



THE DEVELOPMENT OF THE EUROPEAN BATTERY VALUE CHAIN



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**EUROPEAN
BATTERY
ALLIANCE**

EBA250



The European Battery Alliance

The industrial alliance, enabling the European battery value chain

EBA250 represents the EU industrial battery ecosystem

The European Battery Alliance



EU and Member States providing the supportive framework

- EU = Strategic Action Plan on Batteries
- EU = Sustainable Batteries Regulation
- Other legislative & funding initiatives at EU and national level

The industrial workstream of the Battery Alliance led by EIT Innoenergy

- Open and inclusive platform for the entire battery ecosystem
- Policy insight
- Accelerating battery projects



Selection of EU and National R&I Networks and initiatives



BATTERIES EUROPE
EUROPEAN TECHNOLOGY AND INNOVATION PLATFORM

- Batteries R&I strategies and short to medium term technology roadmaps
- Coordination of battery initiatives
- Drive forward SET-Plan action on batteries

BATTERY 2030+

- A network of research institutions and industry
- Long-term technology roadmap
- Coordination of European R&I projects implementing the roadmap

Horizon Europe R&I programmes

BEPA
Batteries European Partnership Association

BATT4EU*
Batteries European Partnership

Downstream & complementary European Partnerships

Other Horizon Europe R&I activities

Member State-led IPCEIs: R&I and first industrial deployment

Interregional partnership on advanced battery materials

National and private-funded R&I activities

Capture a new market worth 250B€/year in 2025
A competitive and sustainable European battery value chain!

Global Battery Value Chain



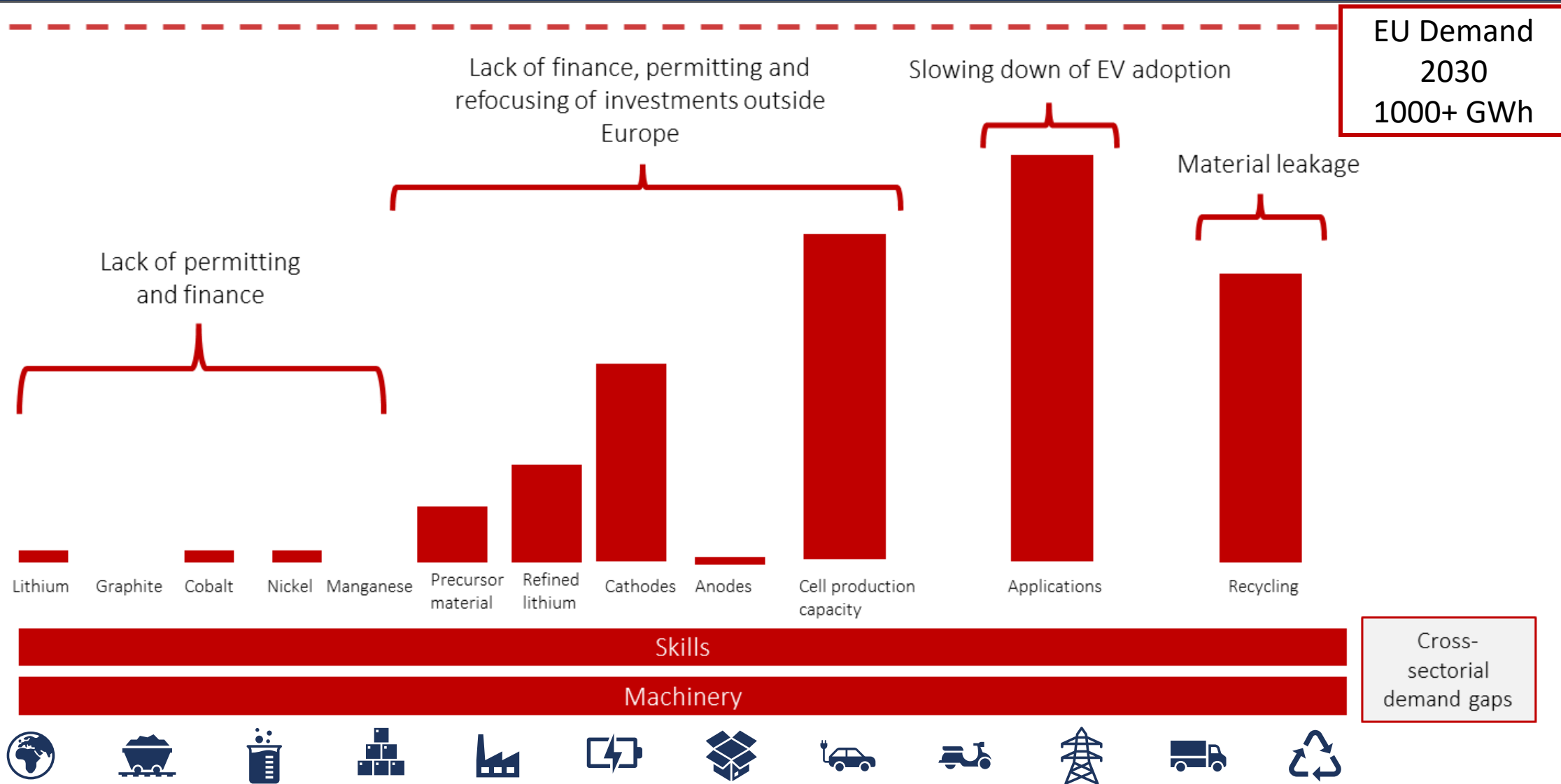
1000+_{GWh}
Announced Capacity
in EU by 2030
in 2023

