



The industrial development programme of the European Battery Alliance

May 2021



"THE LACK OF A DOMESTIC, EUROPEAN CELL MANUFACTURING BASE JEOPARDISES THE POSITION OF EU INDUSTRIAL CUSTOMERS BECAUSE OF THE SECURITY OF THE SUPPLY CHAIN, INCREASED COSTS DUE TO TRANSPORTATION, TIME DELAYS, WEAKER QUALITY CONTROL OR LIMITATIONS ON THE DESIGN", said the European Commission Vice-President, Maroš Šefčovič, during the EU Battery Alliance meeting in Brussels, October 11<sup>th</sup> 2017

"SO, WE NEED TO ACT FAST – AND COLLECTIVELY – TO OVERCOME THIS COMPETITIVE DISADVANTAGE AND CAPITALISE ON OUR LEADERSHIP IN MANY SECTORS OF THE BATTERY VALUE CHAIN, FROM MATERIALS TO SYSTEM INTEGRATION AND RECYCLING."



## The industrial development programme of the European Battery Alliance





EUROPEAN BATTERY ALLIANCE

**EBA250** 

This cooperative ecosystem gathers the European Commission, interested EU countries, investment institutions and key industrial, innovation and academia stakeholders

EIT InnoEnergy has been trusted by the European Commission to drive forward and promote EBA250 activities, acting as network manager and project facilitator





## Being part of the EBA250 will give you access to





#### **REGULATORY INSIGHTS**

MARKET INTELLIGENCE

- Alignment with the European Strategic Action Plan for Batteries
- Update on upcoming legislations
- Public policies recommendations directly addressed to the European Commission

#### **BUSINESS DEVELOPMENT CATALYST**

- Access to a network of industry, innovation and academic partners from the entire battery value chain (from mining to recycling)
- · Regular seminars with the Alliance members
- Match-making to find partners, clients and investors
- · Co-creation of Business Development

### **EBA250**

A unique meeting platform for key players along the entire battery value chain

#### **DE-RISKING OPPORTUNITIES**

- · Holistic and dynamic observatory on battery projects
- Unique insight in ongoing activities in the battery sector from the European Commission, Member States, industry and academia
- Communication platform with insights and updates on projects' progress

- Access to EIT InnoEnergy funding and financing partners
- Insight to European and national financial institutions and funding
- Support in navigating and decoding in the publicly funded landscape (EU, national and regional)
- Credibility to funding requests and connection with the Alliance financial partners
- Business Investment Platform

EBA250 is an inclusive ecosystem for interested stakeholders along the entire battery value chain, that have commercial activities in the EU, and are wishing to collaborate with initiatives that promote sector growth. There are no membership costs.



### **Activities and development**



(participants)

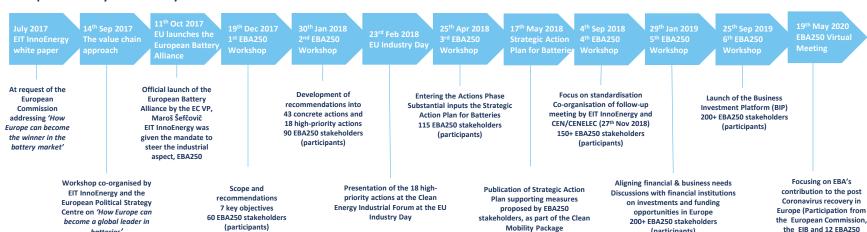


stakeholders)



#### **European Battery Alliance key milestones**

batteries'





