



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

A co-programmed partnership under Horizon Europe

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Secretary-General

MAY 21

BEPA
Batteries European
Partnership Association

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

BATT4EU objectives

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

General objectives

1. Contribute to making Europe the first **climate-neutral** continent by 2050
2. Enable **European leadership in the battery industry** across the value chain
3. Contribute to achieving a **zero-pollution ambition** for a toxic-free environment

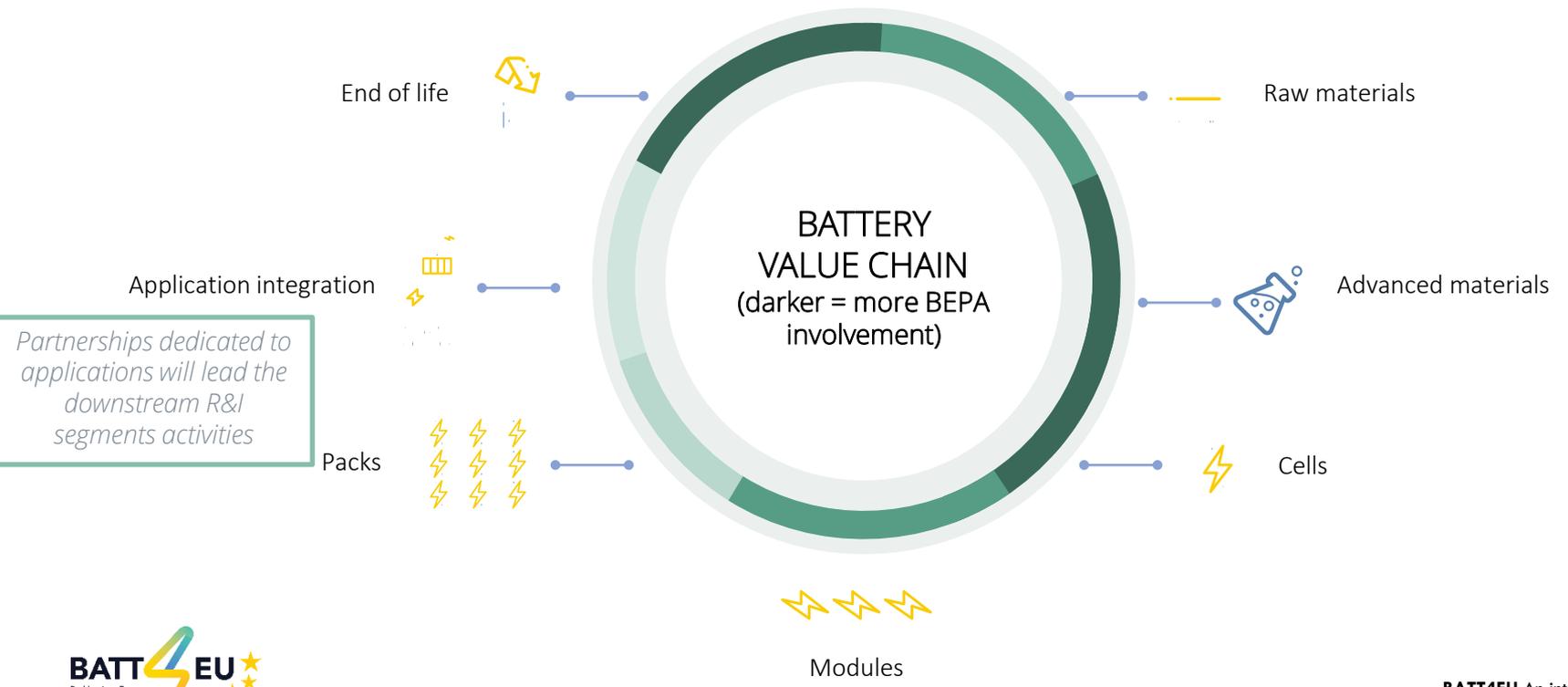
Specific objectives

1. Support the development of **differentiating technologies** in battery materials, cell design and manufacturing and battery recycling
2. Accelerate the development and deployment of **sustainable and affordable battery solutions** for clean mobility
3. Enable a **cost-effective integration of renewable energy sources** in the power grid

Operational objectives

1. Increase energy density +60%
2. Increase power density and charging rate (charging time < 20')
3. Improve cycle lifetime > 2x
4. Reduce battery cost - 60%
5. Ensure battery safety⁽¹⁾ automotive 4 / aviation and waterborne 2
6. implement BAT in manufacturing and recycling operations (plants 4.0 or 5.0)
7. Improve sustainability and circularity)

Scope of the Partnership



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

Scope of the Partnership

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

A

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...

