BATT4EU
Batteries European Partnership

BEPA
Batteries European Partnership Association

# Sixth BEPA General Assembly

**Tuesday, 16 May 2023 – 9:45-12:30**

# Introductory Remarks

## Michael Lippert

*BEPA President*

# Welcome & Practical Aspects

**Philippe Jacques**

*BEPA Secretary General*

# 1. Welcome and Practical Aspects for Virtual Participants

- The meeting is **recorded**.
- During discussions, please **post comments in the chat i**f you would like to intervene. The BEPA staff is monitoring the chat and Q&A and will make your voice heard.
- If you encounter **technical issues**, please send a message in the chat.
- The **slides** and **minutes** of the meeting **will be shared** with all BEPA members after the General Assembly.

# Agenda

| TIME | ITEM |
|---|---|
| 9:00-9:45 | ***Registration process*** |
| 9:45-10:00 | *Welcome* |
| 10:00-10:30 | *Updates from the Board*<br>• *Update on the development of the SRIA*<br>• *Update on the development of the Monitoring Framework*<br>• *Reminder for the In-Kind Additional Activity Reporting* |
| 10:30 – 10:50 | *Final BEPA Financial Statements of 2022* – ***FOR DECISION*** |
| 10:50 – 11:00 | *Elections for the 2 open board positions* – ***FOR DECISION*** |
| 11:00-11:30 | ***Refreshment break /voting*** |
| 11:30-11:45 | *Announcement of election results* |
| 11:45-12:05 | *New member applications* – ***FOR DECISION*** |
| 12:05-12:15 | *BEPA/BATT4EU Activities in 2023* |
| 12:20-12:30 | *Closing remarks* |
| 12:30-14:00 | ***Lunch Break*** |

# Updates from the board

## Simon Perraud

*BEPA Vice-President*

## Franz Geyer

*BEPA Executive Board member*

# Many proposals for first batch of battery calls in 2023

*Three more calls are open until September 5*

| | | Budget total (million EUR) | Expected Projects | Proposals |
|---|---|---|---|---|
| D2-01-01 | DOWNSTREAM PROCESSING & PRODUCTION OF BATTERY-GRADE MATERIALS | 21 M | 3 | 12 |
| D2-01-02 | UPCOMING RECYCLING FEEDS | 15 M | 3 | 13 |
| D2-01-03 | DIGITAL TWEENS FOR BATTERY CELL PRODUCTION LINES | 14 M | 2 | 15 |
| D2-01-04 | BMS & BATTERY DESIGN FOR STATIONARY ESS | 15 M | 2 | 12 |
| D2-01-05 | HYBRID ELECTRIC ENERGY STORAGE SOLUTIONS | 12 M | 2 | 18 |
| | | | 12 | 70 |

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# Changes to the ‘24 Work Programme

*Topic on materials acceleration platform reintroduced in 2024. Virtual testing topic postponed.*

| Topic titles Batt4EU Work Programme | Budget total | Per project |
|---|---|---|
| Advanced sustainable and safe pre-processing technologies for End-of-Life (EoL) battery recycling | 16 (-5) | 8 (+1) |
| Non-Li Sustainable Batteries with European Supply Chains for Stationary Storage | 21 | 7 |
| Development of technical and business solutions to optimise the circularity, resilience, and sustainability of the European battery value chain | 21 | 7 |
| Sustainable high-throughput production processes for stable lithium metal anodes for next generation batteries | 8 | 8 |
| Post-Li-ion technologies and relevant manufacturing techniques for mobility applications (Generation 5) | 15 | 5 |
| Size & weight reduction of cell and packaging of batteries system, integrating lightweight and functional materials, innovative thermal management and safe and sustainable by design approach | 16 | 8 |
| 2025 Accelerated multi-physical and virtual testing for battery aging, reliability and safety evaluation | 15 | 7.5 |
| NEW! Furthering the development of a materials acceleration platform for sustainable batteries (combining AI, big data, autonomous synthesis robotics, high throughput testing) | 20 | 1 |

# Next steps for the SRIA update

*From Batteries Roadmap to common SRIA*

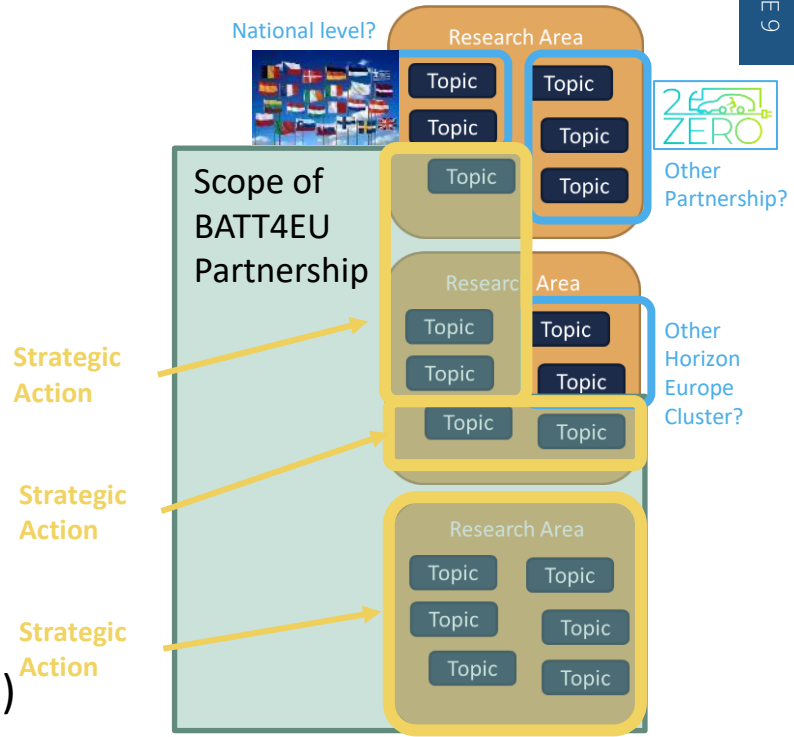
1. Define topics within Strategic Research Areas as defined in the Roadmap

2. Check with Batt4EU scope

3a. Define BATT4EU Strategic Actions

3b. Recommendations for topics outside BATT4EU scope

4. Prioritisation of BATT4EU topics (input for WP'25)



# BEPA/ BATT4EU monitoring duties in 2023

*Reminder of the monitoring efforts that need to be done*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# BATT4EU Monitoring Framework

*KPIs to judge the functioning of the Partnership*

Main points being updated:

- A definition of “new chemistries” (<TRL4 at start of the Partnership) and a relevant target for projects funding these projects
- Environmental and recycling targets based on Batteries Regulation

Main open question:

- Is it feasible to report on battery production in Europe? Currently the Monitoring Framework uses EV sales as a proxy.

