

Battery  
Cluster  
Portugal

# Framework

Climate change is the biggest challenge facing our world today. Europe is committed to achieving a climate-neutral society by 2050



Making Europe climate neutral by 2050

- + Economic Growth Decoupled from Resource Use
- + Protecting, Conserving and Enhancing the EU's Natural Capital
- + Promoting Sustainable and Inclusive Growth



Reduce greenhouse gas emissions by at least 55% by 2030

- + Strengthening the EU Emissions Trading System (ETS)
- + Increasing the Use of Renewable Energy
- + Implementing Carbon Pricing



Rapidly reduce the EU's dependence on fossil fuels

- + Diversifying Energy Supplies
- + Boosting Renewable Energy
- + Increasing Energy Efficiency

Batteries allow us to store energy when it's available and use it when it is needed



# Critical raw materials (CRMA)

In the case of lithium, demand in the EU is expected to increase twelvefold by 2030 and twenty-one times by 2050.

Europe relies heavily on imports, often from a single third country, and recent crises have highlighted the EU's strategic vulnerabilities.



## Goals by 2030:

- > **10%** of the EU's annual consumption of **extraction**
- > **40%** of the EU's annual consumption of **processing**
- > **25%** of the EU's annual consumption of **recycling**
- < **65%** of the EU's annual consumption **comes from a single third country**



**Simplifying permitting procedures** for critical raw materials projects in the EU



Support for access to **EU funding** (EIB, programmes, etc.)