400+
Gigafactories
Announced
Globally

9000+_{GWh}
planned Capacity
by 2030 Globally

Global Battery Value Chain

Estimated realistic share of EU + Norway production capacity compared to estimated demands based on public announcements with current framework in 2030

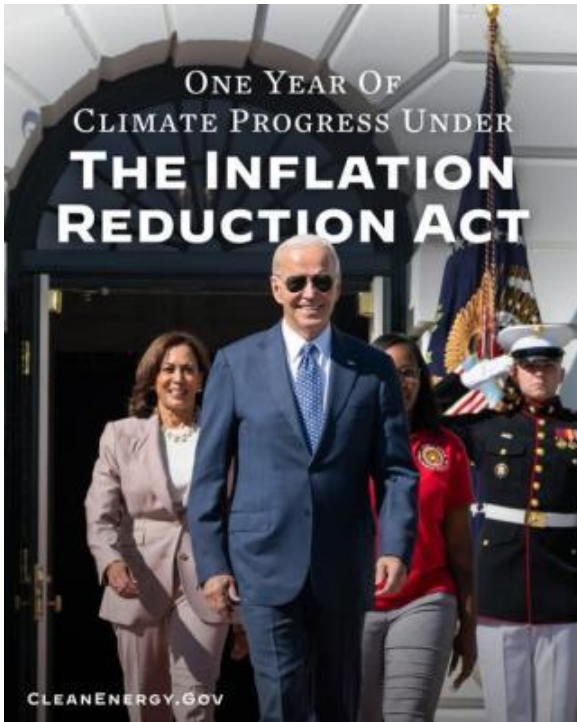


A Year in Review

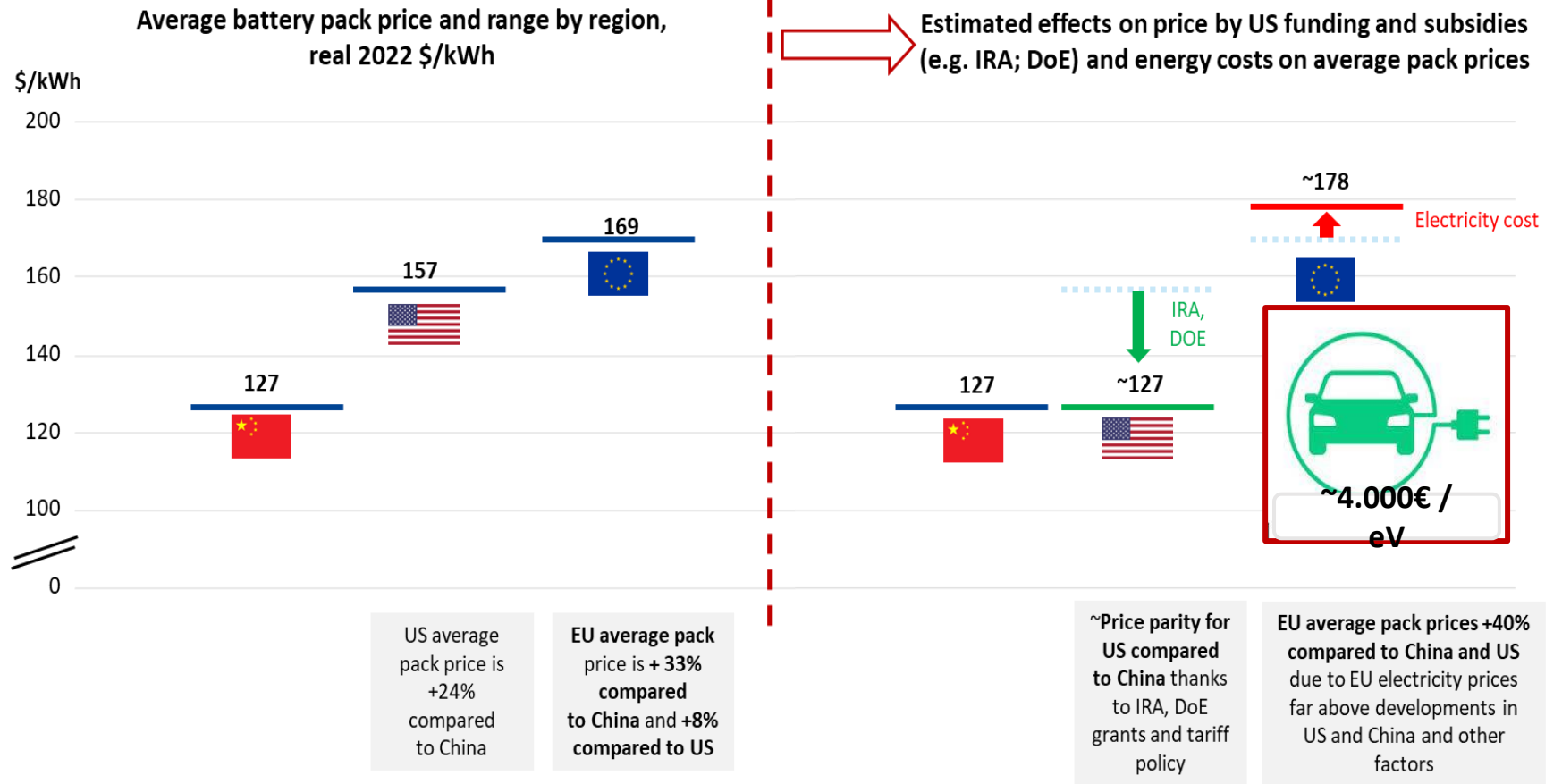
What has happened since last year?

The Day Everything Changed with the IRA

An unbalanced global playing field, impacting EU competitiveness



~4.000 Euros price difference per average EV in US vs. EU



The EU Reaction & Response to the IRA



CRMA *Critical Raw Materials Act*
2030 benchmarks, definition of strategic projects, increased collection of waste products.



TCTF *Temp. Crisis & Transition Framework*
Loosening of state aid guidelines, possibility to match foreign aid if there's a risk of an EU company leaving the EU.



NZIA *Net Zero Industry Act*
Downstream measures, definition of net-zero technologies, targets for cleantech industrial capacity, Net Zero Resilience Projects, Valleys and Platform.

Four pillars of the Green Deal Industrial Plan

- 1 Simplify permitting
- 2 Enhance skills
- 3 Facilitate open & fair trade
- 4 Grants and loans.