B

Cell design and manufacturing technologies

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

C

End-of-life management

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

D

Applications

Batteries for decarbonised transport and stationary energy storage.



Scope of the Partnership

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



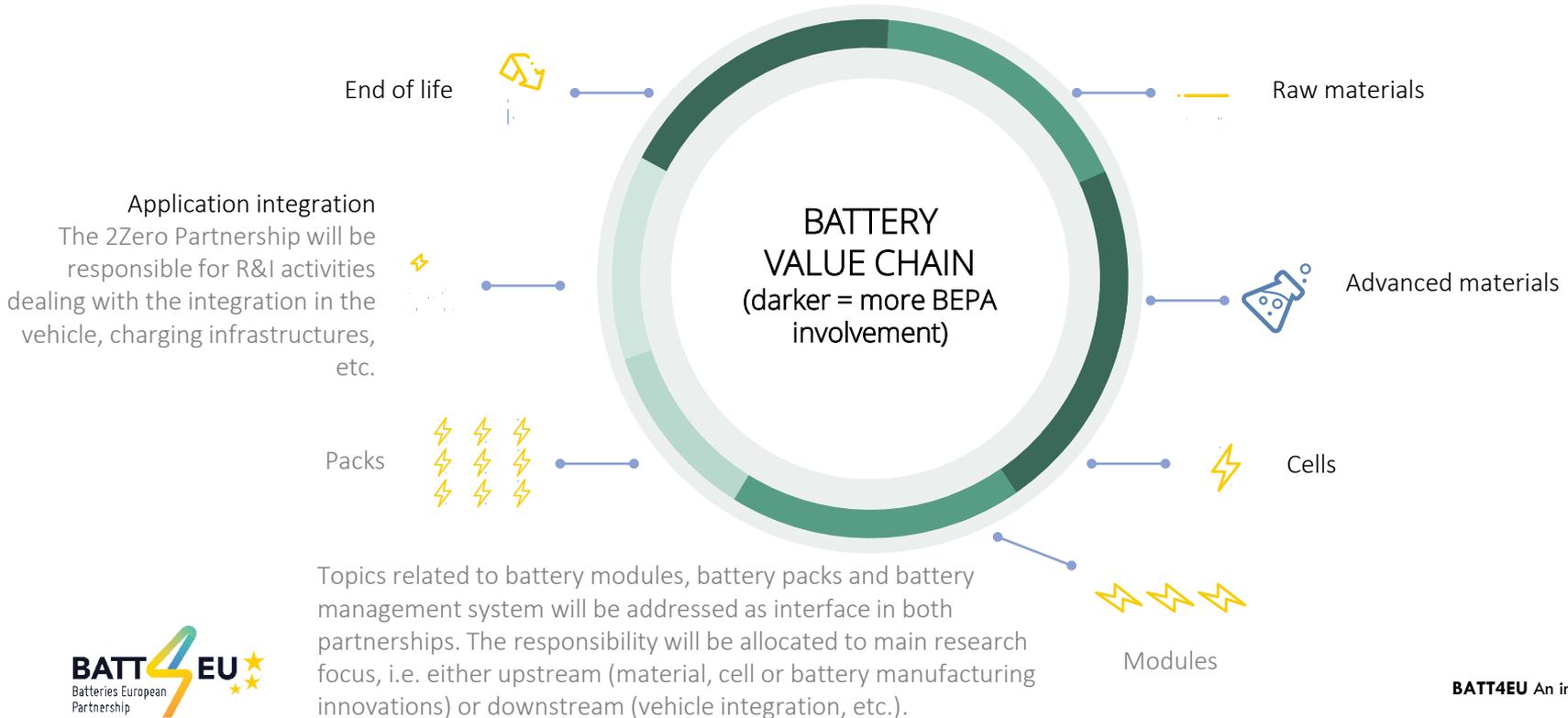
Enhancement of close-to-market Li-ion technologies (TRL 5-8)



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

Interactions and synergistic effects with other Partnerships

Example of road transport. Other sectors with Partnerships: aviation, waterborne transport and rail infrastructure.





- Our Ambition-
for the battery value chain



The EU Battery landscape

How do the organisations interact?

