



# European Battery Alliance

**Paris, May 28<sup>th</sup>, 2019**  
***European Commission, DG GROW***

# Batteries Key Enabling Technology

- **For low and zero emission mobility**
  - Environmental goals
  - City & national bans/restrictions
  - Car manufacturers announcing major electrification plans
- **Energy Storage**
- **Industrial Applications**

# European Battery Alliance

## Launched in October 2017

- Commission
- Member States/Regions
- Industry – all segments of the value chain

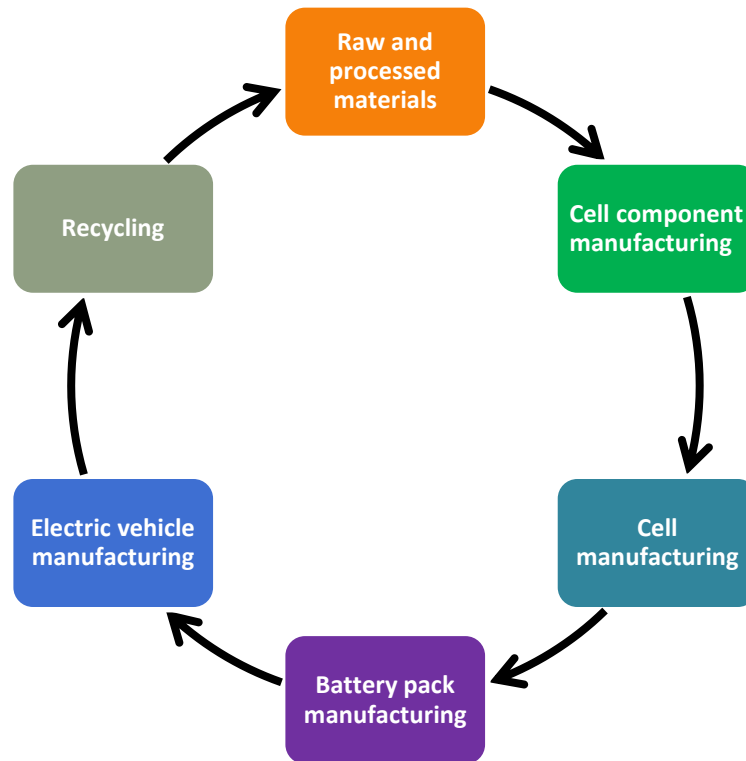
# European Battery Alliance

## Objective:

- To establish a **complete, competitive and sustainable EU battery value chain** with spillover effects over upstream and downstream industries.
- Decrease dependencies from non-European suppliers (currently 3% of global production)
- Capture part of the EU and world market – growth, jobs and innovation (market worth 250 bln Euro in 2025)

# Strategic Action Plan for Batteries: Implementation Report - April 2019

*Target all segments of value chain (innovative approach) - cells at the core*



# Key elements of the Action Plan

1. Securing sustainable supply of raw materials;
2. Support (including financing) emerging EU projects (full value chain);
3. Enhance EU research and innovation in this area;
4. Developing & strengthening the availability of relevant skilled workforce;
5. Developing an EU Framework for supporting a safe and sustainable battery value chain; &
6. Consistency with broader regulatory framework.

# Raw materials

## Secure access to raw materials:

- From countries outside Europe
- From European countries
- From recycling (secondary raw materials) +
- Processing !

# Manufacturing of battery materials

## (examples)

- ***Cathodes***
  - Umicore – Nysa Poland
- ***Cathode precursor materials***
  - BASF – Finland
- ***Electrolytes and anodes***
  - Projects planned but not yet announced.