# Framework



E-Mobility



Stationary energy storage



Consumer  
electronics



Smart Cities

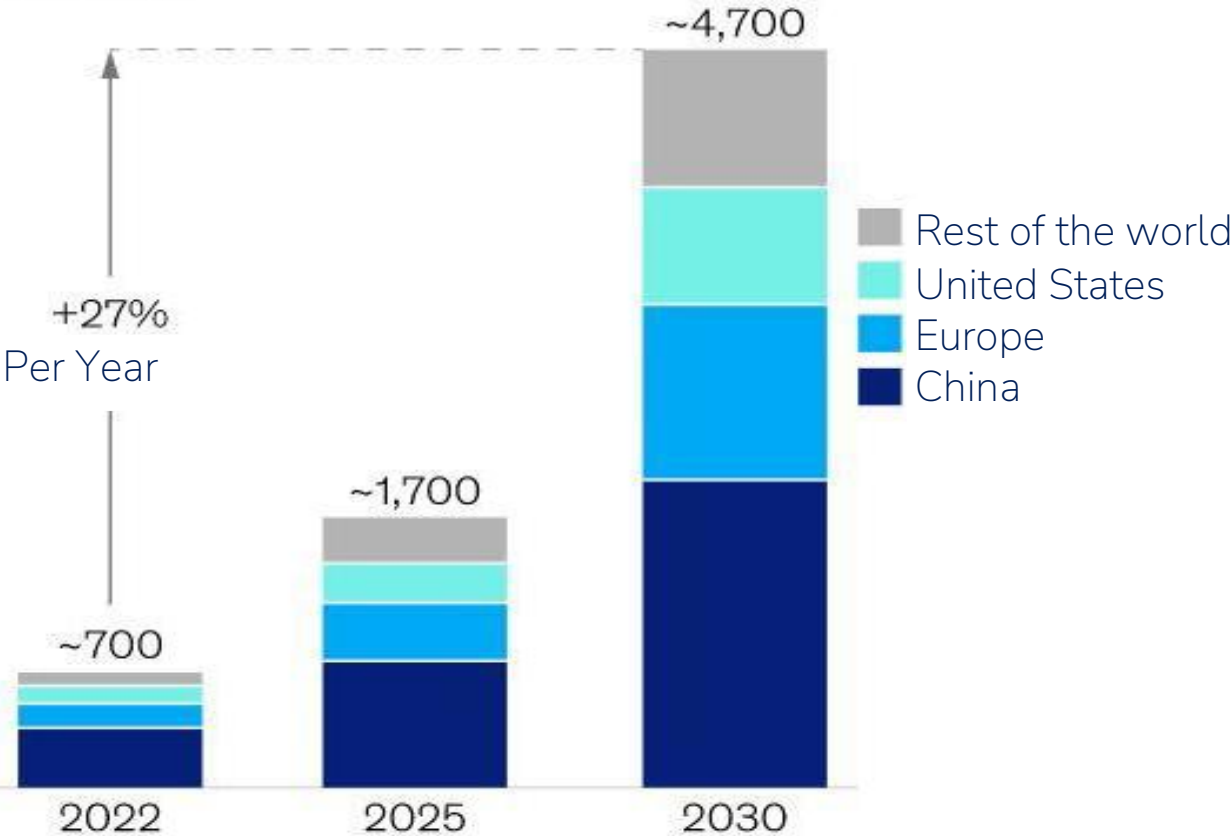


Medical devices

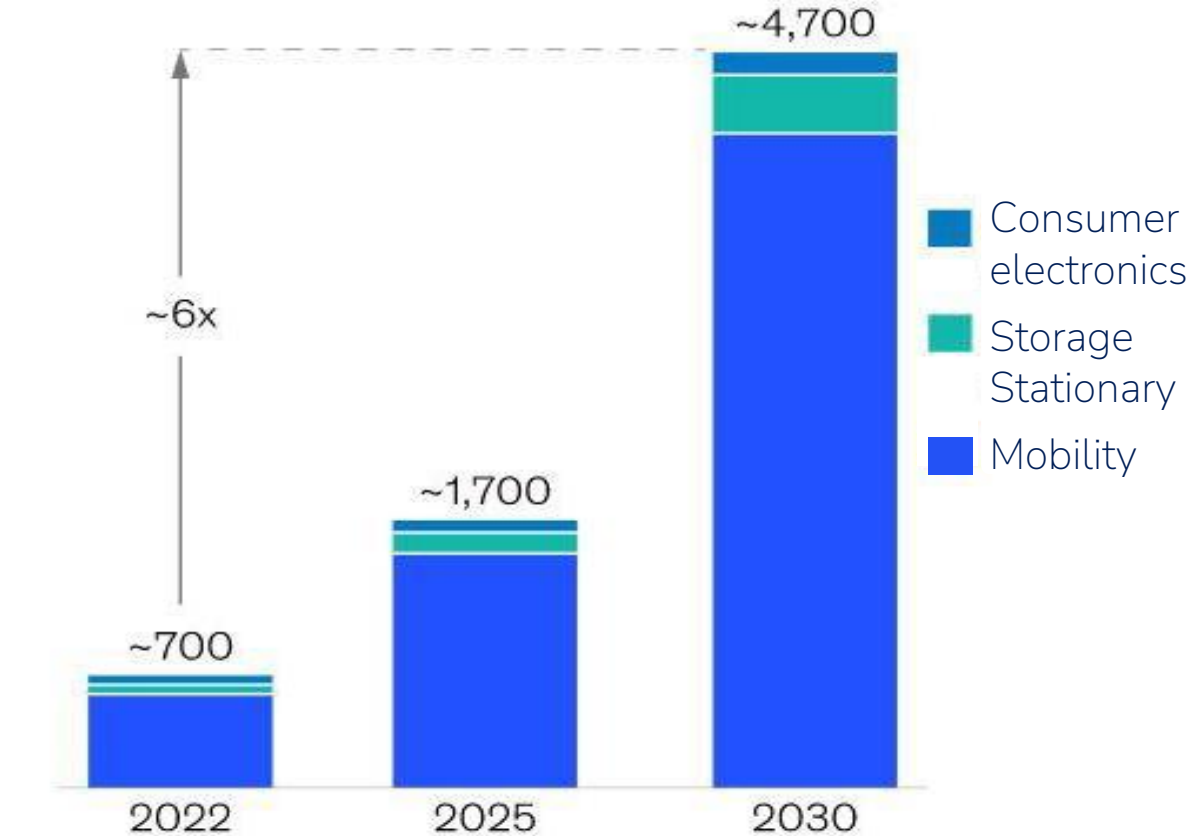
# Demand for lithium-ion batteries is expected to grow by around 33% a year to reach around 4,700 GWh by 2030.

Global demand for lithium-ion battery cells GWh

By region



By sector



<sup>1</sup> including passenger cars, commercial vehicles, two- and three-wheeled vehicles, off-road vehicles and aviation.



# Battery manufacturing in the world

China is projected to remain the dominant force in lithium-ion battery production by 2030, claiming nearly 70% of global capacity. This translates to an astounding 6.268 gigawatt-hours (GWh)



7 of the top 10 battery manufacturing companies are based in China.