# BATT4EU Monitoring Framework

*KPIs to judge the functioning of the Partnership*

Next steps:

- BEPA Office will update monitoring framework in May/June based on Working Group input
- Discussion on the final proposals in the BEPA Association Delegation
- Discussion of the proposals with the European Commission as part of the update of the SRIA

# In-Kind Additional Activity Reporting

*Essential for continued funding for the Partnership / battery topics*

- Provide your information on the additional activities your organisation has conducted between June 2021 and December 2022.
- Reporting your in-kind activities is crucial for the future of the Batt4EU Partnership and funding for batteries under Horizon Europe (and future programmes) to continue.
- Individual figures that are provided will not be subject to auditing and not shared beyond the BEPA Office.
- A tutorial video was sent as part of the last reminder.
- The deadline for sending your information to the BEPA Office is **May 23.**

# Updates from the board

## Q&A

# BEPA Financial Accounts


## Kurt Vandeputte

*BEPA Vice President and Treasurer*

# BEPA financial accounts for 2021

*Unpaid membership fees for 2021*

| Organisation | Amount still to be paid | Status |
|---|---|---|
| Cajo Technologies Oy | 1.025 € | Proposal to exclude |
| INGECAL SA | 1.958 € | Proposal to exclude |
| Sivas Bilim ve Teknoloji Üniversitesi | 2.958 € | Proposal to exclude |
| Farplas Otomotiv Anonim Sirkiti | 8.250 € | Already resigned |
| **Total** | **14.191 €** | |

# BEPA financial accounts for 2021

*Exclusion of members on the basis of unpaid membership fees*

**Proposed resolution submitted to the formal approval of the General Assembly:**

*"The General Assembly approves the exclusion of the aforementioned organisations with immediate effect in accordance with BEPA Articles of Association 7.3."*

**Any objections? Abstentions?**

# BEPA financial accounts for 2022

*Income (as of 31-12-2022)*

| | Budget categories | 2022 budget | Amount presented at last GA | Final figures | Comments |
|---|---|---|---|---|---|
| | Revenue | | | | |
| MF | Membership Fees + Working Capital | | € 832.392 | € 803.076 | Figures at last GA had not taken into account retracted memberships |
| | *Still to be received* | | | *€ 63.495* | *As of 31/3/2023: € 59,495* |
| | **Total Revenue** | **€ 801.500** | **€ 832.392** | **€ 803.076*** | |

# BEPA financial accounts for 2022

*Expenditures*

| Budget categories | | 2022 budget | Amount presented at last GA | Final figures |
|---|---|---|---|---|
| | Expenditures | | | |
| SEC | SecGen & Staff | € 522.500 | € 522.500 | € 522.500 |
| CON | Consultancy | € 30.000 | € 30.000 | € 3.630 |
| COM | Communication | € 25.000 | € 22.000 | € 18.828 |
| ITE | IT | € 10.000 | € 7.000 | € 10.413 |
| REC | Meetings / Events | € 102.500 | € 80.000 | € 103.038 |
| TRA | Travel | € 10.000 | € 6.000 | € 5.488 |
| ACC | Accounting + audit + financial charges | € 30.000 | € 30.000 | € 14.406 |
| REN | Housing | € 35.000 | € 30.000 | € 27.664 |
| STR | Staff training | € 10.000 | € 3.450 | € 2.200,00 |
| RES | Reserve | € 25.000 | € 25.000 | € 14.191,66 |
| | | € 800.000 | € 755.950 | € 722.359 |

# BEPA financial accounts for 2022

*Results*

| Budget categories | | 2022 budget | Final figures | Comments |
|---|---|---|---|---|
| | Revenue | | | |
| | Membership Fees + Working Capital | | € 803.076* | * Of which still to receive: € 63.495 |
| | **Total Revenue** | **€ 801.500** | **€ 803.076*** | |
| | | | | |
| | Expenditures | | | |
| | **Total Expenditures** | **€ 800.000** | **722.360** | |
| | Result | | **€80.716** | |
| | | | | |
| | Balance of previous year | | **€ 490.984** | |
| | New balance | | **€ 571.700** | |

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# BEPA financial accounts of 2022

*Approval of BEPA financial accounts for 2022*

**Proposed resolution submitted to the formal approval of the General Assembly:**

*"The General Assembly approves the accounts of 2022 and discharges the Executive Board of its obligations."*

**Any objections? Abstentions?**

# BEPA financial accounts for 2022

## Q&A

# Elections for the open board positions

## Philippe Jacques

*BEPA Secretary General*

# Elections for the open board positions

## *Open positions*

| Sector | Executive Board | Association Delegation |
|---|---|---|
| Raw materials | **[VACANT]** | **Madeleine Scheidema** (Metso Outotec) |
| Advanced materials | **Kurt Vandeputte** *(Umicore)* | **Daniel Gloesener** *(Solvay)* |
| | | **Ilaria Pucher** (Green Energy Storage) |
| Manufacturing | **Michael Lippert** *(SAFT)* | **Bernhard Riegel** *(Hoppecke Batteries)* **+ Daria Hedberg** *(Geyser Batteries)* **+ Olivier Colas** *(Blue Solutions)* |
| Manufacturing supply | **Gian Carlo Tronzano** (COMAU) | **Stefano Saguatti** *(Manz)* |
| Automotive | **Franz Geyer** *(BMW)* | **Moritz Teuber** *(FEV)* |
| Automotive supply | N/A | **Christophe Petitjean** *(Valeo)* |
| Other applications | **Luigi Lanuzza** *(Enel X)* | **Laurent Torcheux** *(EDF)*, **Federico Cartasegna** *(FPT Industrial)* |
| Recycling | **Justo Garcia** (Orano) | **Tero Holländer** *(Fortum)* |
| Research | **Simon Perraud** *(CEA)* **& Edel Sheridan** *(SINTEF)* | **Victor Trapp** *(Fraunhofer)*, **Kristina Edström** *(Uppsala University)*, **Oscar Miguel Crespo** *(CIDETEC)* |
| Other | Secretary General: **Philippe Jacques -** *(EMIRI)* | |