Other R&I activities
(under Horizon Europe, IPCEIs, S3 interregional partnership, national and bilateral instruments, etc)

BATTERIES EUROPE
EUROPEAN TECHNOLOGY AND INNOVATION PLATFORM

BATTERY 2030+

ERTRAC

WATERBORNE

ACARE

SUSCHEM

ETIP SNET

And other strategic bodies

Feedback for SRIA Roadmap update

Coordination / Collaborations (facilitated by ETIP Batteries Europe)

Inputs to define R&I calls (SRIA, Technology Roadmaps)

BATT4EU
Batteries European Partnership

- Identify the priority topics and build its R&I work programmes
- Support and oversee the portfolio of funding projects
- Reinforce networks between Industry, RTOs, Universities, and other org.
- Attract engagement of more stakeholders in collaborative R&I activities and demo-projects.
- Encourage a robust lab-to-market process and innovation and technology transfer

Coordination / Collaborations

Innovation & Technology Transfer

Skills development

Horizon Europe Pillar 3 and other market update instruments

eit InnoEnergy
Knowledge Innovation Community

eit RawMaterials
Connecting matters

INNOVATION FUND
Driving clean innovative technologies towards the market

European Investment Bank
The EIB bank



Why joining the Partnership?

Joining the BATT4EU Partnership will allow you to help BATT4EU to:

- provide recommendations for calls for proposals supported within the specific parts of the Horizon Europe Work Programmes related to batteries;
- implement and regularly update the commonly agreed Strategic Research and Innovation Agenda (SRIA) for batteries;
- support and oversee the portfolio of projects funded under the Partnership Work Programmes, to monitor their execution phase, and to disseminate their results ;
- create/reinforce networks between the battery industry (including start-ups and SMEs), RTOs, universities and other organisations, and to ensure synergies with other European Partnerships and initiatives;
- support the development of EU regulations on battery standards, safety, and sustainability;
- actively promote and monitor innovation uptake in the market



Thank you

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BATT4EU 
Batteries European
Partnership



BEPA
Batteries European
Partnership Association



BACKUP

BEPA - the Batteries European Partnership Association

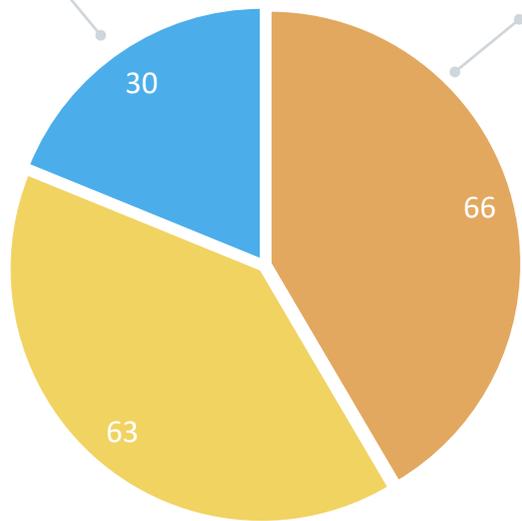
BEPA members

Categories and distribution

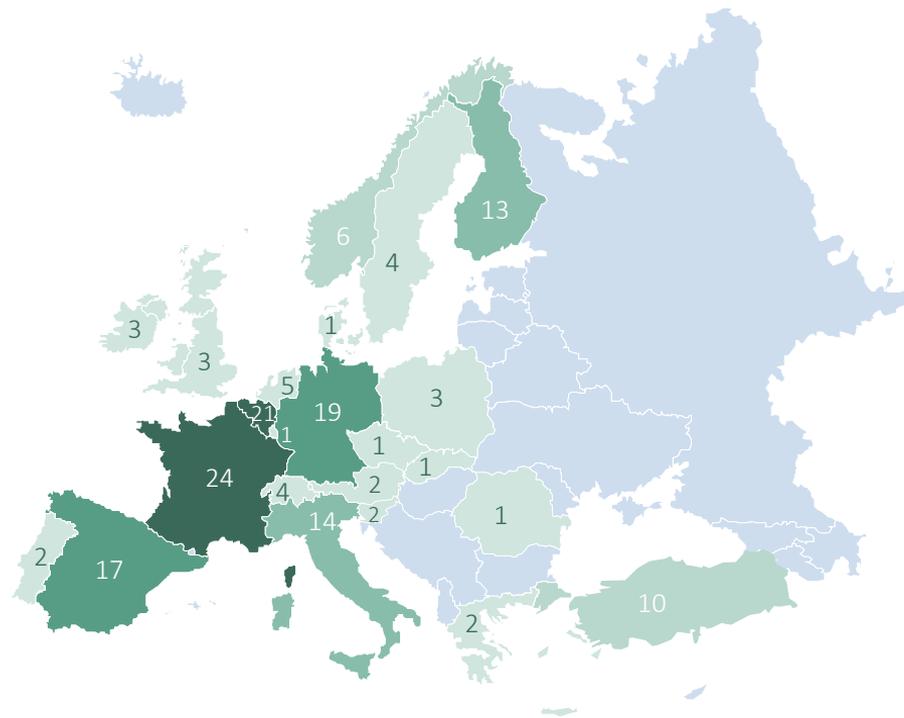
159 members as of 19-5-2021

Associate members

Industry members



Research members



BEPA Governance

Structure

Private side association

General Assembly

Industry members
Research members
Associate members



Executive Board

10 members (inc. Secretary General)