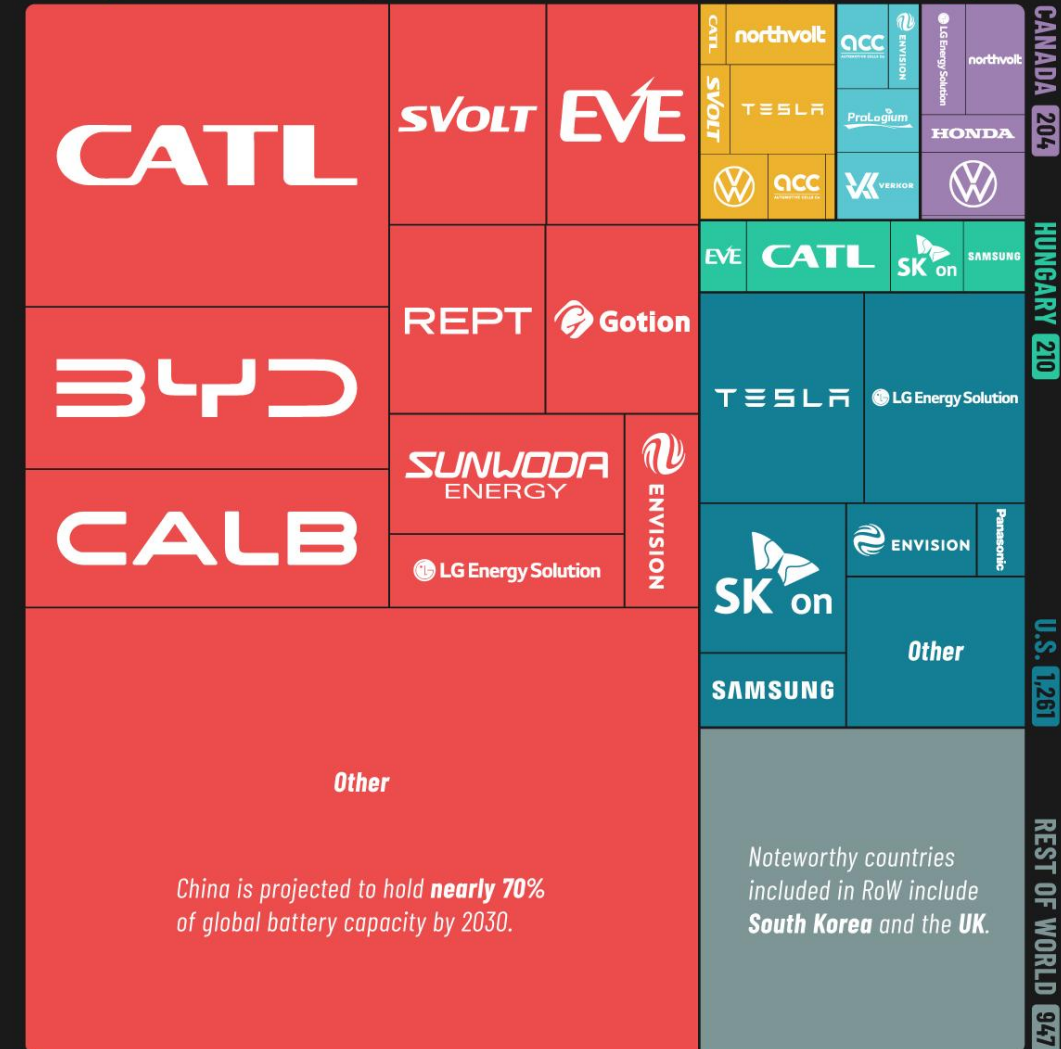
TOP 6 COUNTRIES

# LITHIUM-ION BATTERY CAPACITY

BY 2030

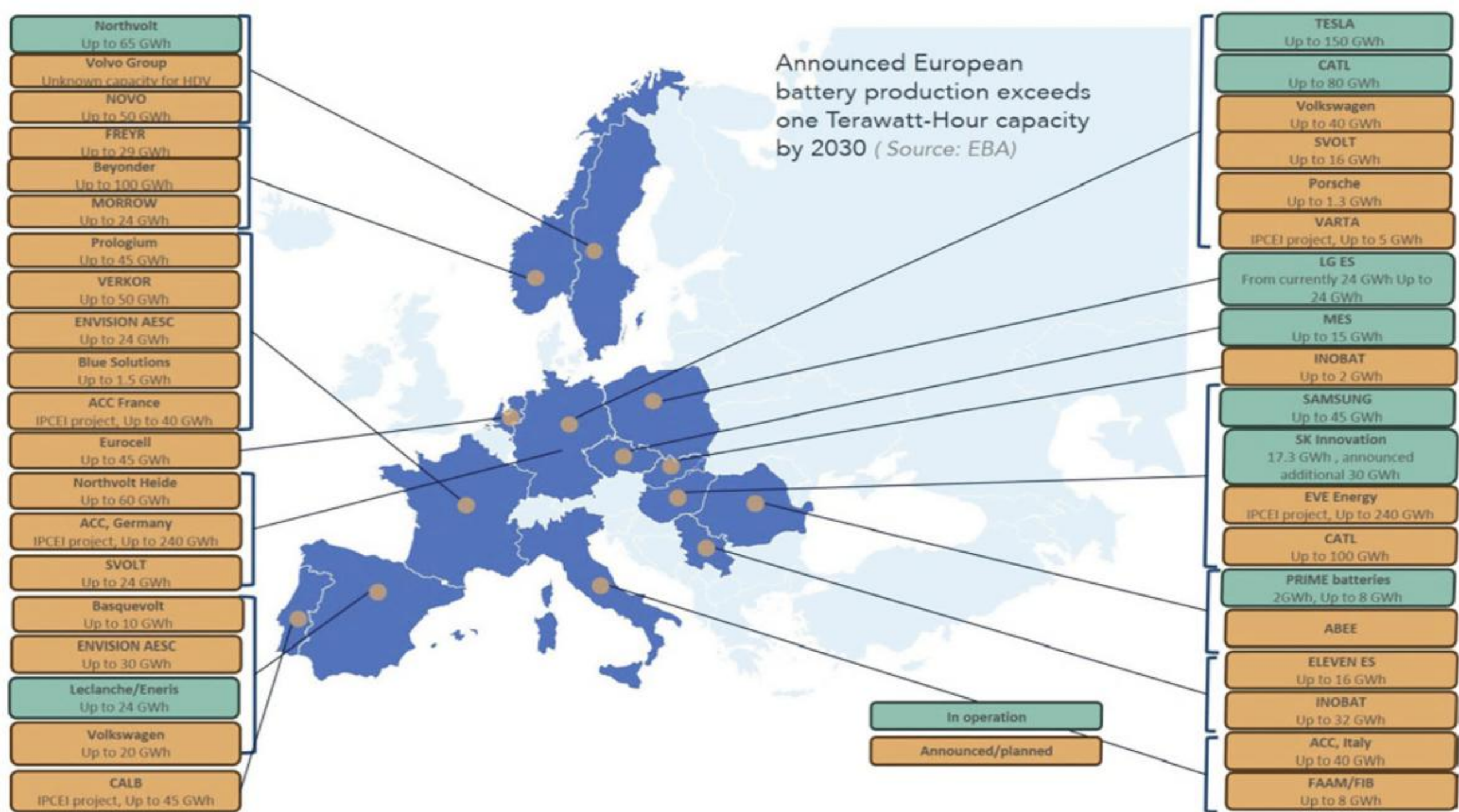
CHINA 6,268 GIGAWATT-HOURS (GWh)

GERMANY 262 FRANCE 162





Announced European  
battery production exceeds  
one Terawatt-Hour capacity  
by 2030 ( Source: EBA)







