



The Battery Lifecycle Company

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Battery Recycling Expo Frankfurt – 18.06.2026

From deep discharge to battery deactivation – forming of a standard as part of the battery recycling value chain

BLC
an expert in the battery field



Who we are

A strong family

- › As an owner-managed company with a decentralized structure, we - like our sister companies REMONDIS, SARIA and Transdev - stand for reliable services, customer-oriented solutions and innovative ideas.

A true partner to our customers

- › We are a value-added partner to our customers. We analyze complex processes and work together to optimize them throughout the complete supply chain.

REMONDIS®

Environmental &
industrial services

13.4

Billion €



48.000

RHENUS
LOGISTICS

Logistics

8.2

Billion €



39.000

SARIA®

Bio-Industry

3.3

Billion €



13.000

transdev
MOBILITY INSPIRED BY YOU

Mobility
(66% Share)

10.4

Billion €

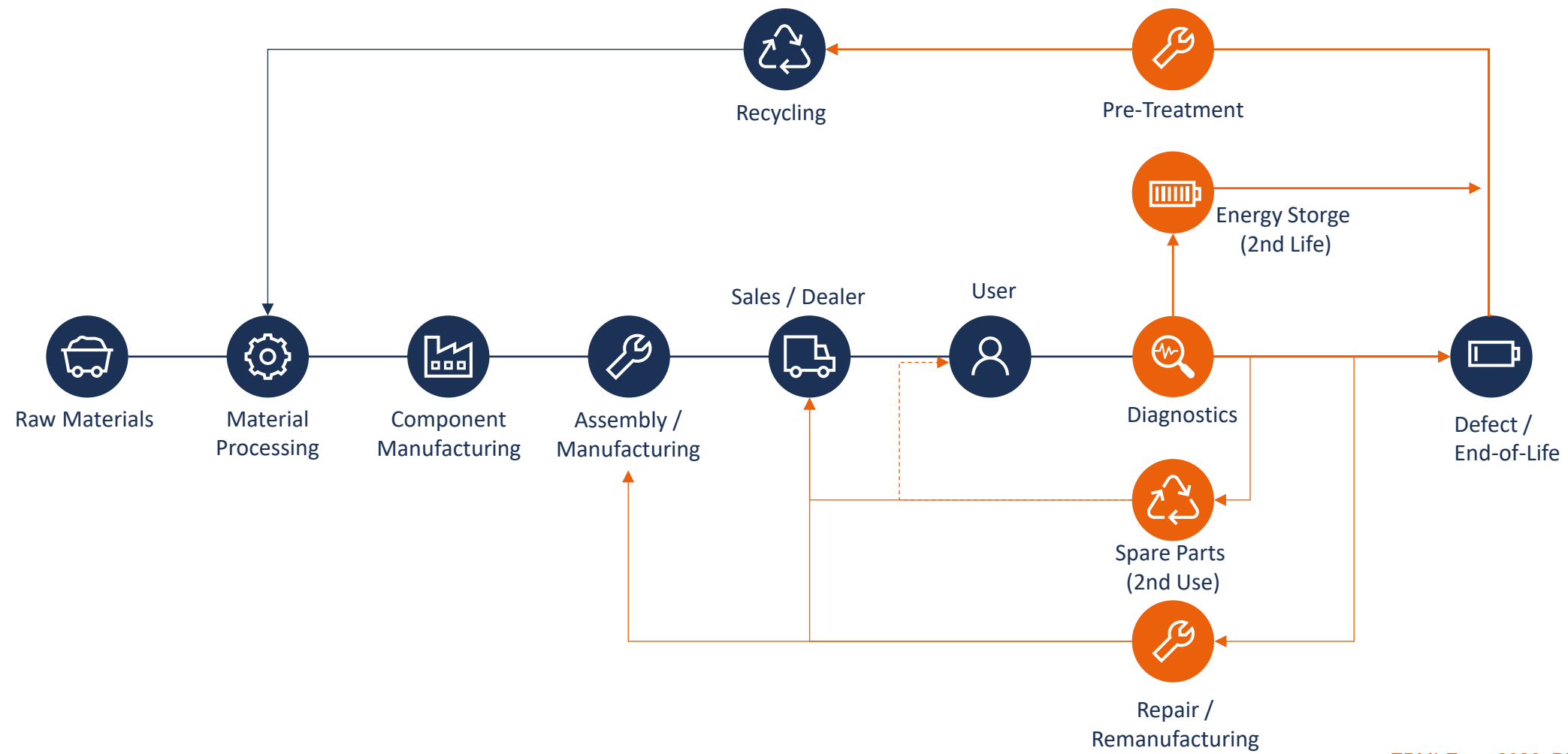


107.000

Foundation of a dedicated joint venture



Battery Circularity Concepts



BLC Sites

Rheda-Wiedenbrück & Magdeburg

Rheda-Wiedenbrück

