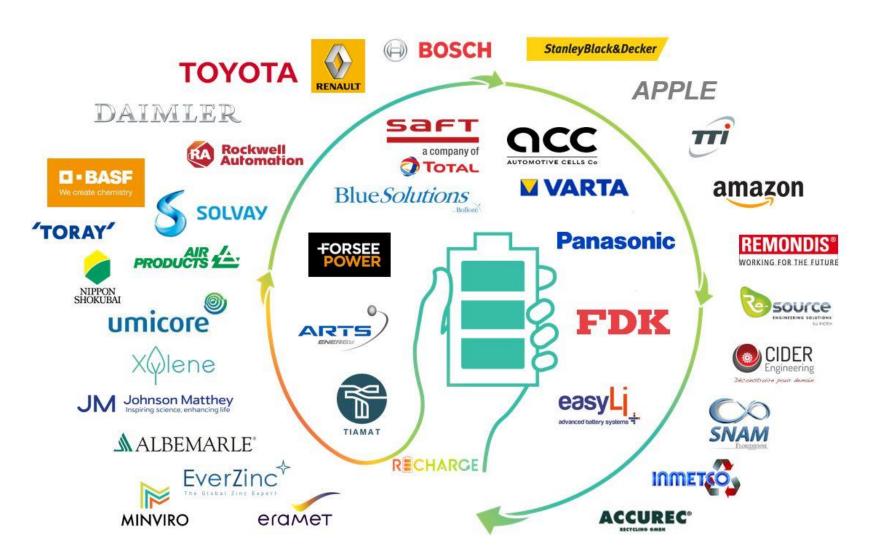


## Industry perspective for a competitive European battery industry: initiatives, regulation and research framework

Claude Chanson General Manager, RECHARGE Swiss Battery Days, February 17<sup>th</sup>, 2021





Association Members























## Batteries: a new global EU strategic approach

- 1. Green deal: strategic for climate change, is calling for the batteries energy storage.
- 2. EU Batteries Alliance: a new informal group, strategic for auto industry, end industrial development.
- 3. The EU Commission strategic action plan, and the batteries Regulation: a new regulating approach to support the industry.
- 4. The research funding: new priority and organization.





- 1. The European Batteries Alliance and following initiatives
- 2. The new EU Batteries Regulation
- 3. The new framework for EU funded Batteries Research







## The EU batteries Alliance



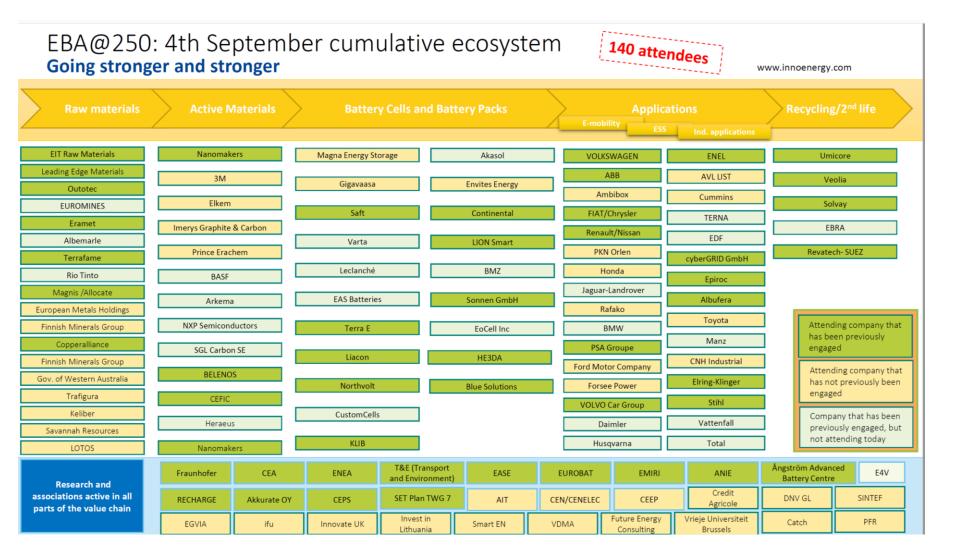


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## The EU batteries Alliance





## Batteries are part of the EU Green Deal

#### **GREEN DEAL TIMELINE**





## The Commission proposed legislative approach

#### Framework:

Strategic Action Plan on Batteries of May 2018 announced that the Commission would "put forward battery sustainability 'design and use' requirements for batteries to comply with when placed on the EU market".

