



@bepa\_eu

*Towards a competitive European industrial battery  
value chain for stationary applications and e-mobility*

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# What is the BATT4EU Partnership?

A co-programmed Partnership under Horizon Europe which gathers – on the public side – **the European Commission**, and - on the private-side – **the Batteries European Partnerships Association (BEPA)** gathering all the European battery stakeholders interested to get involved in Horizon Europe.





- Our Ambition-  
for the battery value chain



# Our vision

## *For the Partnership*



To establish by 2030 in Europe the **best in the world innovation ecosystem** for batteries



Which will boost a **competitive, sustainable and circular** European battery value chain



And will **drive the transformation** towards a **carbon-neutral society**

# Why a partnership?

*Together we are stronger*



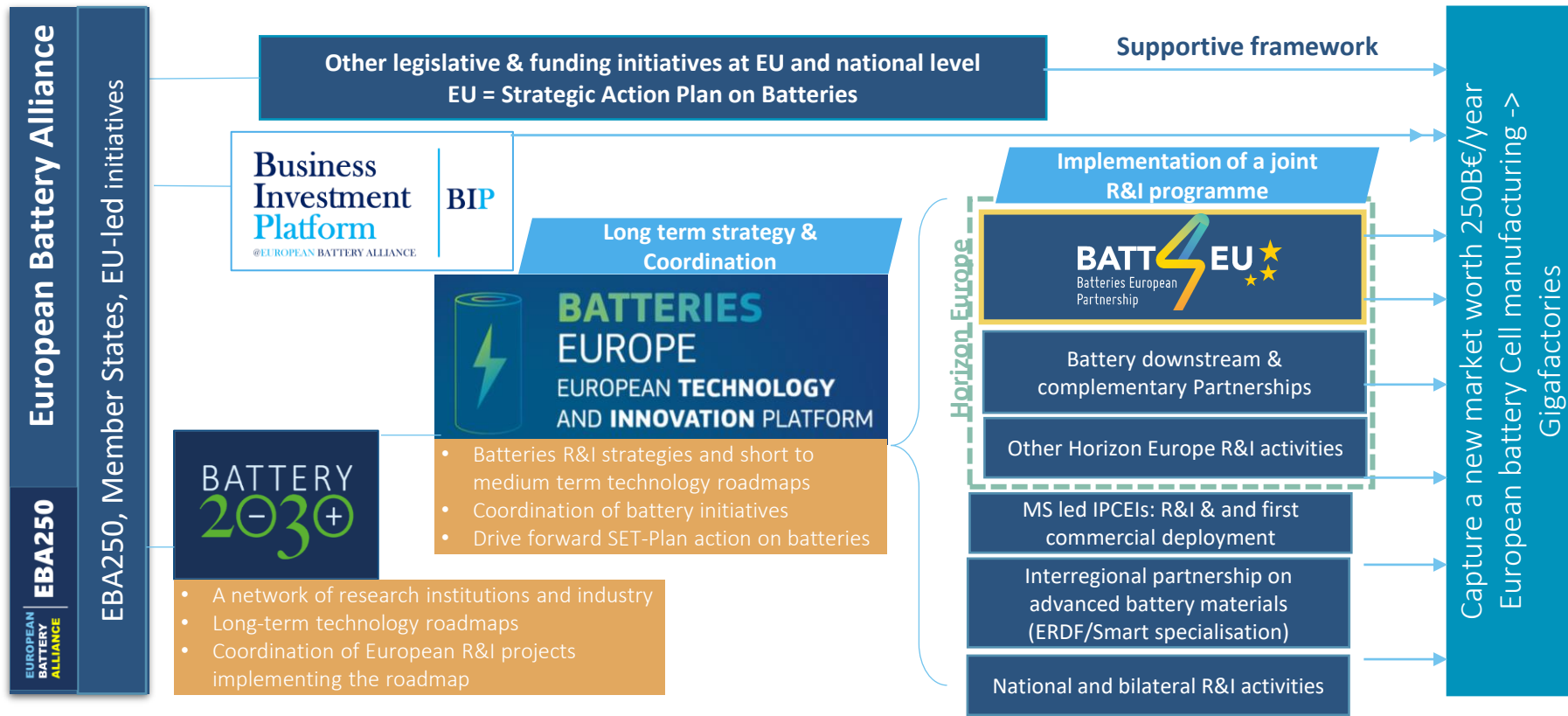
Only a **partnership**, i.e. a **long-lasting and coordinated effort** involving **industry, research** and the **public sector**, can live up to the challenge and bring predictability to the European battery value chain stakeholders.