# Executive Board position for the raw materials sector

*Candidates*

**Madeleine Scheidema**

**Metso**

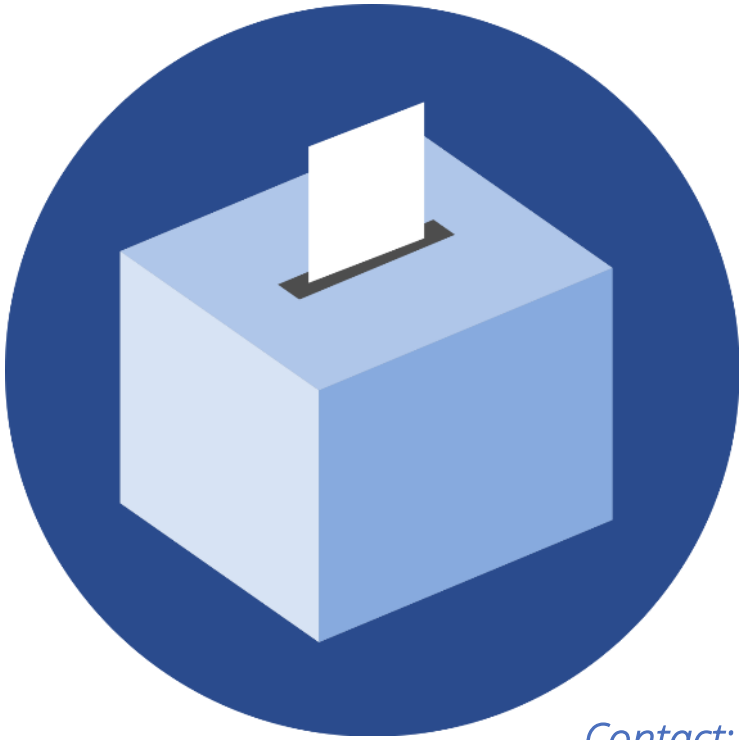
# Association Delegation position for the other applications sector

*Candidates*


**Belén Neira**

**VOLVO Group**

# Vote now!





*E-mail not received?*
*Contact: t.perruchoud@bepassociation.eu*

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# *Refresher Break and voting – 30 Minutes*



# Elections results



**Madeleine Scheidema**
Metso


**Belén Neira**
VOLVO Group

# New member applications

## Luigi Lanuzza

*BEPA Executive Board member*

# BEPA New Members

*14 members proposed for confirmation*



| Name | Category | Country |
|---|---|---|
| CSEM - Centre Suisse d'Electronique et de Microtechnique | Research - Large | Switzerland |
| SNF S.A. | Industry - Intermediate | France |
| SIRO Silk Road Temiz Enerji Depolama Teknolojiteri San ve Tic A.S. | Industry - Medium | Turkey |
| University of Bologna | Research - Large | Italy |
| SOLiTHOR B.V. | Industry - Small | Belgium |
| Turku University of Applied Sciences | Research - Large | Finland |
| Twente Board Development B.V. | Associate | Netherlands |
| Siemens Industry Software N.V. | Industry - Large | Belgium |
| Fundación CARTIF | Research - Small | Spain |
| Fundecyt-PCTX – Iberian Research Centre on Energy Storage | Research - Small | Spain |
| Idener Research and Development A.I.E. | Research - Small | Spain |
| University of Agder | Research - Large | Norway |
| Efectis France | Industry - Intermediate | France |
| Hycamite TCD Technologies Oy | Industry - Small | Finland |

# 3. BEPA New Members - Vote

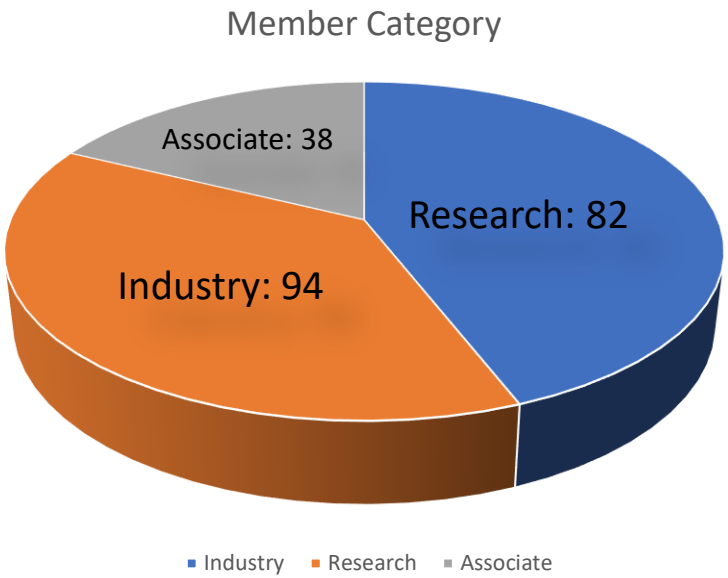
*Approval of new members*

**Proposed resolution submitted to the formal approval of the General Assembly:**

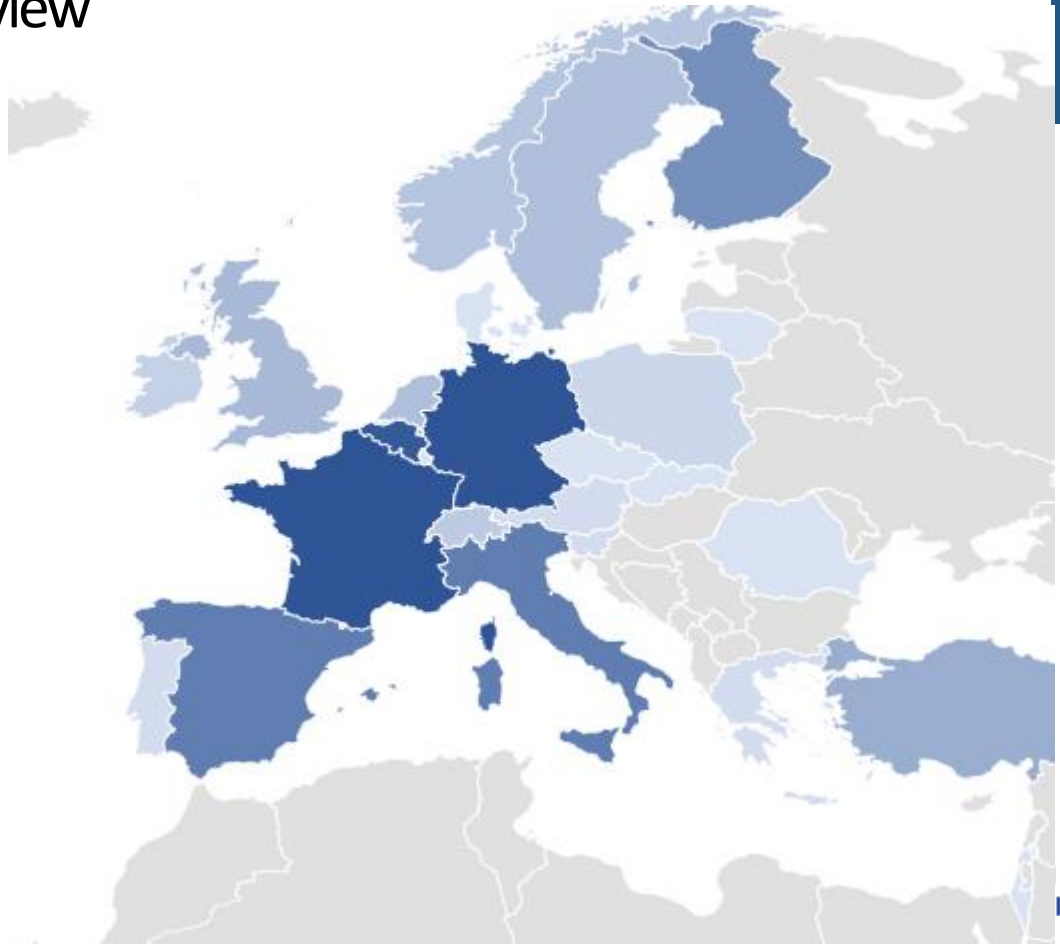
*"The General Assembly grants membership to the new BEPA members as presented today."*