2030 targets

for domestic production based on EU annual consumption:

10%

Extraction



40%

Processing



15%

Recycling



<65%

Max 65% Sourcing from
a single third country



Additional policy measures:

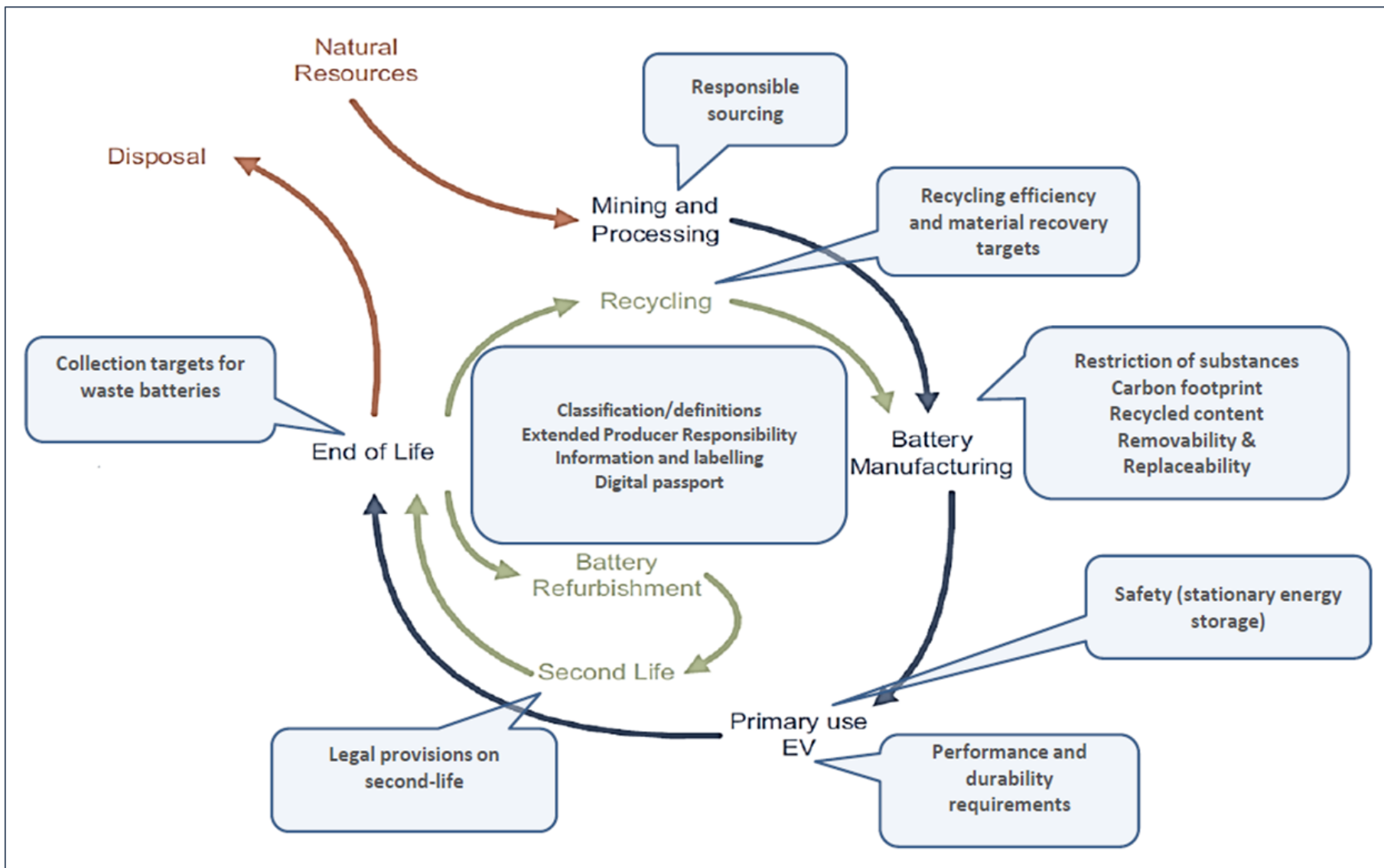
Streamlined Permitting procedures for
Strategic Projects (reduced to 1-2years)