By **pooling Europe's resources and knowledge**, partnerships have demonstrated their efficiency for accelerating the development, industrialisation and deployment of strategic technologies that underpin growth and jobs in key sectors of the European economy

# Linking European Battery Networks

*How do the organisations interact?*



# BATT4EU objectives

## *General objectives*



Contribute to **making Europe the first climate-neutral continent by 2050**, by widespread adoption of e-mobility and stationary electrical energy storage



Enable **European leadership in the battery industry across the value chain**, creating economic growth and jobs in a circular economy, by supporting the development of an innovative, competitive and sustainable battery manufacturing industry in Europe



Contribute to achieving **a zero-pollution ambition for a toxic-free environment**, by providing safer and more sustainable batteries and processes (including recycling).

# BATT4EU objectives

## *Specific objectives*



Support the development of differentiating technologies in battery materials, cell design and manufacturing and battery recycling, leading to demonstrations of new chemistries, cells, production lines and proof of concept of recycling logistics and methods.



Accelerate the development and deployment of sustainable and affordable battery solutions for clean mobility, by building a strong innovation ecosystem with downstream partnerships leading to joint demonstrations in different transport modes.



Enable a cost-effective integration of renewable energy sources in the power grid, by developing affordable batteries for stationary energy storage applications, leading to demonstrations of different scales of storage systems.