**Any objections? Abstentions?**

# 3. BEPA New Members - Overview




**Total BEPA members: 214**





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IP

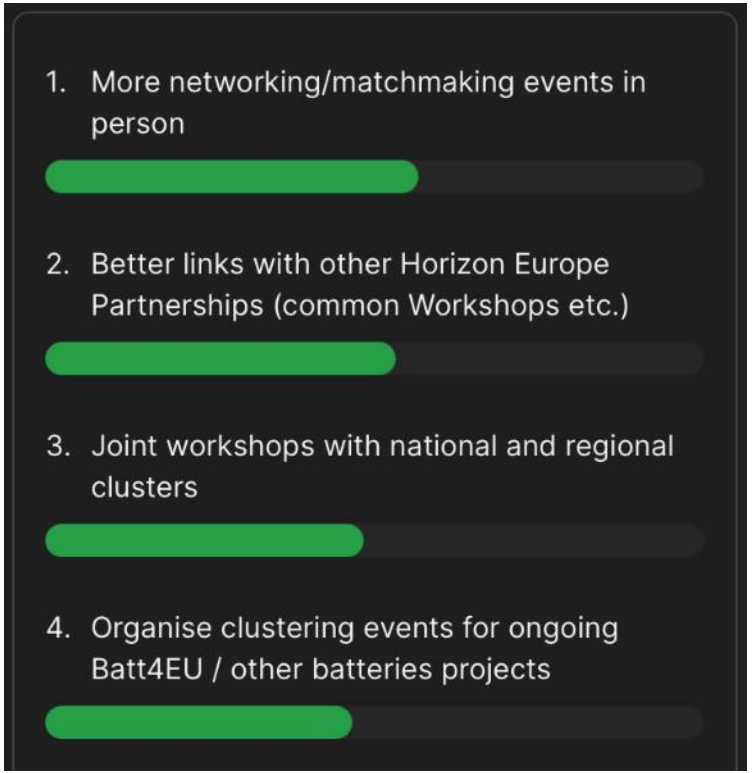
# What's next for BEPA and BATT4EU?

**Philippe Jacques**

*BEPA Secretary General*

# BEPA actions for 2023

*Reminder: survey at last General Assembly*



# Battery Innovation Days in Bordeaux

- Battery Innovation Days in Bordeaux on November 14-15
- First BIDs outside Brussels, focus on national/regional initiatives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# Additional day attached to BIDs (November 16)




Topics under consideration


Innovation uptake


Matchmaking


Clustering event with Battery2030+ (either kick-off for new CSA or IP workshop)

…

# Better links with other Partnerships / initiatives



| | | |
|---|---|---|
| Applications | **2Zero Road Transport** | Joint workshop with the JRC in autumn, including information exchange on the Battery Regulation |
| | **Zero-Emission Waterborne Transport** | Joint workshop with nominated experts to align research targets on **June 7** |
| | **Europe's Rail JU (FP4 Rail4Earth)** | Joint workshop with nominated experts to align research targets on **May 30** |
| | **Clean Aviation** | Close alignment about SRIA and roadmap via common stakeholders |
| Manufacturing | **MadeinEurope** | Joint workshop later in the year |
| | **EIT Manufacturing** | Preparation of Memorandum of Understanding for more cooperation |

# Joint workshops with national and regional clusters



Better collaboration with and within the National and Regional Coordination Group:

- The NRCG will expand its governance with a coordinators group
- The coordinators will lead smaller thematic Working Groups on key topics
- First hybrid NRCG meeting on **June 16** in Brussels, including a presentation of results from Battery 2030+ series of workshops on EU-national alignment on long-term battery research.
- First step in setting up a structure that will allow for more continuous and meaningful exchange between initiatives on EU and member state level

# Joint workshops with national and regional clusters



Other initiatives:

- BEPA joined the Executive Committee of the IEA Technology Collaboration Programme on Hybrid and Electric Vehicles on **April 19**. Possible alignment of task un this programme and Horizon Europe programme. There is overlap in state representatives within the HEV-TCP and the BEPA NRCG, so that will be beneficial.
- BEPA was present at a national battery day in Portugal on May 4 and will be present at Horizon4Poland’23 in November

# Activities for 2023

## Q&A

# Concluding Remarks

## Philippe Jacques

*BEPA Secretary General*


# See you at 14:00!

**BATT4EU**
**info@bepassociation.eu**
**BEPA Office**
**info@bepassociation.eu**

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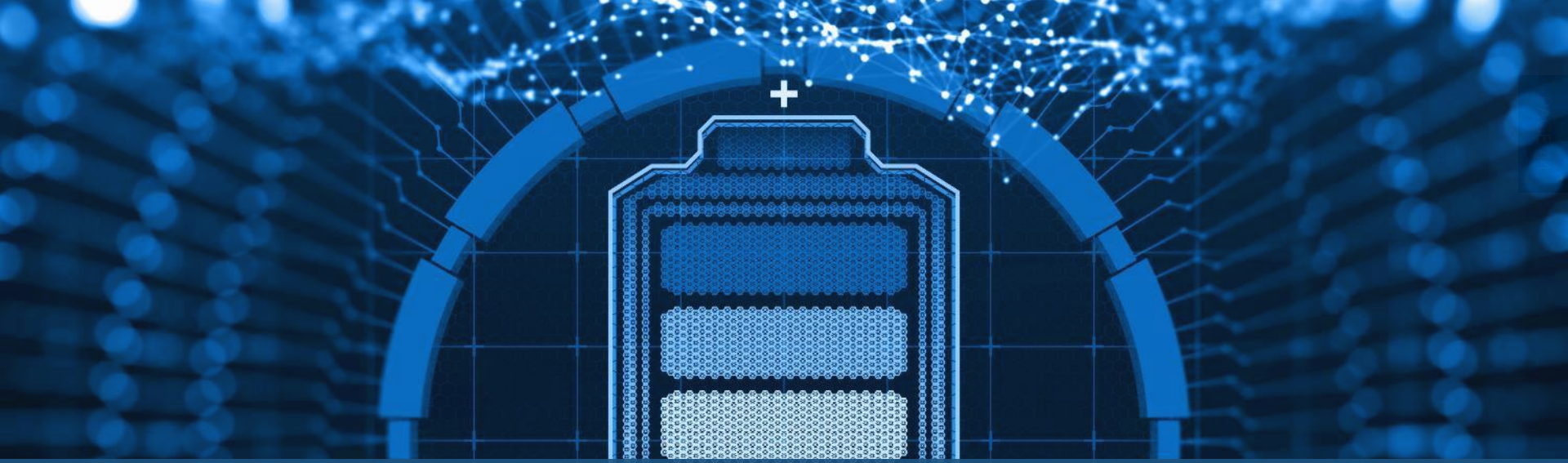