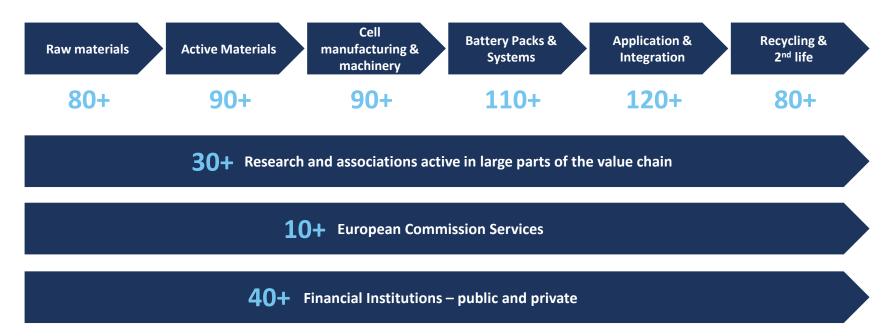
### Our industrial stakeholders across the battery value chain





EBA250 is an inclusive network with 650+ members along the entire battery value chain, gathering the European Commission, interested EU countries, financial institutions, key industrial players, innovation and academia stakeholders.

The EBA250 stakeholders' list can be found here





### **Other European Battery Alliance-related initiatives**





#### **BATTERY 2030+**



# BATTERY 2030+ is a large-scale research initiative including 17 partners in nine European countries

- The long-term initiative brings research institutions, industry and public funders together to develop the next generation of ultraperforming, sustainable and safe batteries
- The objective is to provide European industry with disruptive technologies and competitive edge across the full value chain, that will enable Europe to take the lead in battery science and technology

Further information can be found <u>here</u> and <u>here</u>

#### **BatteRles Europe**



#### BatteRles Europe is the one-stop shop for the European batteryrelated R&I ecosystem

- Coordinated by EIT InnoEnergy, it includes research, industry and representatives from several Commission Services and Member States in order to identify, prioritise and co-ordinate the main research and innovation needs for the whole battery value chain in Europe
- The ambition is for a place where relevant stakeholders will not only exchange and coordinate their efforts on Batteries R&I, but also mobilise resources to implement R&I activities in the field

#### **Business Investment Platform (BIP)**



The Business Investment Platform (BIP) is a unique platform for key stakeholders along the entire battery value chain

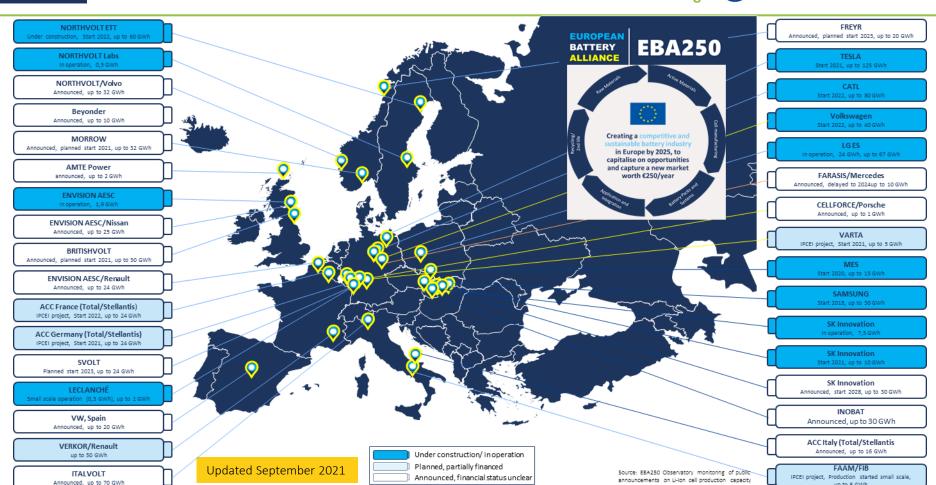
- 70B€ of frontloaded investment in batteries is required to meet peak European demand by 2023
- In order to bridge the gap between investors and investees, EIT InnoEnergy has co-designed a Business Investment Platform (BIP) together with financial institutions – public and private – and several core industrial partners
- Enhancing the robustness of the investment cases, the objective of the BIP is to:
  - o Shorten the time to investment
  - o Reduce business risk for the investee
  - o Reduce investment risk for the investor

For more information and to apply, contact us.