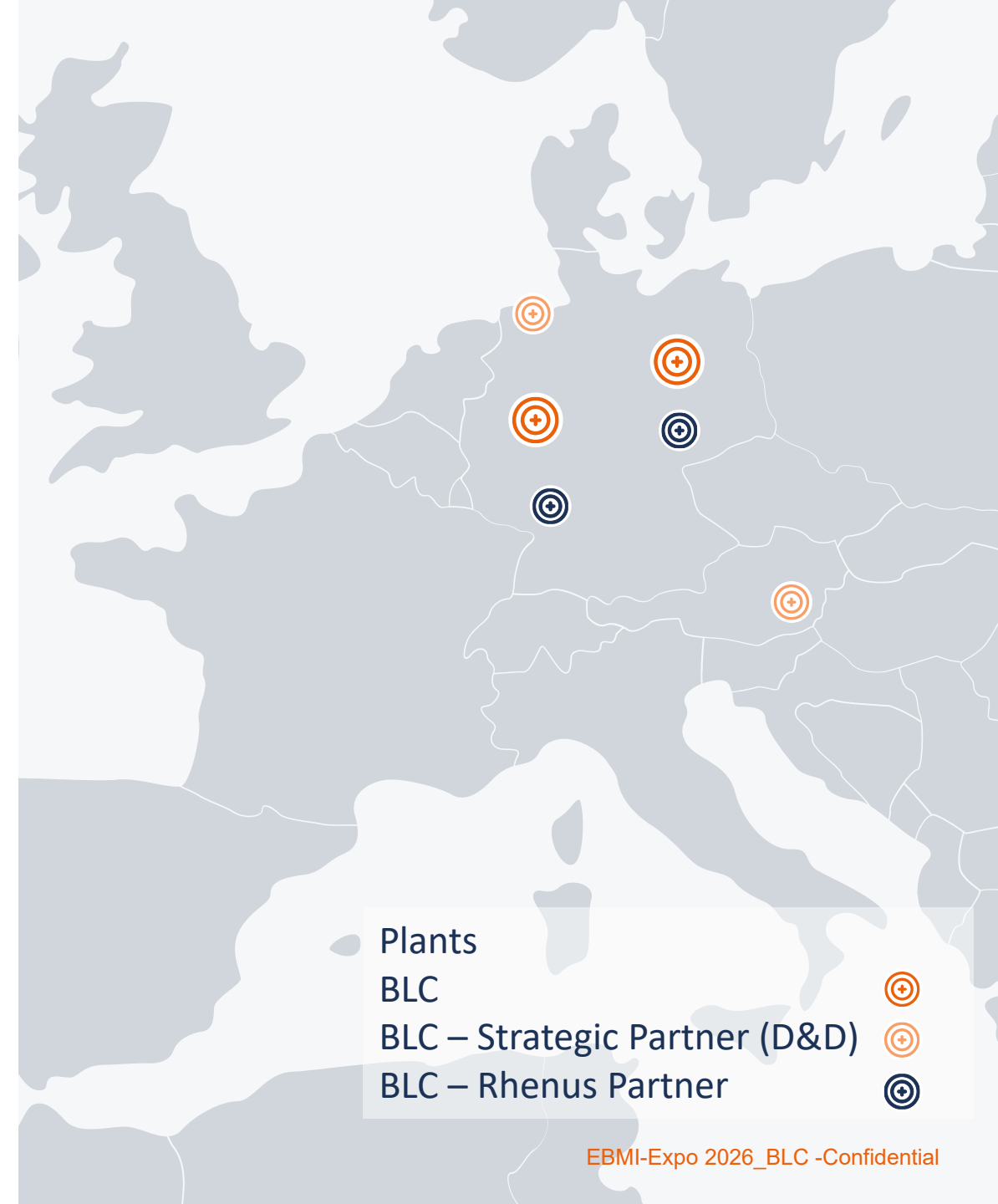


Magdeburg



A growing network

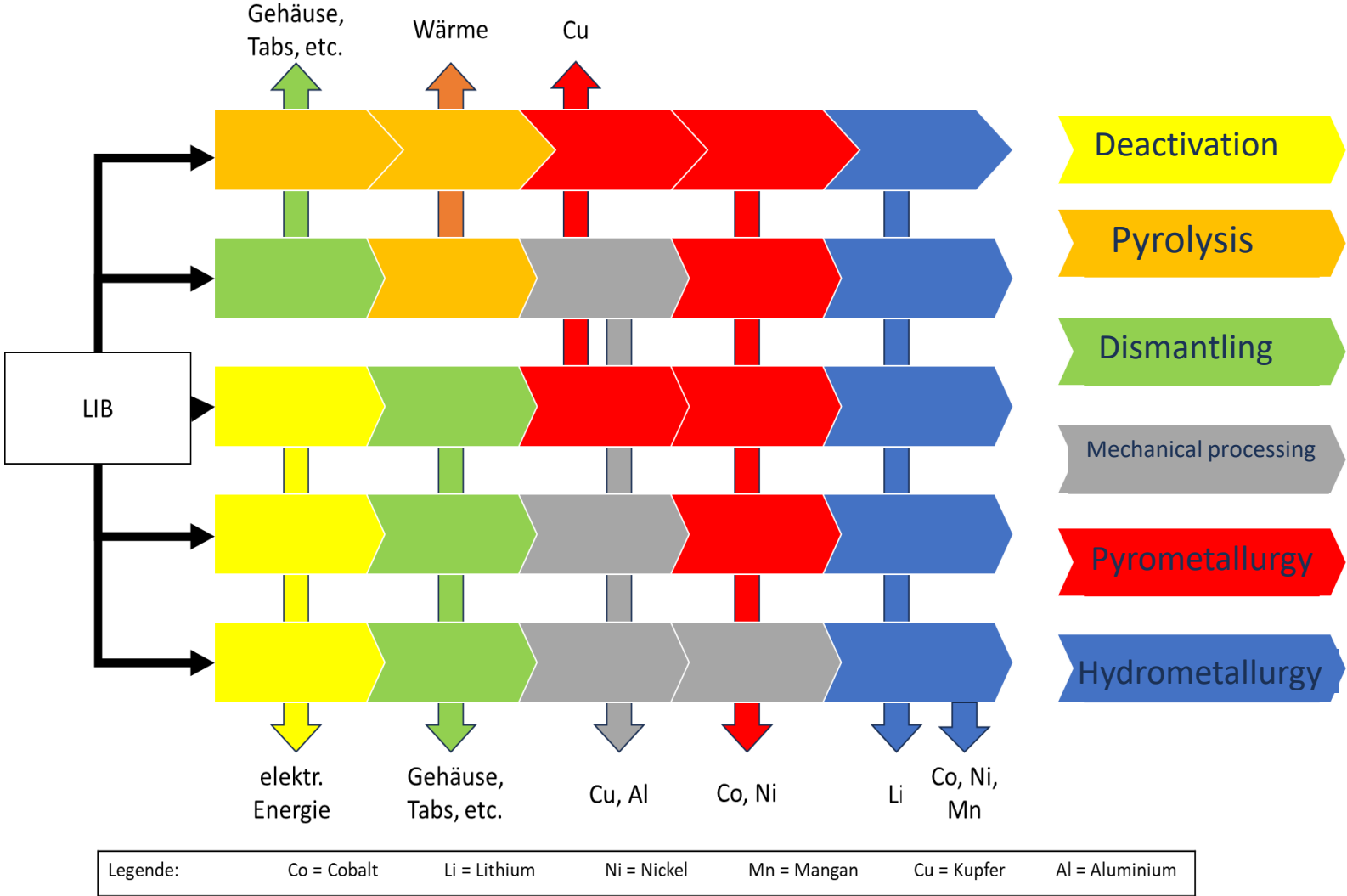
- › Plant in Rheda-Wiedenbrück already in production since 2022 (2.500t/year)
- › Plant in Magdeburg already in production since 2024 (15.000t/year)
 - › Increased grade of automation
 - › Automated deep-discharging
 - › Prepared for repair/remanufacturing process
- › Strategic BLC partner in Austria
- › Rhemus Ports Mannheim & Automotive Zwickau as BLC partners for warehousing
- › Overall growing network in the next years by developing existing plants of Rhemus & TSR