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# EUROPEAN COMPETITIVENESS WORKSHOP

**Keeping European Battery Research and Industry Competitive in a Changing World**

**Tuesday, 16 May 2023 – 14:00-17:30**

# Welcome and practical aspects

Simon Perraud

*CEA*

# Agenda

| TIME | ITEM |
|---|---|
| 14:00-14:10 | **Welcome and practical aspects** |
| 14:10-14:30 | **Setting the scene: the changing global landscape**<br>*(incl. 5mn Q&A session)* |
| 14:30-14:50 | **EU Policy update: the Net-Zero Industry Act and other measures**<br>*(incl. 5mn Q&A session)* |
| 14:50-15:50 | **Round table : What does the European industry need right now?**<br>*(incl.15 mn Q&A session)* |
| 15:50-16:20 | **Coffee Break** |
| 16:20-17:15 | **Round table : how can R&I keep the European battery value chain competitive?**<br>*(incl. 15 mn Q&A session)* |
| 17:15-17:30 | **Conclusion and closing remarks** |

# Setting the scene: the changing global landscape

Andrea Casas

*CIC EnergiGUNE*

CIC energiGUNE

MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

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BEPA GENERAL ASSEMBLY

# The global changing in the battery landscape

Andrea Casas Ocampo

*Sustainability Specialist at CIC energiGUNE*

# WHO ARE WE?

## CIC ENERGIGUNE INTRODUCTION

# CENTER OVERVIEW

Through our activity, we seek to drive the value chain of batteries, thermal storage and conversion as well as hydrogen technologies

CIC energiGUNE
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

*AT A GLANCE*

## Research areas

- *Electrochemical energy storage*
- *Thermal energy storage and conversion*
- *Hydrogen*

## Yearly Activity

**125** publications/year

**75** industrial projects

**30** European projects

## Human team

**190** people

**25** nationalities

**50%** women/men

## Awards

- *Top 3 European storage center*
- *Leading research foundation in Iberoamerica* (SCIMAGO)
- *6 researchers in Stanford's top ranking*

## 2 spin-offs launched

BASQUEVOLT

Bcare

## Prototyping and Industrialization

*Unique battery prototyping line with dry room in Southern Europe. Benchmark center in solid state batteries*

*Pioneering platform for testing industrial components under extreme thermodynamic conditions*

# CENTER OVERVIEW

Within our energy electrochemical storage research, we seek to develop and transfer valuable knowledge and solutions to industry

***We focus on three major applications in the field of electrochemistry***

Transversal lines

- Life Cycle Assesment
- Life Cycle Cost
- Scaling up and industrialization
- Digitalization

## 1 Stationary

Development of state-of-the-art technologies, such as integration of renewable generation, support of grid management and recharging, self-consumption, lighting...

## 2 Mobility

CIC energiGUNE is the reference center in Europe for the development of solid-state batteries, which will provide electric cars with greater safety and energy densities

## 3 Portability

Development of battery technologies for mobile phones, batteries for portable and point-of-care medical devices, printed batteries and/or flexible batteries

**End-users**

# BUILDING A REAL SUSTAINABILITY

We contribute with our science and technology from environmental, business and social perspective

**Environmental Analysis**

Definition of the environmental footprint of our technologies based on LCA approach

**Legal Analysis**

Identification of the new regulatory frameworks approved and their global impact on our activity


**Market analysis**

Identification of the main economic and other trends related to our scientific-technological activity

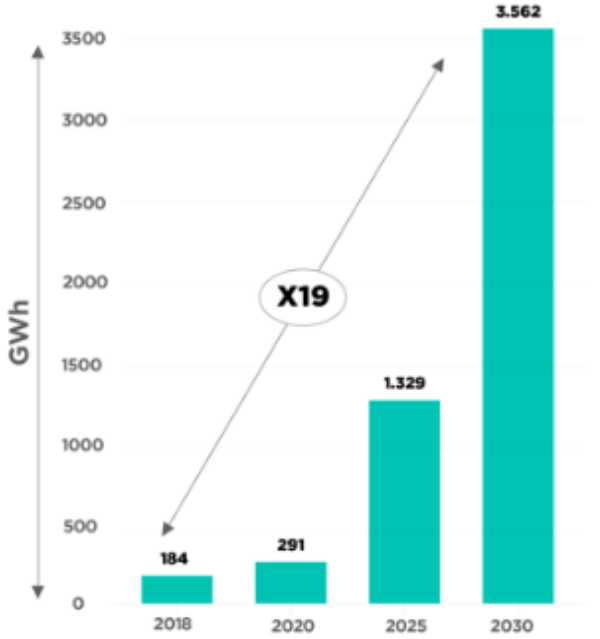
# BATTERY LANDSCAPE

## THE CURRENT GLOBAL CHANGING

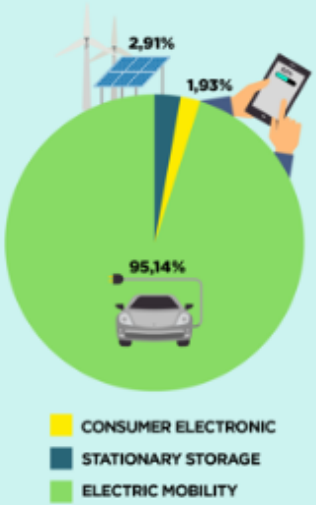
# OVERVIEW OF THE BATTERY LANDSCAPE

Demand forecasts for the battery market position the industry as one of the most strategic and attractive sectors for the future

