Battery Pass

thebatterypass.eu

Closing Event

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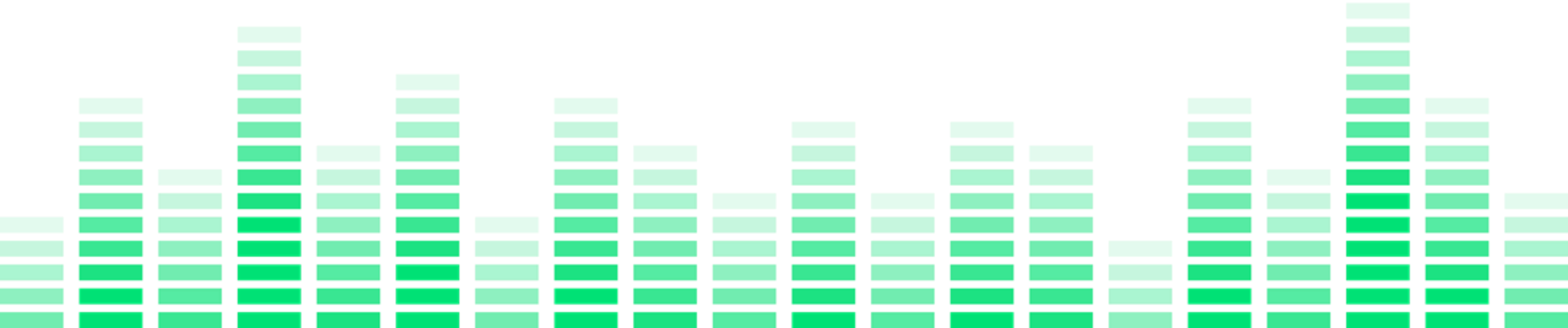
Supported by:
Federal Ministry for Economic Affairs and Climate Action
on the basis of a decision by the German Bundestag

From Concept to Blueprint:

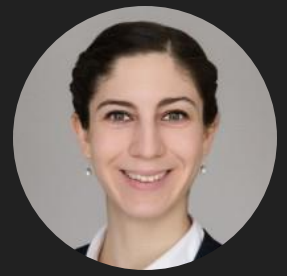
Battery Passports as Enablers of Transparent, Competitive, and Circular Value Chains.



PRESENTATION

The Economic Case for Battery Passports: Unlocking the Value of the EU Battery Passport