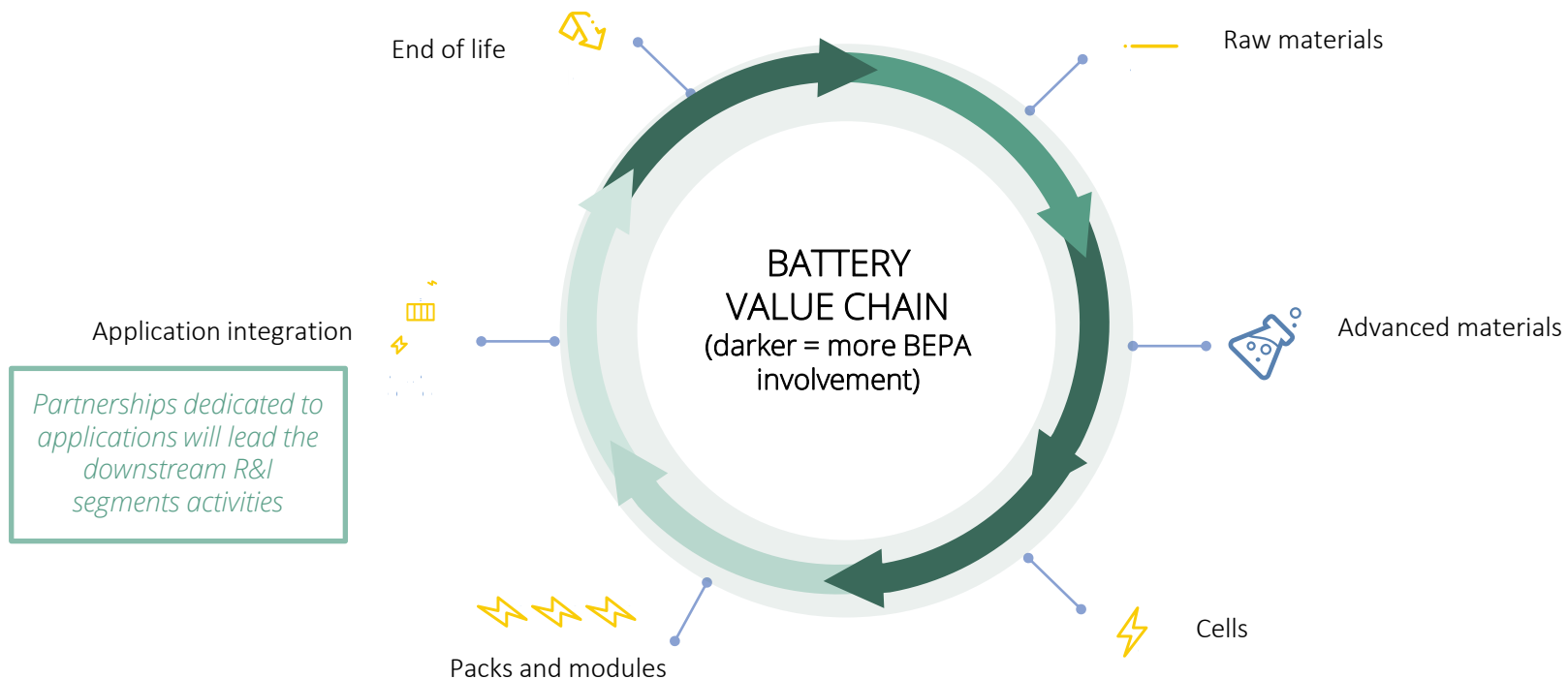


# BATT4EU objectives

*Operational objectives. By 2030, achieve the following technical and scientific targets:*

- increase battery energy density (+60% compared to 2019 values)
- increase battery power density and charging rate
- improve cycle lifetime (at least by a factor of 2 compared to 2019 state-of-the-art values)
- reduce battery cost (-60% compared to 2019 values)
- ensure battery safety in the different targeted application sectors
- implement **worldwide Best Available Technologies** in manufacturing and recycling operations
- enhance the sustainability of the main supply chains of battery raw materials and **achieve the lowest possible carbon footprint** of the supply chain from raw materials extraction through battery manufacturing, use and recycling.