**EXPECTED DEMAND FORECAST FOR ENERGY STORAGE DURING THE UPCOMING YEARS**




**DEMAND IN 2030 BY APPLICATION**




**Reasons for this momentum and growth**

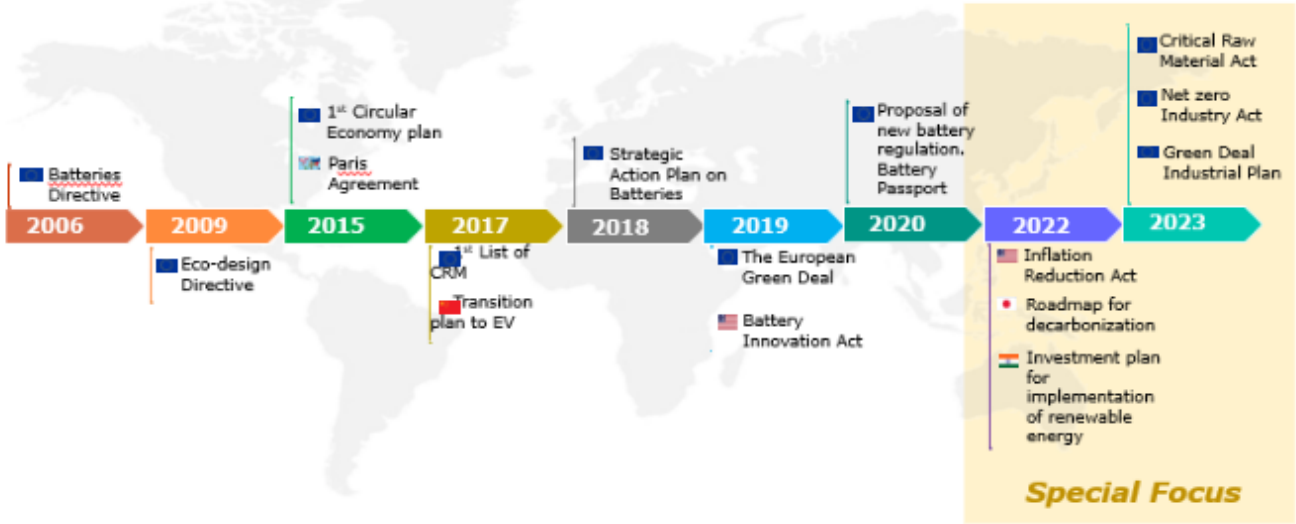
*Demand and compliance with climate objectives*

*New technological solutions capable of matching or surpassing the performance and costs of conventional alternatives*

# OVERVIEW OF THE BATTERY LANDSCAPE

Due to this situation, currently a "race" is taking place between countries (and economic interests) that is favoring the deployment of the industry

*Different examples over the last years show initiatives to create the best possible framework for the development of technologies such as batteries and attraction of their related investments*



# UNITED STATES

Trough the "Inflation Reduction Act" (IRA), aid and credits for more than 30.6 billion dollars are expected by 2031 for battery industry

*Key aspects of the IRA and its regulation and incentives*

The **Inflation Reduction Act (or IRA)** is a US-approved plan that is considered by **many analysts** to be **"the most ambitious green investment plan in history"**

This is due to the **investments** that are contemplated for the **promotion** of **technologies** linked to **energy transition**: **more than US$ 400 billion**

Technologies such as **batteries** or **hydrogen** will benefit from **incentives** and **fiscal aid** aimed at **boosting** the **development** of projects such as **gigafactories** or **electrolyzer plants**

# EUROPE

A new regulatory framework has been defined to accelerate the continent's position as a world reference in the energy transition

## EU NET-ZERO INDUSTRY ACT

1 **REGULATORY FRAMEWORK**
Simplifying the regulatory framework for net-zero technologies.

2 **UPSCALING**
Scaling up manufacturing of net-zero technologies.

3 **COMPETITIVENESS**
Fostering competitive and resilient European net-zero industry.

+

## EUROPEAN CRITICAL RAW MATERIALS ACT

1 **EXTRACTION**
At least 10% of the EU's annual consumption for extraction

2 **PROCESSING**
At least 40% of the EU's annual consumption for processing

3 **RECYCLING**
At least 15% of the EU's annual consumption for recycling

4 **EXTERNAL SOURCES**
No more than 65% of key raw material consumption in EU may come from a 3rd country.

# EUROPE

In this context, Battery Passport plays a crucial role in increasing sustainability in the industry by providing transparency, traceability, and accountability

**The EU Battery Passport has a significant impact by promoting transparency and circularity in the battery industry**

All batteries will have a **clearly visible QR code** that provides all the **key information**: composition, capacity, results in key indicators, durability...

**Batteries** exceeding **2kWh** will have a **digital passport**, which will inform the **technical details** as well as **their percentage** of **recycled materials** used and **associated carbon footprint**

**Minimum percentages** of **recycled materials** to be contained in all batteries are set according to their nature: **16% cobalt**, **6% lithium**, **6% nickel** and **85% lead**

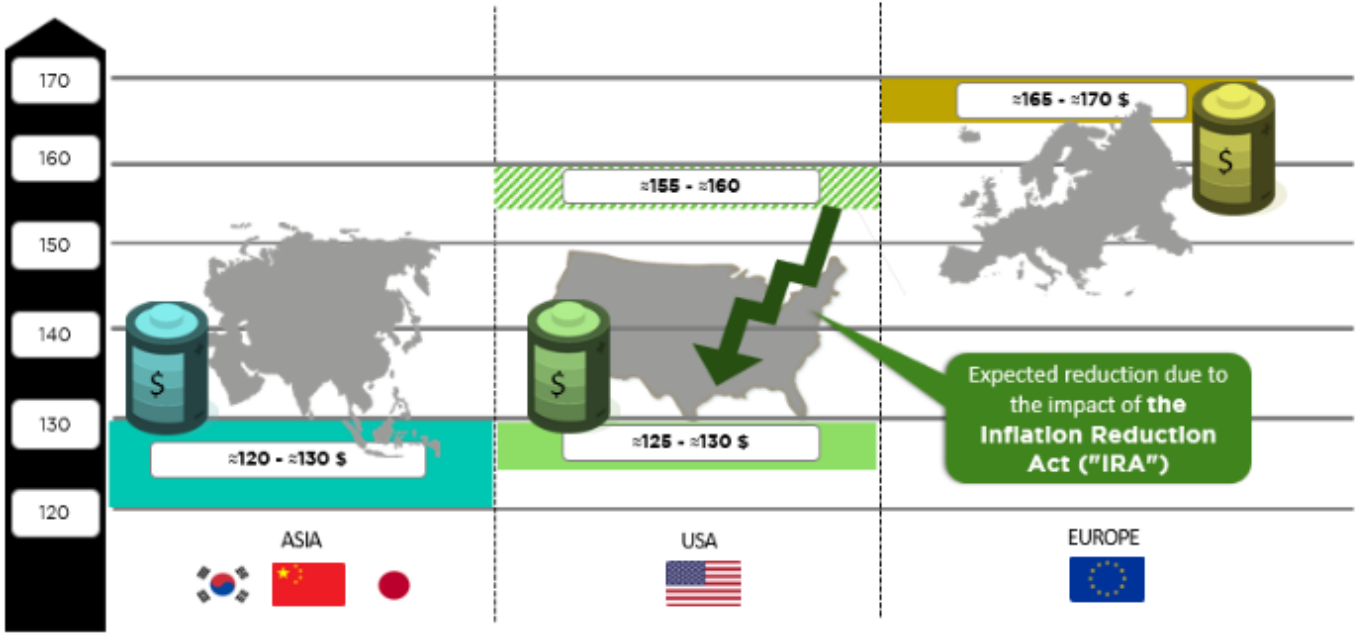
It is **mandatory** to **calculate** the **carbon footprint** of each **battery model** for its entire life cycle