Dr. Sven Jantzen
Umicore



Canan Köllner
Systemiq

We consider battery passports as transformation tools

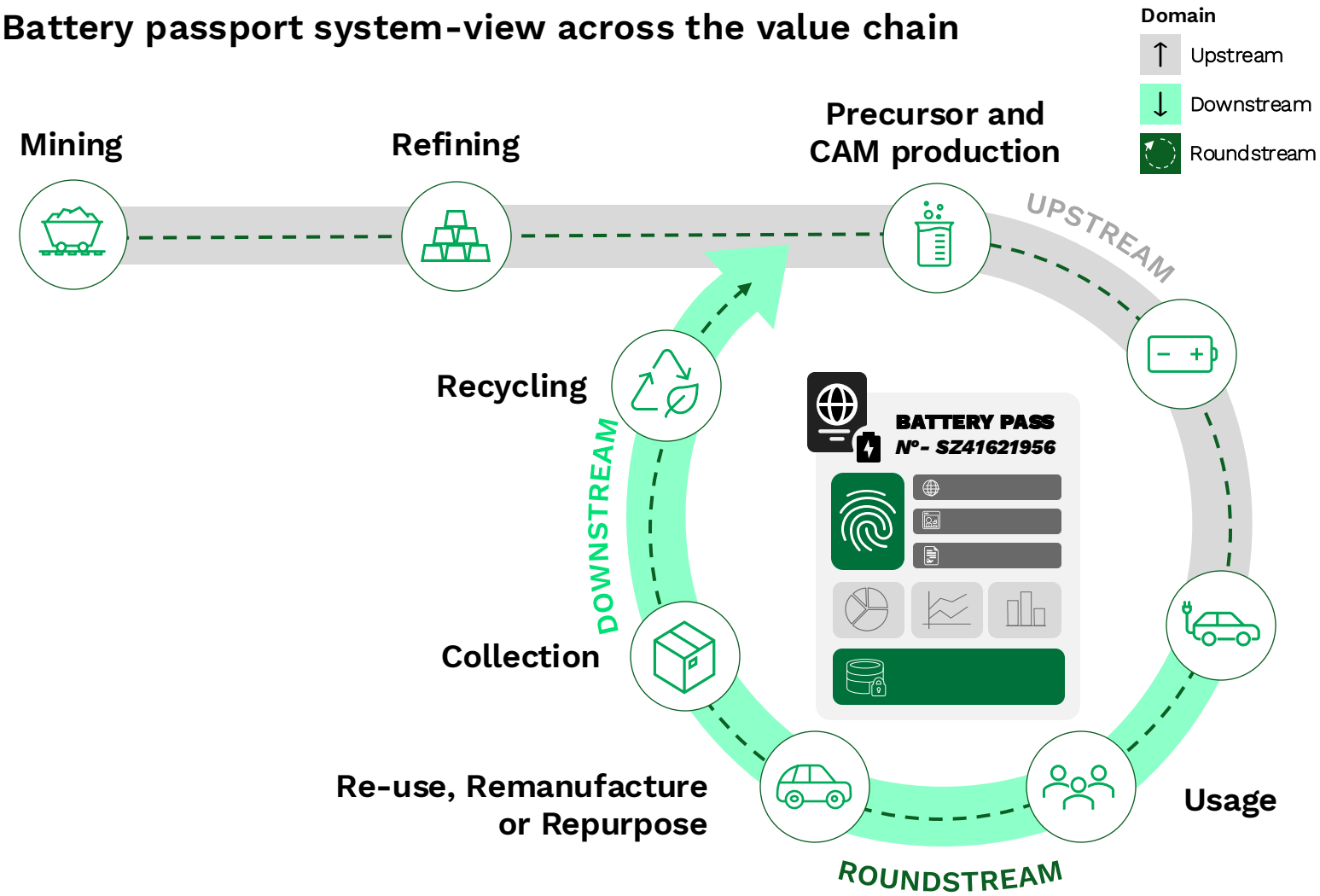
Battery Pass **Battery ID:** 0101010

1. General information
2. Labels and certifications
3. Carbon footprint
4. Supply chain due diligence
5. Materials and composition
6. Circularity & resource efficiency
7. Performance and durability

- ✓Situational awareness
- ✓Profound decision making
- ✓Product-as-a-service
- ✓Individualised use cases

Battery passports can boost value in 3 domains

Battery passport system-view across the value chain



Battery passports will enable...

- Level playing field
- ESG profiling as additional competitive advantage
- Closer ties with suppliers and customers
- End-of-life process management, development, and optimization
- Secondary raw materials more affordable, available, and tuned to needs
- Digitalized value chain to enable aligned R-strategies, and circular battery designs
- Triggering self-reflection to support organizational change

We have identified several use cases, particularly in the downstream sector

Direct use case | Potential use case | Selected for qualitative deep dive and initial quantification

Battery passport creation

Reliable communication of ESG data

Informed purchasing decisions

Eased servicing

Risk assess-ment for transport

More efficient recycling

Simplified residual value determination

Efficient data exchange and reporting based on upstream traceability

Streamlined trade of used and waste batteries through marketplaces

Increased end-of-life collection

Industry benchmarking

Accurate market overview

Informed policy design

Of the use cases we identified, we detailed and quantified three

Increased end-of-life collection

Additional downstream information could support authorities in preventing “battery leakage”

- ↓ Reduction of illegal export
- ↓ Reduction of illegal treatment

Simplified residual value determination

Performance and durability data enable businesses and private users to better assess the residual value of the battery

- ↓ Reduction of technical testing costs
- ↑ Increase in batteries going into a second-life application

More efficient recycling

Availability of data on battery composition and dismantling enables more efficient recycling processes

- ↓ Reduction of sampling cost
- ↓ Reduction of dismantling cost
- ↓ Process control optimisation

To maximise value creation, businesses need to take urgent action

Assess implementation requirements

- Initial battery passport software development and hard-ware set-up
- Data collection and management
- Battery passport operations

Identify strategic opportunities

- Assess which benefits are possible (revenue, cost, funding, resilience, emissions, materiality, social benefit optimisation)
- Establish a business case and model environmental impact metrics
- Define an implementation roadmap

Select implementation strategies

- by leveraging and enhancing internal capabilities, sourcing capabilities, and/or joining forces with industry peers. E.g. SMEs may benefit from 3rd-party passport providers

Interested in further details? Find the full results here!

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

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