### **Ongoing and Planned Li-ion Battery Cell Factories in Europe**





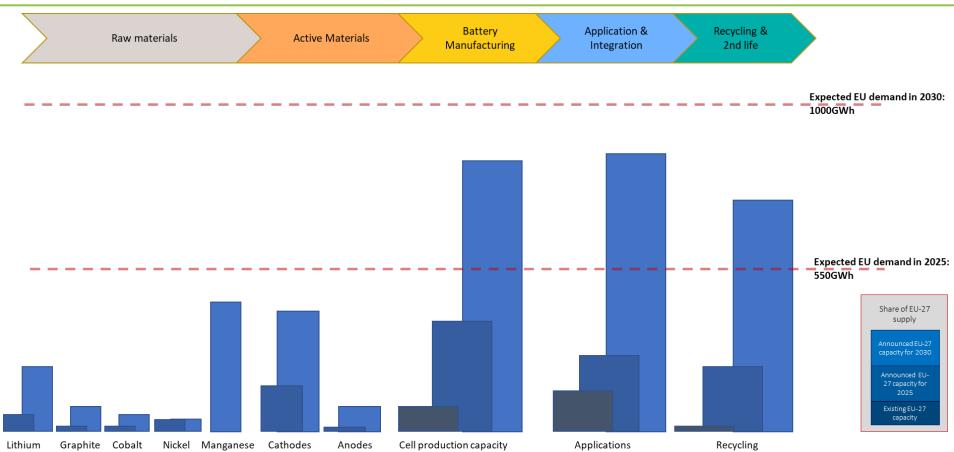




## Analysis of demand-supply gaps along the battery value, forecast 2022





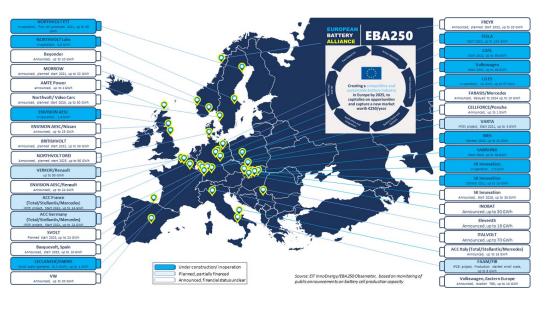




## Battery production in Europe is growing fast – and so is the "skills gap"







Battery demand expected to increase up to 300GWh by 2025

Europe lacking highly qualified people among all educational segments and along the Battery Value Chain

Gigafactories are job hot spots<sup>1,2</sup>, in battery production:

- 90 180 direct jobs/GWh
- 300 1400 indirect jobs/GWh

5-10 times more downstream including OEM

Massive endeavour, because of volume, speed, skills typology (many & new), and geographical coverage

European approach is needed!

 $<sup>^{1}\!\!:</sup>$  Future Expert Needs in the Battery Sector, Fraunhofer ISI-EIT RawMaterials, 2021

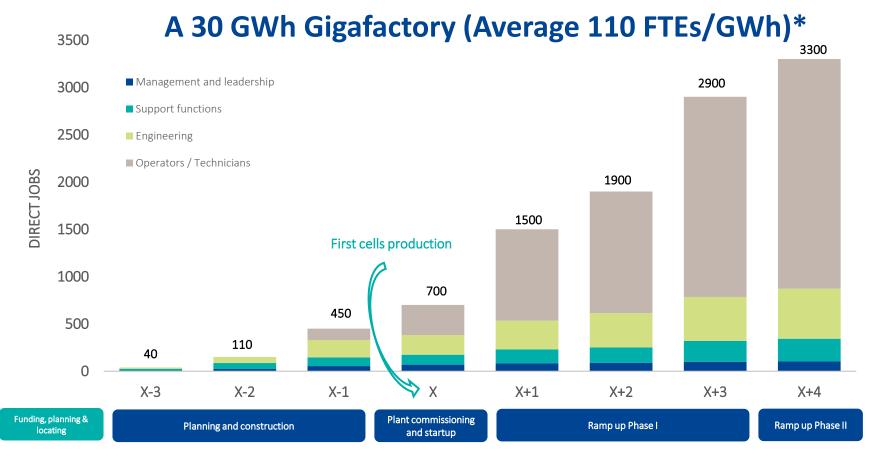
<sup>&</sup>lt;sup>2</sup>: Position paper, Task Force on Education and skills, Batteries Europe, 2021