Legislative process expected to be finalized
mid-2024

EU Battery Regulation

A Sustainable Product policy for batteries



KEY PROVISION ITEMS

2023 2024 2025 2026 2027

RESTRICTION OF HARMFUL SUBSTANCES

▲ Mercury, cadmium, lead

▲ Report on
substances of concern

IMPLEMENTATION OF DUE DILIGENCE POLICIES

▲ Guidelines

▲ Cobalt, Natural graphite, lithium, Nickel

BATTERY PASSPORT

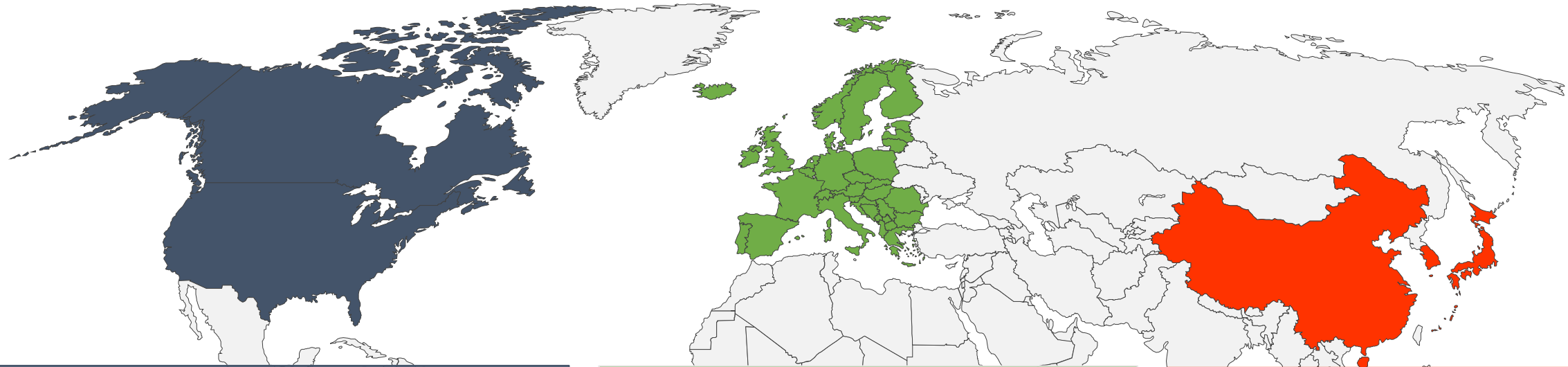
▲ Implementing act on access &
use of data

▲ For EV, LMT, industrial batteries

Looking at the future

Where are the opportunities?

International cooperation and collaboration encouraged for a sustainable & resilient value chain



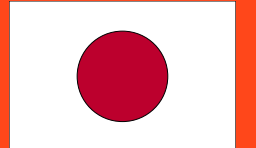
North America

- Energy costs for renewable energy becoming lower than Europe
- Accelerating the uptake of EVs with up to 7,500 USD credit
- Fostering domestic production –Lower demand for EV's and batteries from EU



Europe

- EU competitiveness under pressure
- New EU Battery Regulation to secure industrialization of the value chain
- Continuing to grow the battery ecosystem
- Opportunity for intl. collaboration



East Asia

- Stronger orientation towards Europe and RoW
- Leading global market and technology for batteries
- To have 70% of battery capacity by 2030 cumulatively over 9000GWh

1

Electric transportation driving development

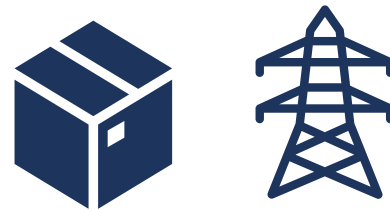
- Driving the development of the battery value chain
- Affordable cars next focus – impact on battery design



2

Stationary Storage next big demand

- Focus on renewable energy stationary storage (ESS)
- Expected to have a similar growth as EVs



3

Secure & sustainable supply chains

- Added demand for raw materials
- Alternative chemistries, Na-ion a strong contender
- Need for Skilled workforce



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Thank you
Köszönöm!



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