A **"due diligence policy"** is established to **reduce** the **social** and **environmental risks** that may occur in the **activities** of **material sourcing**, **processing** and **marketing** of **batteries**

# WHY THESE INITIATIVES ARE RELEVANT

These initiatives are expected to generate an ecosystem of incentives that will attract investment and generate competitiveness in the industry

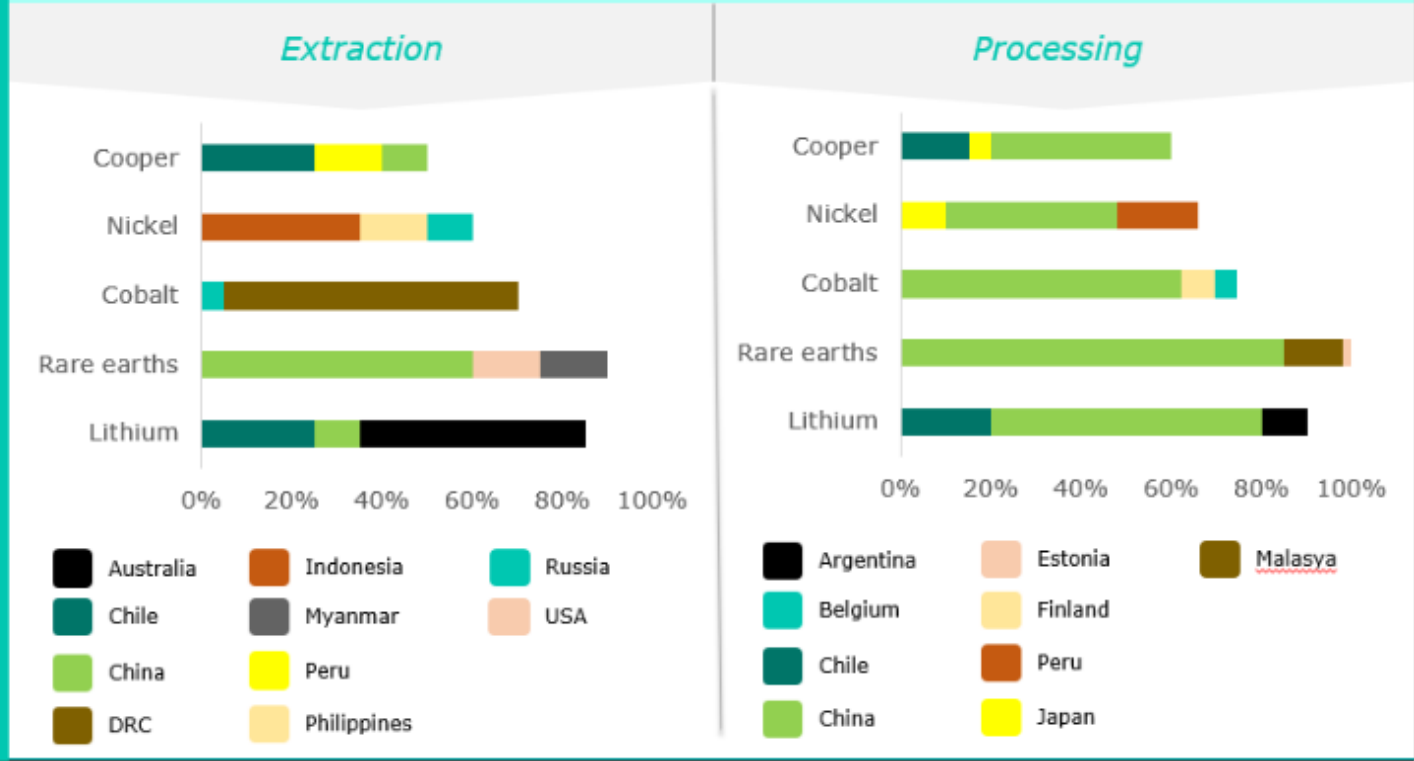
*Above all, the aim is to compete with China in terms of technology and price, for which standards such as the IRA provide for cost reduction through incentives*



# WHY THESE INITIATIVES ARE RELEVANT

It also focuses on generating conditions that guarantee the supply of raw materials, which are currently concentrated in the hands of a few

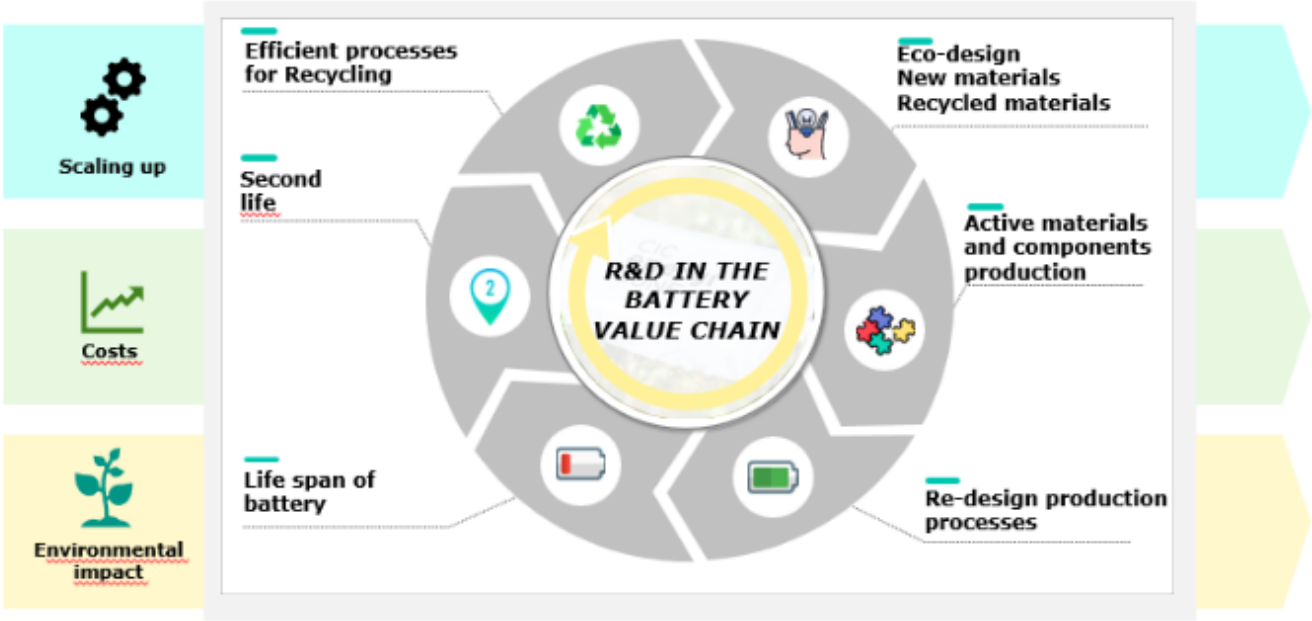
## Geographic distribution of the supply chain and capabilities