## **Example of a Gigafactory direct employment growth**





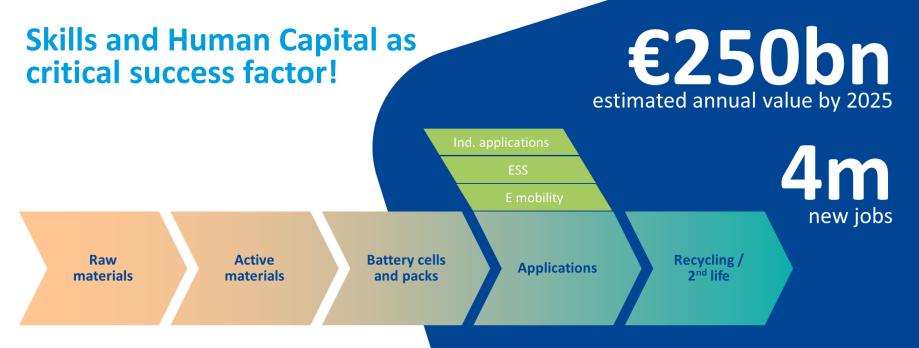




## In summary: Qualified personnel is one of the key bottlenecks besides raw materials







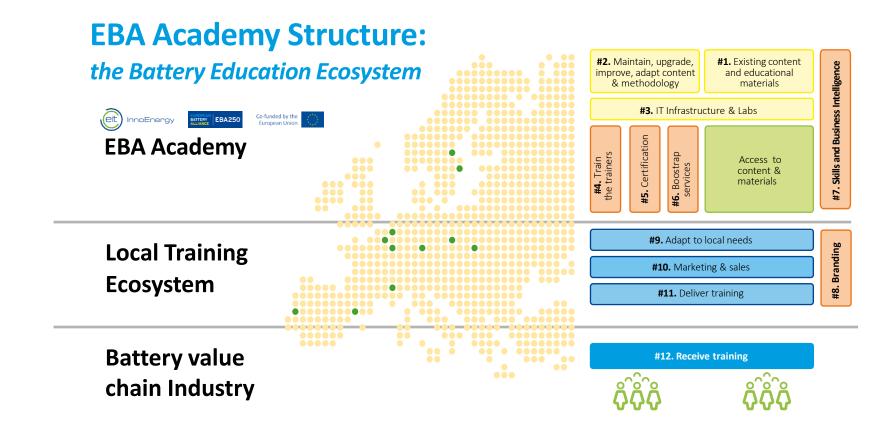
800.000 to upskill & reskill



## Value chain approach: collaboration with local training providers and the industry











## Thank you for your attention!

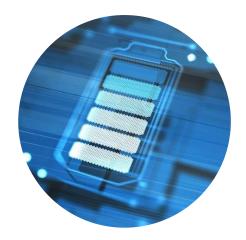




EIT InnoEnergy is the innovation engine for sustainable energy across Europe supported by the European Institute of Innovation and Technology.

EIT InnoEnergy's role in the European Battery Alliance is to provide background data, collect and formulate key questions, recommendations and actions.

EIT InnoEnergy also support the establishment of a European Battery ecosystem by promoting a meeting place for key players along the entire value with our EBA250 Workshops.



#### EIT InnoEnergy

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