Political guidelines in the European Green Deal: new industrial strategy + climate neutrality by 2050 + Carbon Border Tax to be gradually rolled out

#### <u>Process</u>

Implementation in the ongoing revision of the Batteries Directive, including the "sustainability initiative" (ex-"Batteries Ecodesign")







## Commission Proposal: The next milestone in delivering on the Strategic Action Plan on Batteries

European policymakers are now in the unique position to translate the EU's vision for sustainable, innovative and competitive batteries "made in Europe" into a meaningful legislative framework that will close the gaps in existing legislation and can level the playing field with international actors.



Support the competitiveness potential of the European battery ecosystem

Lean and Coherent Legislation





Value Chain Approach





## A new Batteries Regulation

The proposal for a new Batteries Regarlation was published by the EU Commission on December 10, 2020.

- COM(2020) 798/3: Proposal for a Regulation
- COM(2020) 798/3: Annexes 1 to 14
- SWD(2020)335 final Part 1: Impact Assessment (main report)
- SWD(2020)335 final Part 2: Impact Assessment (Annexes 1 to 8)
- SWD(2020)335 final Part 3: Impact Assessment (Annex 9)

#### LEGISLATIVE DATES

Publication of Commission proposal on 10/12/2020

- Batteries Regulation
- Annexes

Presentation of Commission proposal at Environment Council on 17/12/2020

EU Council's ENVI Working Party will discuss the file on 7/1/2021

Appointment of Rapporteur by European Parliament -> Report (and opinion)

Council will hold technical and political discussions to establish own position

March 2021 EU Council will debate their joint political orientation.



## New Regulation Objectives

Strengthening the functioning of the internal market by ensuring a level playing field through a common set of rules

- Fostering the production and placing on the EU market of high-quality batteries
- Ensuring functioning markets for secondary raw materials and related industrial processes
- Promoting innovation and the development and take-up of EU technological expertise

Promoting a circular economy

- Increasing resilience and closing the materials loop
- Reducing the EU's dependence on imports of materials of strategic importance
- Ensuring appropriate collection and recycling of all of waste batteries

Reducing environmental and social impact throughout all stages of the battery life cycle





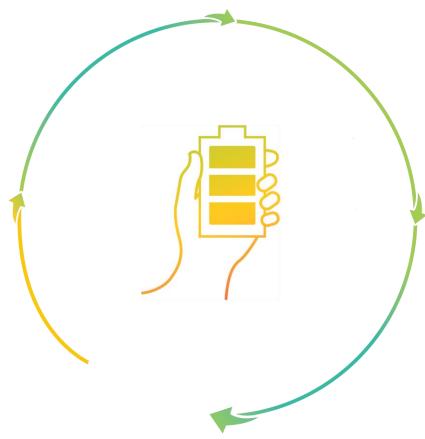
## Today's Regulatory Battery Framework

#### MANUFACTURING

- Batteries Directive
- Chemicals safety REACH, RoHS
- Workers protection OSH
- Local permits
- ETS/CBAM

#### **EXTRACTION & REFINING**

- Chemicals safety REACH
- Local permits
- ETS/CBAM
- Workers protection OSH
- Voluntary ILO Principles
- Voluntary Due Diligence Guidance
- UN SDGs
- Trade treaties