# Scope of the Partnership

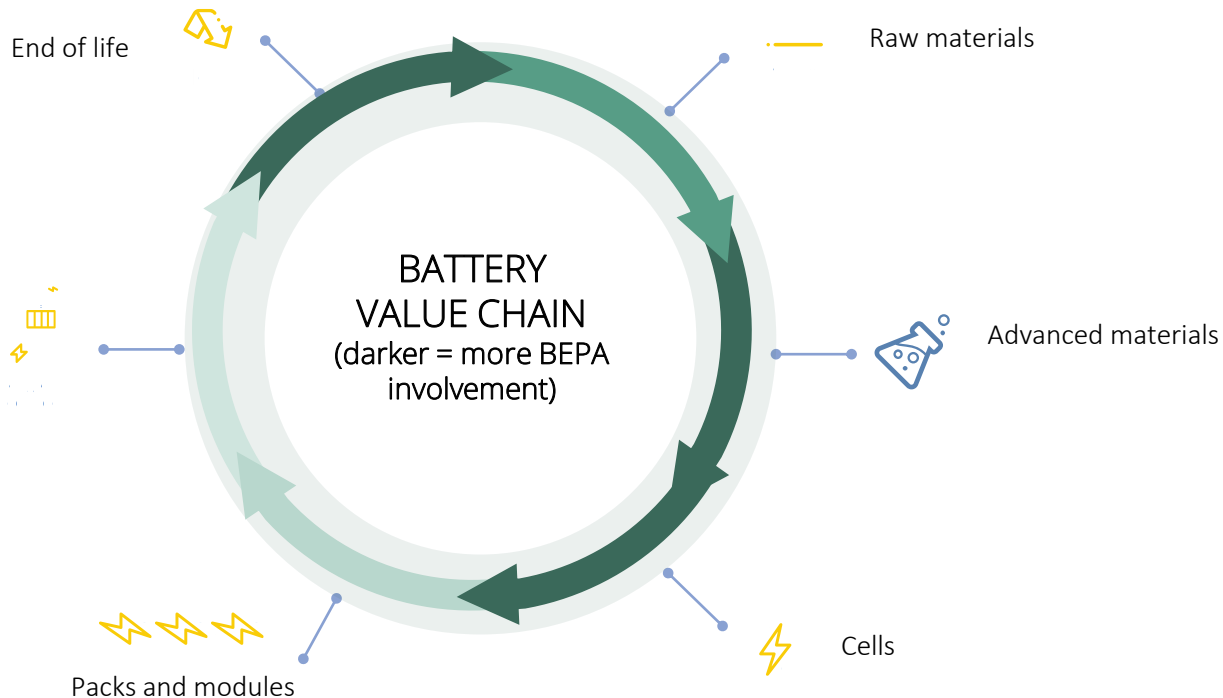


# Scope of the Partnership

The **2Zero Partnership** will be responsible for R&I activities dealing with the integration in the vehicle, charging infrastructures, etc.

Application integration

*Partnerships dedicated to applications will lead the downstream R&I segments activities*

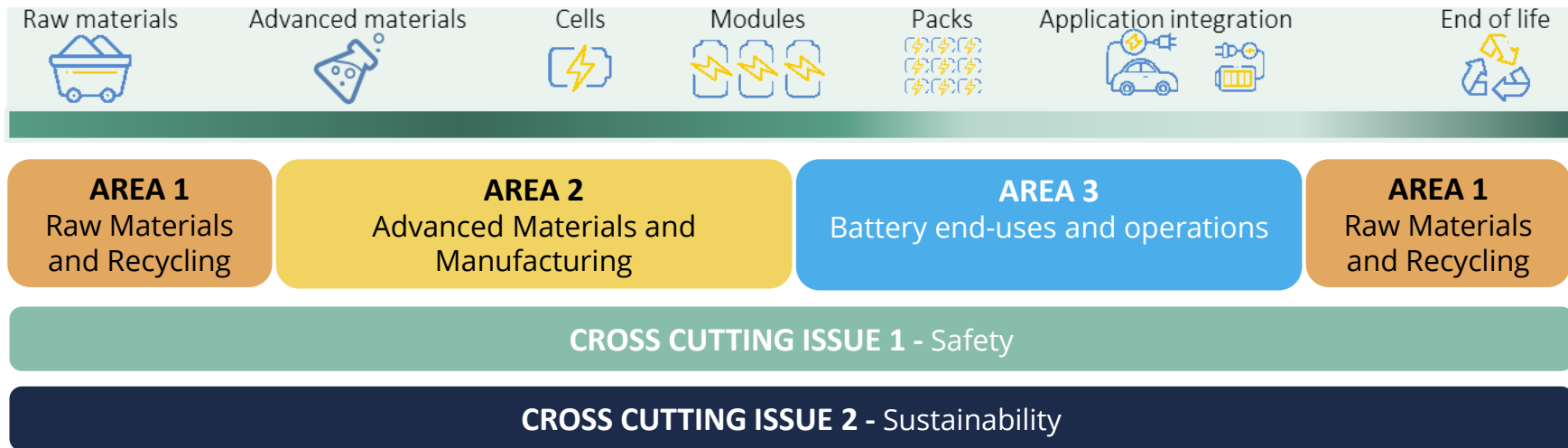


# Scope of the Strategic Research and Innovation Agenda (SRIA)



# Scope of the SRIA

*3 focus areas to cover the segments of the value chain and 2 cross-cutting issues*





# Scope of the SRIA

*The Partnership allocates a substantial part of its resources on R&I in these segments of the value chain:*

## Materials and related technologies

- Battery-grade raw materials
- Active cells materials (cathodes, anodes)
- Other cells materials (separators, binders, electrolytes, additives (particularly solid-state future electrolytes)
- Structural materials (casing, mechanical components, ...)
- Processes and equipment to manufacture and process materials
- Novel methods for accelerated discovery and engineering of materials and interfaces...

## Cell design and manufacturing technologies

- Advanced technology for manufacturing (solid-state) cells
- Specialised equipment for new manufacturing technologies

## End-of-life management

- Re-use
- Dismantling and recycling technologies
- Secondary raw materials from recycling

## Applications

Batteries for decarbonised transport and stationary energy storage.