# THE ROLE OF RESEARCH AND INNOVATION

Development of new materials, designs and production processes allows will allow batteries meet the new standards in terms of safety, efficiency and sustainability

*Key technological developments have their foundations in the generation of knowledge, through disruptive research which responds to the challenges generated*



## THE ROLE OF RESEARCH AND INNOVATION

ADDRESSING THESE CHALLENGES REQUIRES CAREFUL PLANNING, SIGNIFICANT RESEARCH AND DEVELOPMENT, COLLABORATION BETWEEN INDUSTRY AND GOVERNMENT, AND A COMMITMENT TO ONGOING RESEARCH AND DEVELOPMENT

THIS WILL BE WHAT WILL CONSOLIDATE EUROPE AS A LEADER IN THE ENERGY TRANSITION

# THANK YOU

Andrea Casas Ocampo
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# Setting the scene: the Green Deal Industrial Plan and other measures

Jesse Terry

BEPA

# Overall policy context

**European Green Deal**

| Fit for 55 Package | REPowerEU | Green Deal Industrial Plan |
|---|---|---|
| • Reduce GHG emissions by 55% by 2030<br>• 13 legislative proposals to align policies with goals | • Energy Independence from Russia by 2030<br>• Short and medium term measures to enact by 2027 | • **Critical Raw Materials Act**<br>• **Net Zero Industry Act**<br>• **Electricity Market Reform** |

# Critical Raw Materials Act

*Addressing supply chain vulnerabilities*

| 2030 Targets | Policy measures | Skills & Sustainability |
|---|---|---|
| • 10% of EU annual consumption for extraction<br>• 40% of EU annual consumption for processing<br>• 15% of EU annual consumption for recycling<br>• No more than 65% of EU annual consumption of each SRM at any relevant stage from a single third country | • Streamlined permitting procedures for Strategic Projects (reduced to 1-2 years)<br>• Joint purchasing of SRMs on a voluntary basis<br>• Framework to monitor SRM stocks to mitigate supply risks | • Skills partnership on CRMs, and Raw Materials Academy<br>• Member States to improve collection of CRM waste, increase recycling and 2nd use<br>• Measures to improve maturity of recycling technology and substitution of CRMs |

# Net Zero Industry Act

*Building up the European industrial base*

| 2030 Targets | Policy measures | Skills & Sustainability |
|---|---|---|
| • EU manufacturing capacity of Net-Zero Technologies reaches 40% of annual deployment needs<br>• 40% highly ambitious for battery Cathodes and Anodes<br>• Manufacturing capacity of 5050 GWh (EBA)* | • Streamlined permitting procedures for Strategic Projects, 18 months for manufacturing projects<br>• Net-Zero regulatory sandboxes for lower TRL technologies to develop faster in controlled environment<br>• Public-private cooperation to create and maintain stable demand | • Specialised European Skills Academies on Net-Zero technologies<br>• Net-Zero Europe Platform to assist deployment of skilled workers improve engagement<br>• Circularity and sustainability practices favoured |

# Electricity Market Reform

*Enabling the integration of energy storage*

| Targets | Regulatory measures | Market Measures |
|---|---|---|
| • Regulatory authorites to asses needs for flexibility in electricity system completed by 2025, updates every 2 years after<br>• Member states to develop national objectives on non-fossil flexibility needs | • Streamlined process for connecting new generation and demand installations<br>• Transparent and continuously updated grid capacity info<br>• National capacity mechanisms to create green and flexible grid | • Redesigned national tariff methodologies incentivizing ESOs to procure more flexibility<br>• Aims to reduce sensitivity of electricity prices to gas-fired generation<br>• Investment certainty from contract length and price stability |

# Conclusions and analysis for EU battery industry

| Strengths | Weaknesses |
|---|---|
| • Strategic Project designation very beneficial for chosen projects<br>• Streamlined permitting removes significant regulatory burden<br>• Clear effort towards skills and education development | • Strategic projects, regulatory sandboxes, and targets set, monitored and enforced by Member States authorities<br>• Few new financial incentives for manufacturing and production |
| **Opportunities** | **Threats** |
| • Regulatory sandboxes and support for innovation good for battery research projects<br>• Likely improved business case for stationary storage and recycling<br>• Improved supply chain stability | • Financial incentive of IRA could still draw away planned factories<br>• Member states decided how these tools will be deployed, which will determine their effectiveness |

# Next steps for the GDIP

*Legislative proposals*


| March 2023 | End 2023 | 2024 - 2030 |
|---|---|---|
| Proposals will go through the European Parliament and Council of the European Union<br>• Amendments from Parliament will bring some changes | Some aspects tied to Batteries Regulation, small changes regarding batteries possible | As implementation is largely up to national authorities, policies could look very different across the EU |

Too early to tell how effective these measures will be

# The Green Deal Industrial Plan

## Q&A

**Concluding thoughts…**

Are more financial measures needed to compete with the Inflation Reduction Act?

Are the measures in the GDIP enough to keep the EU battery industry competitive?


# Thank you!

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Batteries European Partnership

# Round table: What does the European industry need right now?



**Franz Geyer**
BMW

**Madeleine Scheidema**
Metso

**Kurt Vandeputte**
Umicore

**Ilka von Dalwigk**
EBA250

BEPA Batteries European Partnership Association

EUROPEAN PARTNERSHIP

# Q&A

# *Refresher Break– 30 Minutes*

# Round table: How can R&I keep the European battery value chain competitive?

**Johan Blondelle**
DG RTD

**Stefan Deix**
EUCAR

**Stefan Wolf**
VDI-VDE-it/EuBatin

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# Q&A

# Conclusion and closing remarks

Simon Perraud

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# THANK YOU!

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