RAW MATERIAL  
EXTRACTION

REFINING

CELL  
MANUFACTURING

BATTERY  
PACKS

END  
USE

CIRCULARITY

Value  
chain

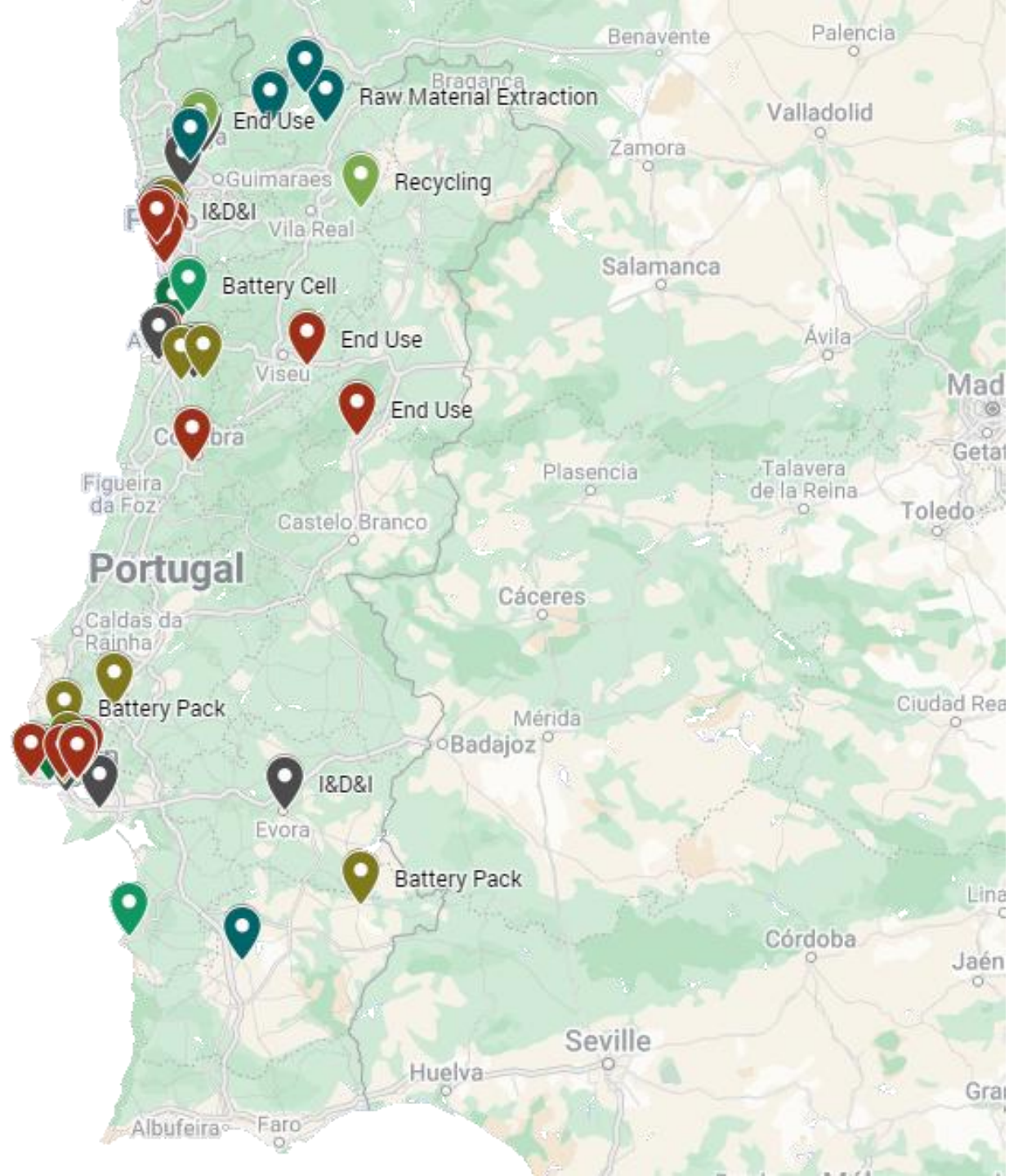
Portugal is one of the few countries in the world with the possibility of having a complete battery value chain.



# Distribution

- End Use (18)
- I&D&I (15)
- Battery Pack (9)
- Raw Material Extraction (5)
- Recycling (5)
- Refinery (5)
- Battery Cell (4)
- Associação (2)
- Training (1)

260 KM





SAVANNAH



LUS • RECURS • S

AURORA  
LITHIUM



Lifthium



RAW MATERIAL  
EXTRACTION

REFINERY

BATTERY  
CELL

CALB



ADDVOLT

METERBOOST  
BATTERY FOR LIFE

LUXOENERGY  
SOLAR EVERYWHERE ANYTIME



Globaltronic  
spreading technology



dstsolar

prio energy



RECYCLING



b.again



prio energy

50  
cluster  
associated  
entities

+3  
Scheduled to  
enter later this  
year

## INNOVATION ECOSYSTEM





# Opportunity Brief: HORIZON-CL5-2025-02-D2-06

**Title:** *Fostering the European Battery Ecosystem by Providing Accurate and Up-to-date Information and Stimulating Excellence in the European Battery R&I Community*

**Call Type:** Coordination and Support Action (CSA)

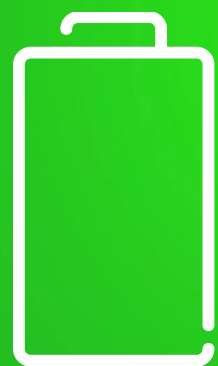
**Estimated EU Contribution per Project:** ~€3M

**Deadline:** [to be confirmed based on F&T Portal]

## **Objectives and Expected Outcomes:**

This action aims to **strengthen the European battery ecosystem** through the establishment of a **centralised knowledge and coordination platform** that informs strategic decisions and supports excellence across the EU battery value chain.

- **A publicly accessible information observatory**
- **A robust knowledge base**
- **An agile R&I strategy**
- **Maximised impact of Batt4EU Partnership**
- **Increased excellence and coordination in battery R&I throughout Europe**



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## CONTACTS

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