund-2024-call-and-battery-calls\_en</u>
- > EUREKA Eurostars (SME)
  - https://eurekanetwork.org/opencalls/eurostars-funding-programme-2024-call-7/
- > M-Era.net
  - https://www.m-era.net/
- ≻ Era.Min
  - <u>https://www.era-min.eu/</u>

Contact <u>kiessling@bayfor.org</u> for additional information



Future EU Funding Opportunities in the BATTERY Sector Dr. Daniel Kiessling / BayFOR

Bavarian

**Research Alliance** 



## **Our Services for YOU**

Finding a match of your idea to an EU topic Finding Bavarian ↔ international partners for EU-proposal Support of your EU-proposal in case of Bavarian participation

> Feel free to contact us as early as possible so we support you agile & effectively



Future EU Funding Opportunities in the BATTERY Sector Dr. Daniel Kiessling / BayFOR



#### Thank you for your attention!

#### **Bavarian Research Alliance GmbH**



Photo: © Bavarian Research Foundation, Christine Reeb

#### Headquarters in Munich

Dr. Panteleimon Panagiotou

Unit Information & Communication Technologies | Engineering & Natural Sciences

Prinzregentenstraße 52 80538 Munich Germany Phone: +49 (0)89 99 01 888-130 Email: panagiotou@bayfor.org

www.bayfor.org



Foto: © Bayern Innovativ GmbH, Verena Kaister

#### **Offices in Nuremberg**

Dr. Daniel Kießling

Unit Information & Communication Technologies | Engineering & Natural Sciences

Am Tullnaupark 8 90402 Nuremberg Germany Phone: +49 (0)911 507 15-920 Email: <u>kiessling@bayfor.org</u>

www.bayfor.org



Future EU Funding Opportunities in the BATTERY Sector Dr. Daniel Kiessling / BayFOR