#### **TRANSPORT**

- UN transport regulation
- National transport legislation

#### USE

- Product safety
- Labelling
- · CE
- Declaration/PoM

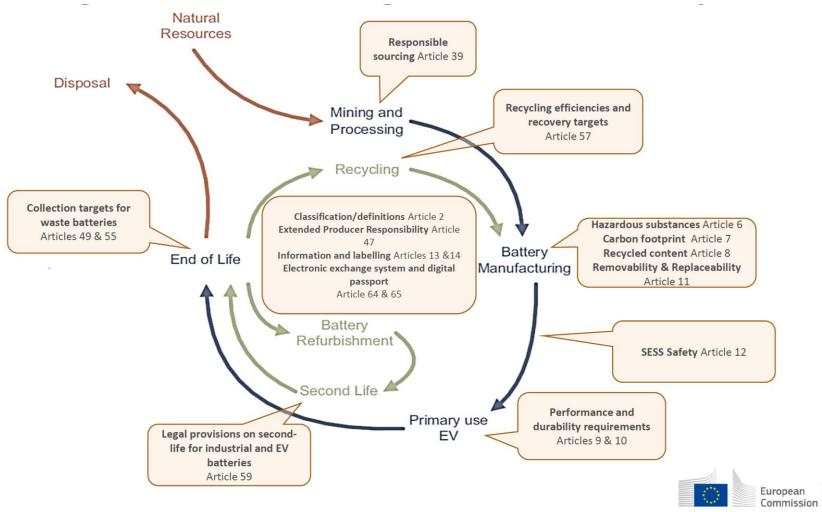
#### END-OF-LIFE

- Batteries Directive
- WFD, WEEE, ELVD, WSR
- UN and national transport regulation





## Full life cycle coverage







# Industry's Assessment of the Batteries Regulation in a nutshell

#### **RECHARGE** welcomes:

- 1. Recognition of batteries' strategic role
- 2. Relevant updates
- 3. Objective to create coherence
- Legal basis creating a high level of predictability
- 5. Inclusion of additional key sustainability pillars :
  - CO2 footprint
  - Due Diligence
  - Battery Passport
  - Green public procurement

In light of "Better Regulation", RECHARGE proposes to:

- 1. Ensure feasible timelines
- 2. Harmonize overlaps within Batteries Regulation/with other frameworks
- 3. Reduce complexity for SMEs and niche markets
- 4. Reduce complexity by focusing on realbenefits provisions
- 5. Strengthen enforcement and level playing field





# Industry's Assessment of the Batteries Regulation in a nutshell

- The draft Batteries Regulation adds important key sustainability pillars (carbon footprint, due diligence, green procurement)
- Is not only a revision but fully repeals the existing Batteries Directive
- New legislative basis allows for important predictability - MS interpretations have created significant administrative/market obstacles
- Better reflects today's battery market (chemistry and applications)
- Good selection of areas for secondary legislation → allows thorough technical implementation in key areas

However, the draft Batteries Regulation also:

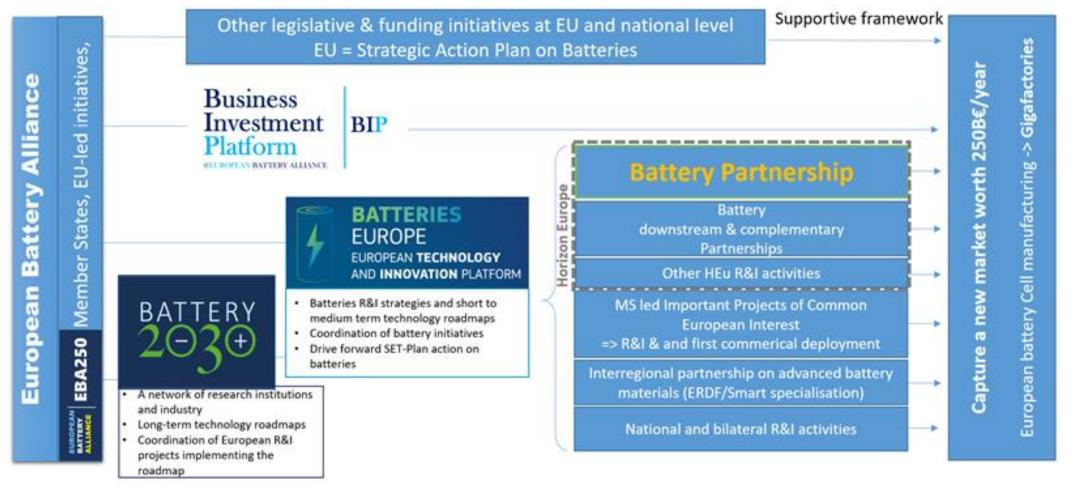
- Creates increased complexity by:
  - Sheer number of new measures
  - Complexity within the measures
- Features several overlaps within the Regulation and with other frameworks:
  - Chemicals management
  - Horizontal/overarching legislation (e.g. UN safety)
  - Overlapping circular economy requirements
  - Information/declaration/labelling provisions
- Definition of measures scopes are too broad to be effective:
  - Performance, durability criteria
  - BMS  $\rightarrow$  2<sup>nd</sup> life
  - Recovery and recycling efficiency targets
- Foresees challenging timeframes