Office

Secretary
General +
Staff

Association Delegation

25 members (Inc.
Executive Board)

Partnership Board

EC Delegates

DG RTD
DG MOVE
DG ENER
DG CNECT
DG CLIMA

Alignment Board with MS



BEPA Governance

Composition and representation

Balanced representation

- between all sectors of the value chain, reflecting the key challenges
- between Industry and Research members

Executive Board and Association Delegation members

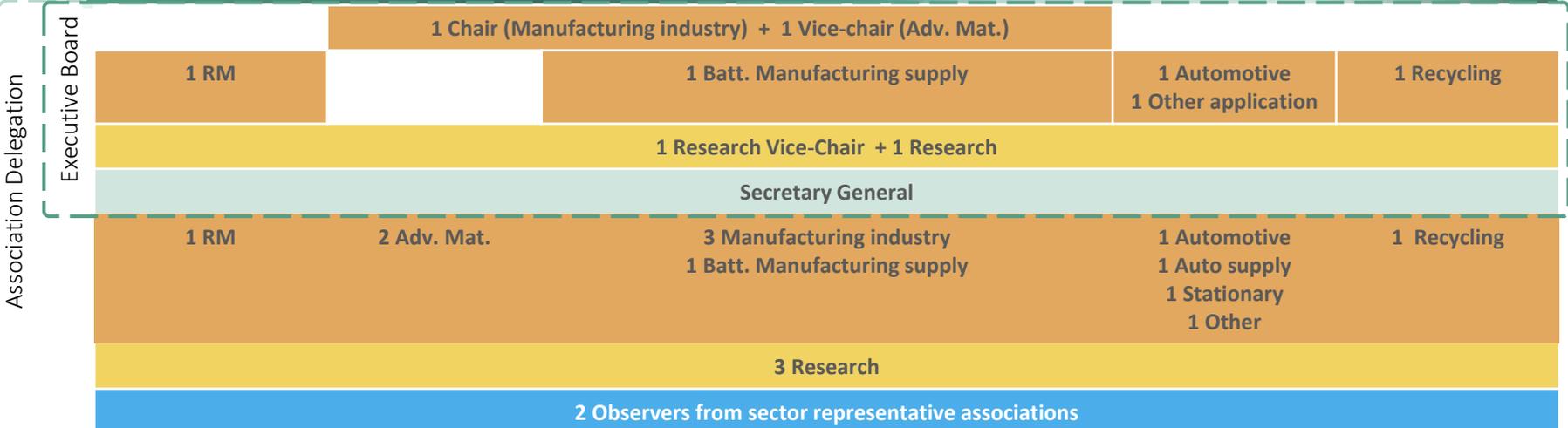
- represent their sector
- elected by G.A., possibly upon nomination from sector representative associations

3 types of members

• Industry Members

• Research Members

• Associate Members



Why joining the Partnership?

Being involved in BEPA provides the following benefits:

- First hand information on the industrial R&I roadmap;
- First hand view of impactful research findings generated in Europe (in Horizon Europe projects);
- Opportunity to significantly contribute to the direction of battery research, drive the prioritisation of research topics and ability to impact it;
- Be part of a strong industrial network with a focus on innovation;
- Overview and understanding of the entire value chain and the potential impacts of upcoming innovations across all sectors;
- Understanding of the potential impact of innovations resulting from research employing cross cutting topics (e.g. digitalisation);
- Understanding of the technology readiness (what's in the pipeline!)
- Strong connections to other European Partnerships which influence the battery industry;
- Understanding of the requirements and conditions that will be / is created by European regulations.

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 European Batteries Partnership
- ✓ sharing and supporting the objectives of European Batteries 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
Large (headcount>5000 and turnover >1,5bn€)	9.500,00 €
Intermediate (headcount 250-4999 or turnover 50ml-1,5bn €)	7.500,00 €
Medium* (headcount 50-249 or turnover 10-50ml €)	5.000,00 €
* SMEs (headcount 50-249 and turnover <50ml €)	2.500,00 €
Small (headcount<50 and turnover <10ml €)	1.500,00 €
Research members (non profit)	
Large (headcount>250)	4.000,00 €
Small (headcount<250)	2.500,00 €
Associate members (membership without voting right)	
Associations, NGOs and other stakeholders	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)
- 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.

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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/decreed establishing the organisation

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

Legal organisation's address: