



**Battery  
Pass**

thebatterypass.eu

# Closing Event

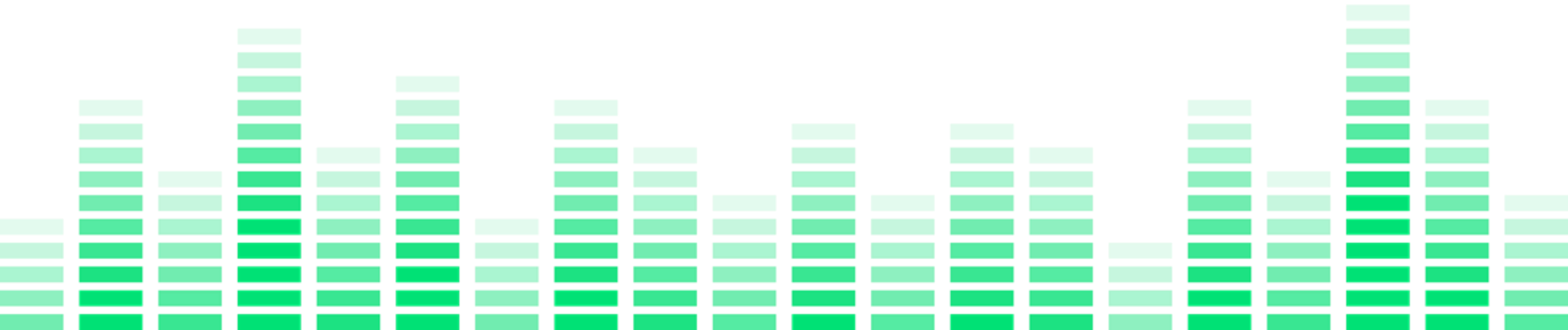
25 February 2025, Brussels

Supported by:



on the basis of a decision  
by the German Bundestag

## **From Concept to Blueprint:** Battery Passports as Enablers of Transparent, Competitive, and Circular Value Chains.



PRESENTATION

# Content Guidance of Battery Passports: Practical Tools for Implementation and Lessons Learned



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# The battery passport will be the pioneer of digital product passports to be launched in the European Union

## The Digital Battery Passport

Article 77 of the Battery Regulation mandates for batteries an “**electronic record (battery passport)**” from 18 February 2027.



## DPPs in the ESPR

The Eco-design for Sustainable Products Regulation (ESPR) includes the requirement that “**products can only be placed on the market or put into service if a digital product passport is available**”.

## Objectives of DPPs



Provide transparency to impact decisions

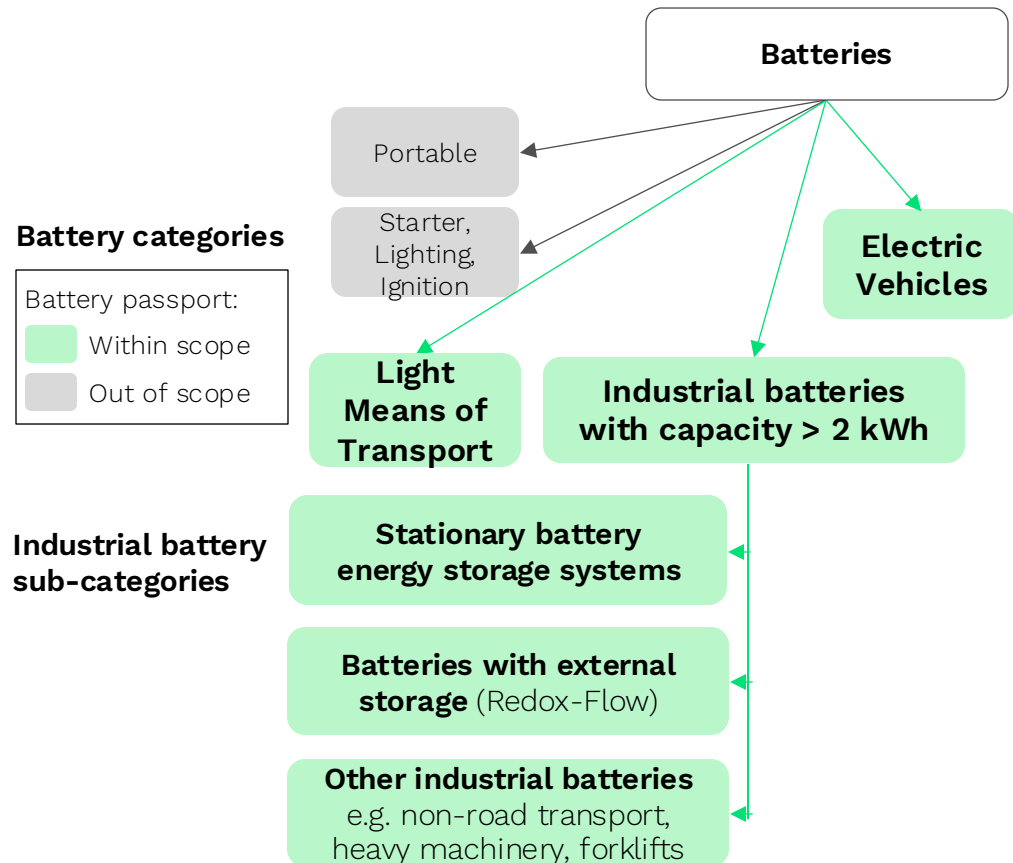


Enable shift from linear to circular economies



Sustainable and responsible supply chains

# The battery passport scope includes various applications with impact on data requirements



## Responsibility



The **economic operator** (or an authorized representative) is responsible for the BP when **placing the battery on the market**

## Access groups



- 1) The “**general public**”
- 2) “**Notified bodies**, market surveillance authorities and the Commission”
- 3) “Any natural or legal person with a **legitimate interest** in accessing and processing that information”

## Key insights: One size does not fit all!

- Choice of product (sub)categories, and their characteristics crucially affect technical framework
- Application-specific definitions & measurements needed

# The data in the battery passport is clustered into seven categories that can be a blueprint for other DPP

**Data categories for the battery passport** (select data attributes shown below, not exhaustive, overall: ~90 data attributes)



Battery ID: 0101010  
Battery passport ID: 1111010  
Responsible economic operator

## Identifiers & product info

- Manufacturing info (identity, place, date)
- Battery category
- Battery mass
- Battery status

## Labels and conformity

- Symbols and labels
- Meaning of labels & symbols
- Declaration of conformity
- Compliance of test results

## Carbon footprint

- Carbon footprint (5 metrics)
- Weblink to CF study
- CF performance class

## Supply chain due diligence

- Due diligence report

## Materials & composition

- Hazardous substances
- Battery chemistry
- Critical raw materials
- Materials used in cathode, anode, electrolyte

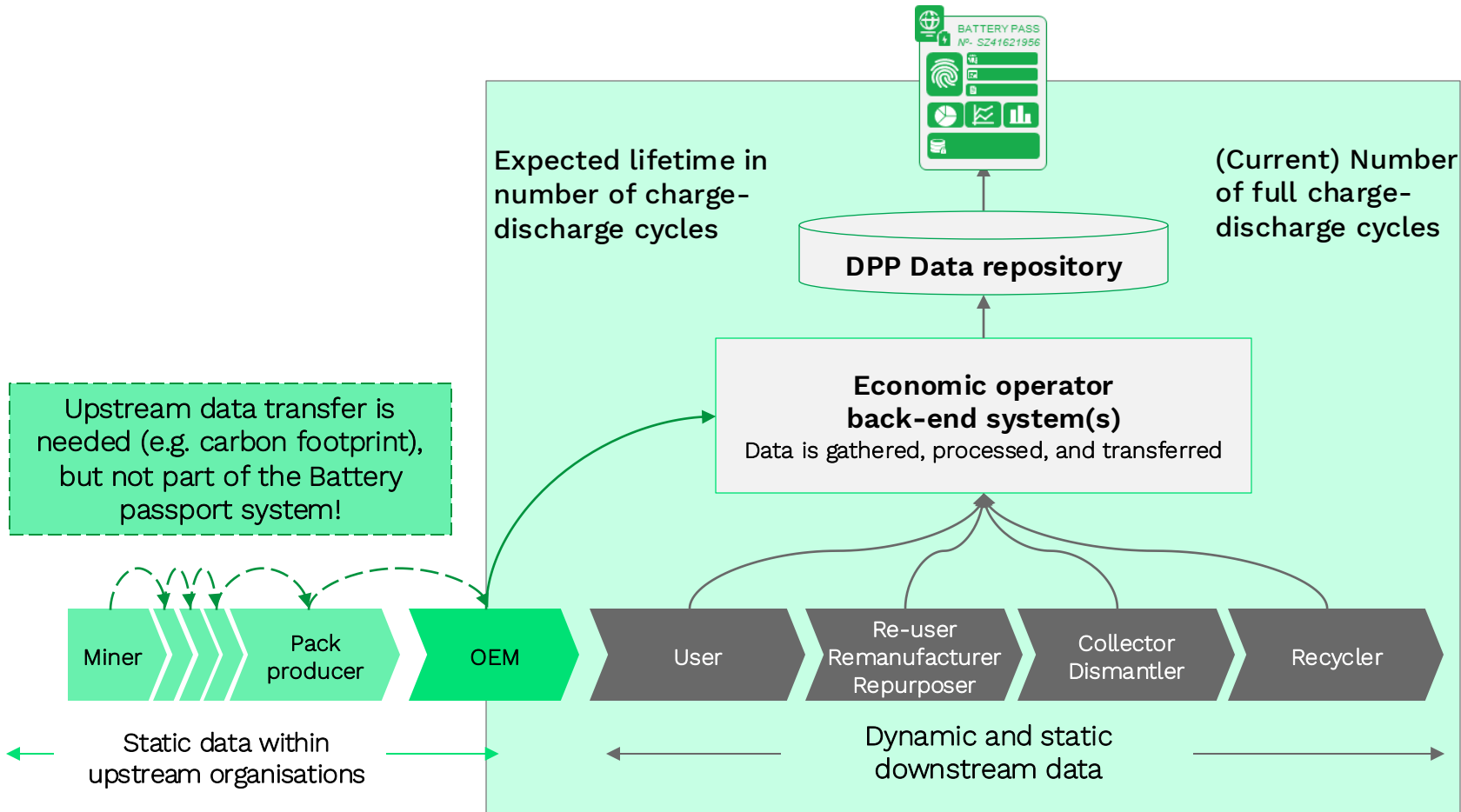
## Circularity & resource efficiency

- Recycled content shares
- Manuals for removal, disassembly, dismantling
- Component part numbers & spare parts information
- Safety measures/instructions

## Performance & durability

- Capacity, energy, power, SoH
- Expected lifetime
- Negative events

# Data transfer in value chain before and in the battery passport and crucial definitions: example performance & durability



## Performance & durability data

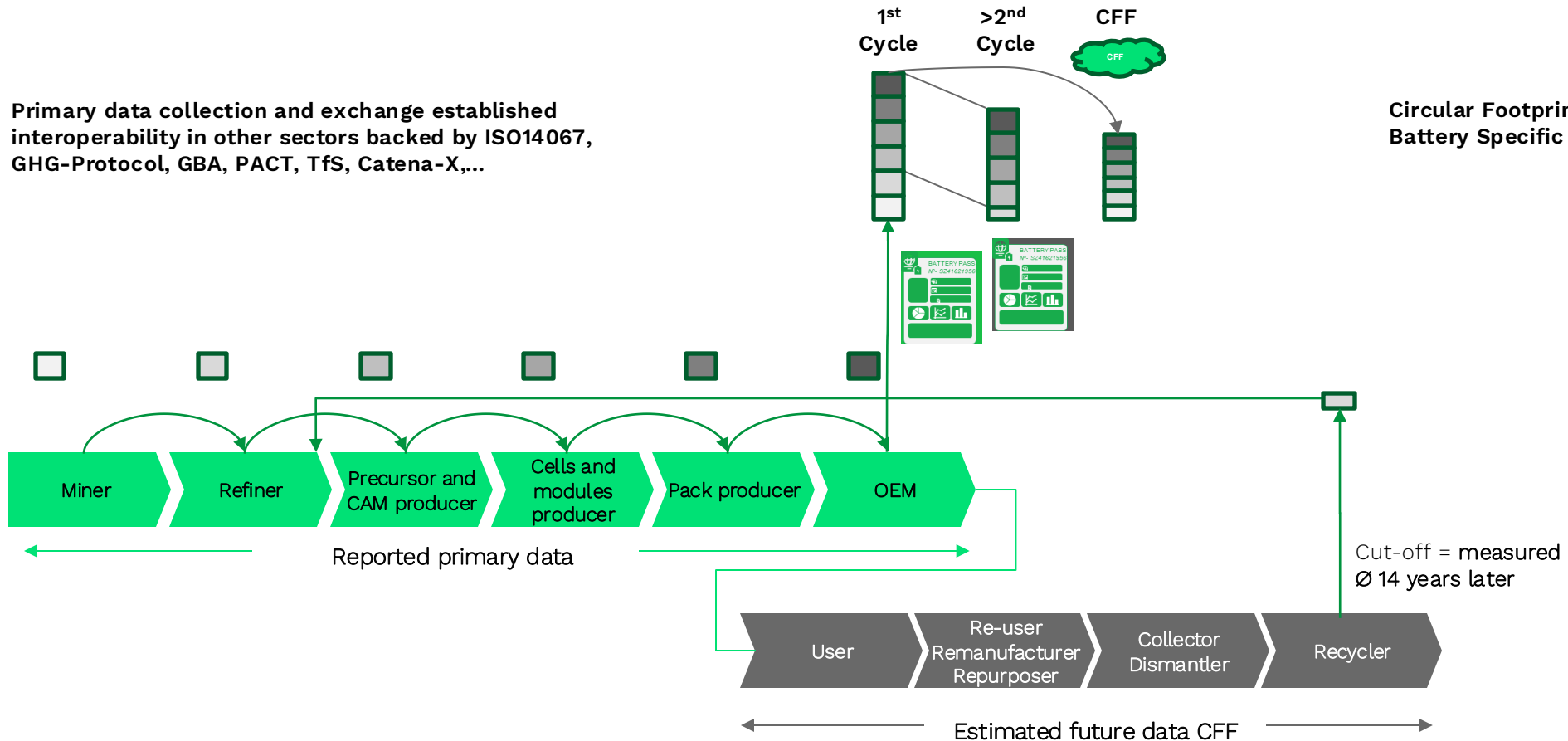
- what does **up-to-date** mean for dynamic data?
- **Some definitions remain unclarified** (e.g. accidents)
- **Measurement methods to be determined**

# Carbon Accounting for Batteries must be defined interoperable across sectors using established methodologies

GHG reporting shall base on trusted data. CFF not fit for purpose.

Primary data collection and exchange established interoperability in other sectors backed by ISO14067, GHG-Protocol, GBA, PACT, TfS, Catena-X,...

Circular Footprint Formula (CFF)  
Battery Specific LCA proposal



# The DIN DKE Spec 99100 paves the way to a Public Available Standard

## The DIN DKE Spec Process

- Extended original project scope Jan-Dec 2024
- **Complementing existing standardisation activities** (M/579, JTC 24)
- Paves way to **broad acceptance of BP content**



## Content/Publications:

- **DIN DKE Spec 99100** provides data attribute definitions as update of the Battery Pass content guidance
- **Data attribute longlist** updated to v1.2 including change log
- Data attributes definitions **shaped by latest developments and discussions**



DIN DKE Spec facilitates implementation by companies and use of project results in standardisation



# February 2027 is near: Act now!

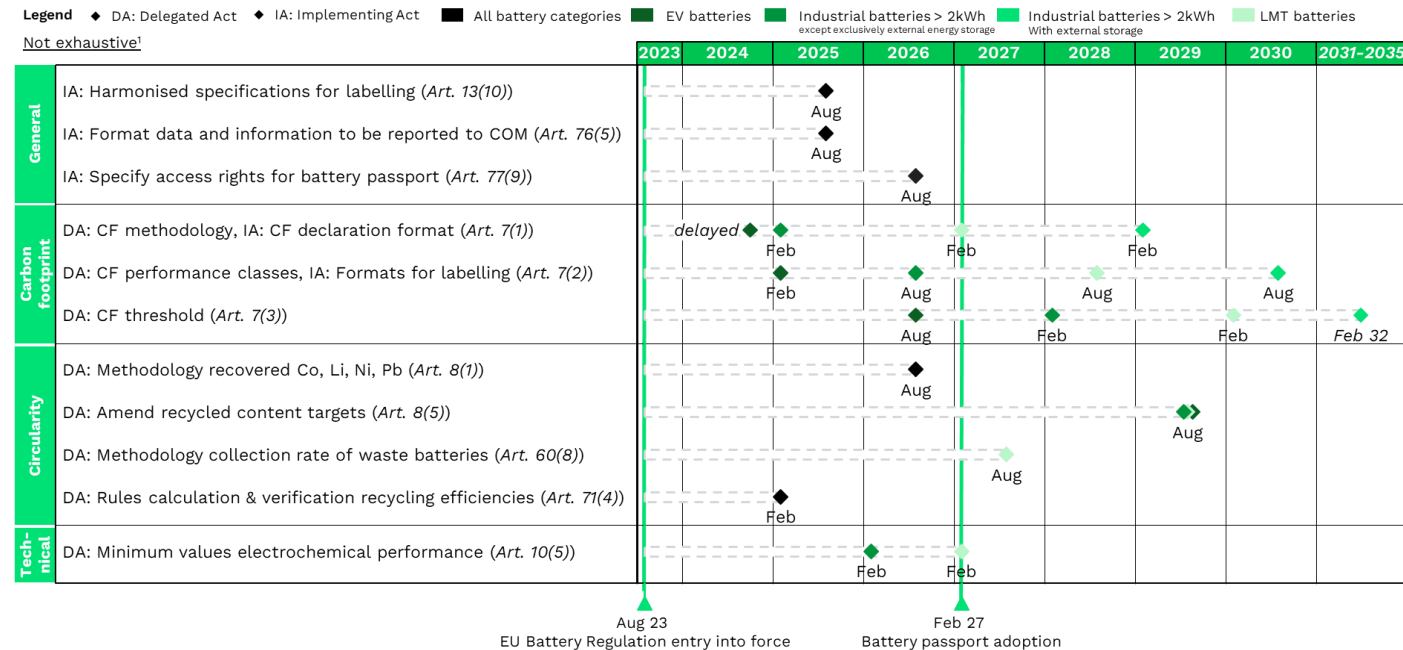
There is a lot left to be done, let's act now:

## Economic operators: start now to prepare!

- Check readiness for internal and external data acquisition
- Follow updates from secondary legislation and standardization
- Assess what's in for you: Business models beyond regulatory effort

## Regulators:

- Please clarify open requirements asap
- Consider lessons learned from the battery passport for other DPPs
- Ensure interoperability between sectors/products





# Interested in further details? Find the full results here!



Scan for additional **Battery Pass resources** on the:

- Battery Passport Content Guidance and DIN DKE SPEC 99100
- Battery Passport Technical Guidance
- Battery Passport Value Assessment
- and Software Demonstrator