# Manufacturing battery cells i.a.

**Demand for LiOn batteries in Europe is set to increase to 200 GWh by 2025. OEMs suggest that we will be producing the equivalent of 220-270GWh in battery cells per year by then**

- **Northvolt**

Pilot line (150 MWh) + permit granted for scale up production (32 GWh by 2023) + recent EIB decision on supporting 16 GWh

- **SAFT** (+ consortium under construction)
- **Second wave of consortia** – emerging now
- **And several Asian manufacturers ...**

# Research and Innovation

- **H2020 call published**
  - 114 million EURO – 2019
  - 132 million EURO planned for – 2020
- **Horizon Europe** - batteries are one of the main objectives
- **European Technology and Innovation Platform** (“Batteries Europe” to be launched shortly)
- **Targets:** advanced LiOn, disruptive solid, advanced materials, manufacturing, recycling etc

# Skills

- **Blue Print for Sectoral Cooperation on Skills**
- *Six sectors including 'batteries for electro-mobility'.*
- *4 years – up to 4M€ per sector*
- *A successful tender is expected to be selected this summer*

# The regulatory framework

- **New rules on batteries performance (lowest possible environmental footprint)**
  - Set performance and sustainability criteria that batteries will have to meet to be placed on the EU market.
  - Preparatory study ongoing – two stakeholder workshops held (December 2018 & May 2019)
  - Framework to be underpinned by standards – Request to be made to CEN/CENELEC

# Revision Battery Directive

- Evaluation of the Batteries Directive published in April

## Key provisions:

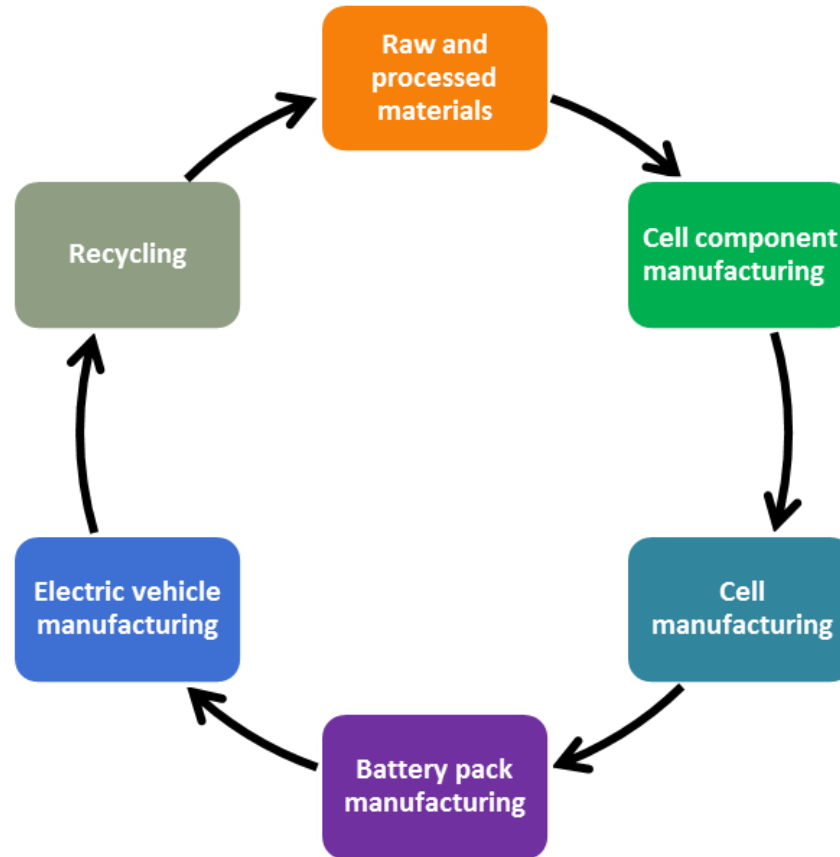
- Sets requirements and targets for:
  - the collection of waste batteries; and
  - recycling levels achieved within the EU

## And other rules:

+ Clean Vehicle Directive, CO2 standards & EU goal to achieve a net-zero greenhouse gas economy by 2050.

# Smart Specialisation Platforms

- Smart Specialisation Platform on Advanced materials on batteries – launched in October 2018
- 6 pilot areas selected to identify concrete interregional projects to be supported by regional funds.
- Around 30 Regions involved so far (Slovenia leading)



**Thank you.**

*European Battery Alliance website:*

[https://ec.europa.eu/growth/industry/policy/european-battery-alliance\\_en](https://ec.europa.eu/growth/industry/policy/european-battery-alliance_en)