# Scope of the SRIA

*Appropriate balance between short-to-medium term and long-term R&I activities*



Enhancement of close-to-market Li-ion technologies (TRL 5-8)



New promising and longer-term breakthrough technological solutions (TRL 2-4)



- Why joining BATT4EU? –  
Benefits and activities



# Why joining the Partnership?

*Being involved in BEPA provides the following benefits:*

- provide recommendations for calls for proposals supported within the specific parts of the Horizon Europe Work Programmes related to batteries;
- get first hand information on the strategic R&I roadmap and prioritise of research topics;
- get access to impactful research findings generated in Europe (in Horizon Europe projects);
- be part of a strong industrial network with a focus on innovation;
- overview and understanding of the entire value chain and the impacts of innovations in all sectors;
- understand the impact of innovations in cross cutting topics (e.g. digitalisation and sustainability);
- understand the different levels of technology readiness (what's in the pipeline!);
- strong connections to other European Partnerships which influence the battery industry;
- understand the requirements and conditions that will be / is created by European regulations.

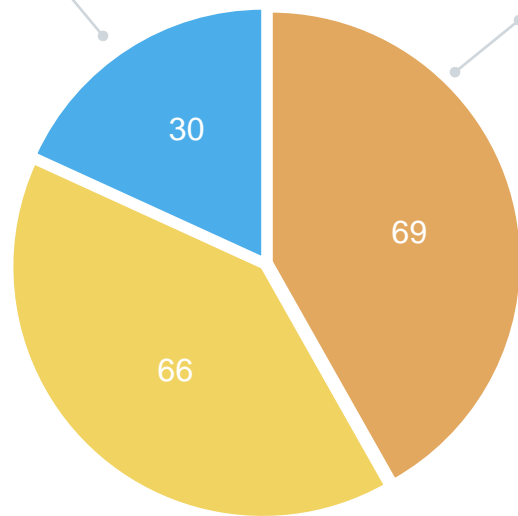
# Why joining the Partnership?