## New Research ecosystem for Batteries







## New funding coordination: BEPA

#### Other R&I activities

(under Horizon Europe, IPCEIs, S3 interregional partnership, national and bilateral instruments, etc)

#### Other partnerships

Battery downstream and complementary WP under Horizon Europe

> Coordination I Collaborations (facilitated by ETIP Batteries Europe)

Feedback for SRIA Roadmap update



Inputs to define R&I calls (SRIA,

Technology

Roadmaps)

#### **BATTERIES EUROPEAN PARTNERSHIP**

- Identify the first priority topics to be implemented in its R&I work programmes
- Support and oversee the portfolio of funding projects
- Reinforce networks between industry, RTOs, Universities, and other organisations.
- · 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

Innovation and Technology Transfer

Skills development

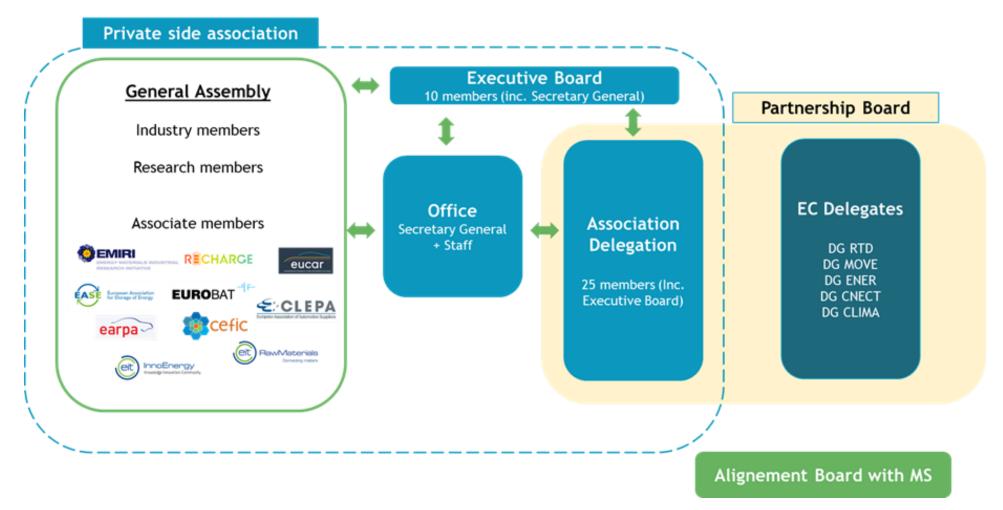
Horizon Europe Pillar 3 and other market update instruments InnoEnergy RawMaterials **INNOVATION FUND** European Investment Bank The EU bank







## New funding coordination: BEPA







## BEPA scope

Raw Materials

Advanced Materials

Modules

Packs

Application Integration

End-oflife

#### AREA 1 Raw Materials and Recycling

**SO1**: Provide the European Industry with differentiating technologies, supporting the development of an innovative, competitive and sustainable battery manufacturing industry in Europe

TO4: Reduce battery cost - 60%

**TO6:** implement BAT in manufacturing and recycling operations (plants 4.0 or 5.0)

### AREA 2 Advanced Materials and Manufacturing

**SO1**: Provide the European Industry with differentiating technologies, supporting the development of an innovative, competitive and sustainable battery manufacturing industry in Europe

Cells

TO1: Increase energy density +60%

**TO2**: Increase power density and charging rate (charging time < 20')

TO3: Improve cycle lifetime > 2x

TO4: Reduce battery cost - 60%

**TO6**: implement BAT in manufacturing and recycling operations (plants 4.0 or 5.0)

### AREA 3 Battery end-uses and operations

**SO2**: Develop sustainable and affordable battery solutions for clean mobility

**SO3**: Enable a cost-effective integration of renewable energy sources in the power grid

TO1: Increase energy density +60%

TO2: Increase power density and charging rate

(charging time < 20')

TO3: Improve cycle lifetime > 2x

# AREA 6: Coordination

AREA 4 - Safety

TO5: Ensure battery safety

#### AREA 5 - Sustainability

TO7: Improve sustainability and circularity



#### Thank you

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