*Join a wide network of stakeholders*

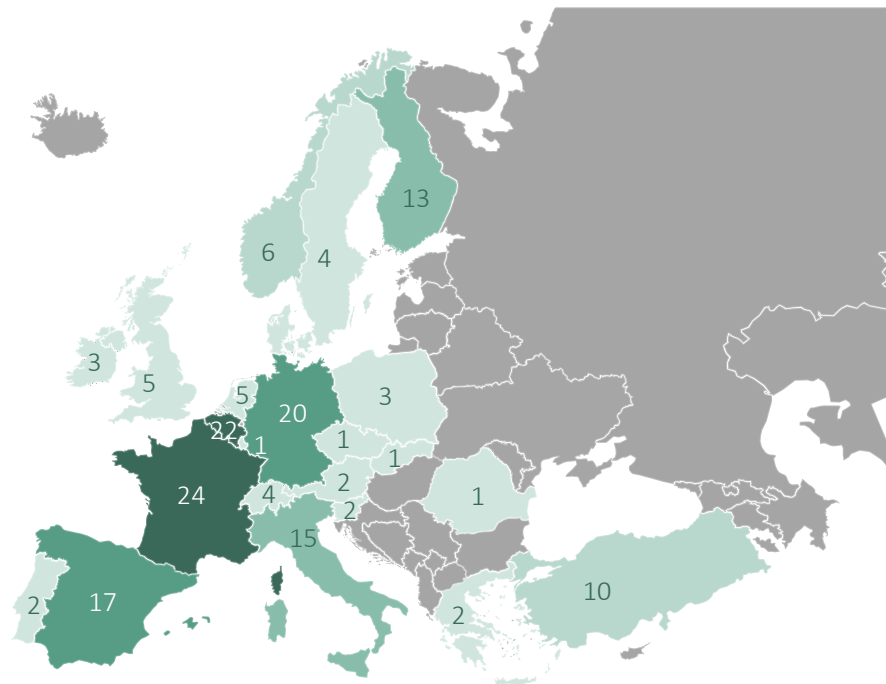
165 members as of 1-6-2021

Associate members

Industry members



Research members





# Why joining the Partnership?

*Other activities to be launched within BEPA in 2021-22*



➤ Experts groups within BEPA



➤ Coordination with other Partnerships and initiatives



➤ Organisation of workshops and networking events



➤ Support communication and dissemination of battery projects' results



➤ Activities focused on Innovation uptake and standardisation/regulation

# Best way to influence? Join the BEPA Working Groups

*Five Working Groups. One for each area and each cross-cutting topic*

**Working Group 1**  
Raw Materials and  
Recycling

**Working Group 2**  
Advanced Materials  
and Manufacturing

**Working Group 3**  
Battery end-uses and  
operations

**Working Group 4**  
Safety & Reliability

**Working Group 5**  
Sustainability

- Identify, prioritise and draft the Battery R&I topics for the calls of the Horizon Europe Work-Programmes
- Update the long-term **Strategic Research and Innovation Agenda (SRIA)**
- **Craft potential joint calls** with other European Partnerships
- Deliverables that will follow from the **monitoring and reporting framework**

# How to join

## *Who can become a member?*

Membership is open to all legal persons interested to contribute to the activities of the Partnership.  
With some basic conditions (eligibility criteria art. 5.1):

- ✓ established in the European Union or in a country associated to EU RTD Framework Programme
- ✓ activities within the scope of the Partnership
- ✓ sharing and supporting the objectives of the Partnership
- ✓ committing to the Strategic Research Agendas and roadmaps of one of the European Technology and Innovation Platforms (ETIPs) supporting the Batteries European Partnership
- ✓ willing to actively contribute as partner in projects of the European Framework Programme for Research and Innovation

# How to join

## Membership categories

### ➤ FULL MEMBERS (entitled to vote)

#### ➤ INDUSTRY

- Battery raw materials industry
- Battery advanced materials industry
- Battery manufacturing industry
- Battery manufacturing supply industry
- Automotive industry (including automotive supply industry)
- Other applications industries (stationary storage, Maritime, Aviation, Rail, industrial applications...)
- Recycling industry

#### ➤ RESEARCH

- Research Institutes and Universities --- non-profit-making


### ➤ ASSOCIATE MEMBERS (not entitled to vote)

Industry members (inc. for profit research)	Annual fee
<b>Large</b> (headcount>5000 and turnover >1,5bn€)	9.500,00 €
<b>Intermediate</b> (headcount 250-4999 or turnover 50ml-1,5bn €)	7.500,00 €
<b>Medium*</b> (headcount 50-249 or turnover 10-50ml €)	5.000,00 €
*SMEs (headcount 50-249 and turnover <50ml €)	2.500,00 €
<b>Small</b> (headcount<50 and turnover <10ml €)	1.500,00 €
Research members (non profit)	
<b>Large</b> (headcount>250)	4.000,00 €
<b>Small</b> (headcount<250)	2.500,00 €
Associate members (membership without voting right)	
<b>Associations, NGOs and other stakeholders</b>	1.000,00 €

# How to join

## Apply online

- To become a member of BEPA, please fill in the application form [at this link](#).
- Once the application is submitted online: signed PDF version must be sent out **via physical mail + email to BEPA Office** ([info@bepassociation.eu](mailto:info@bepassociation.eu))
- Your application will be checked and submitted to BEPA Executive Board for approval. BEPA Office will then inform you when your application process will be finalised.

 EUSurvey

☒ Save a backup on your local computer (disable if you are using a public/shared computer)

## APPLICATION FOR MEMBERSHIP OF THE BATTERIES EUROPEAN PARTNERSHIP ASSOCIATION

Fields marked with \* are mandatory.

**Disclaimer**

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### APPLICATION FOR MEMBERSHIP OF BEPA AISBL - THE BATTERIES EUROPEAN PARTNERSHIP ASSOCIATION

*In order to proceed with your membership application, please complete and submit this form:*

**YOUR ORGANISATION**

\* Legal name (full name of the organisation)  
ⓘ As stated in the legal statute of the registration act/decrece establishing the organisation

\* Establishment / Registration country  
ⓘ Country of registration or establishment of the organisation

**Legal organisation's address:**





# Thank you

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