Standard
importance of forming one

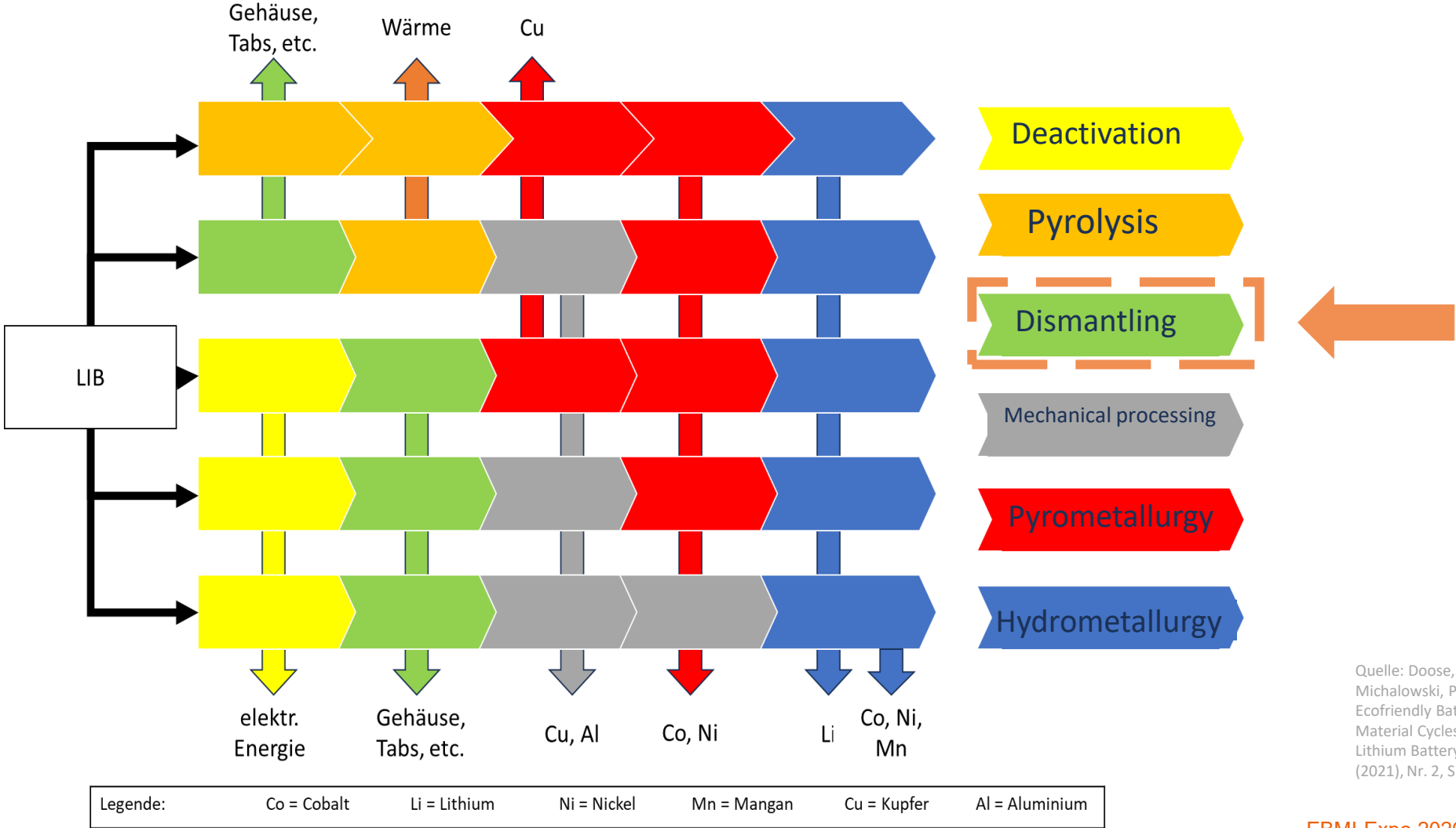


Various recycling process routes



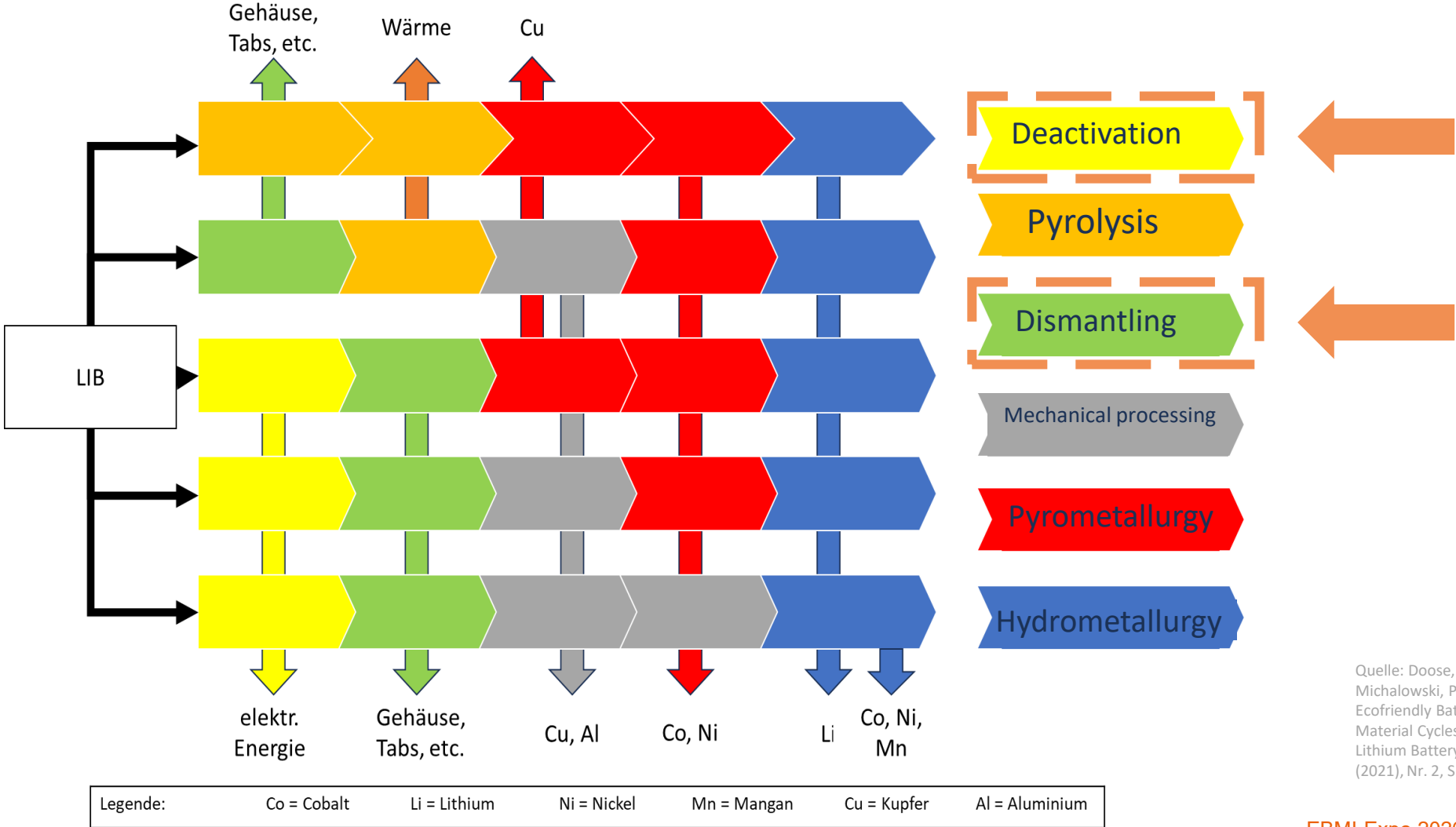
Quelle: Doose, S.; Mayer, J. K.; Michalowski, P. et al.: Challenges in Ecofriendly Battery Recycling and Closed Material Cycles: A Perspective on Future Lithium Battery Generations. Metals 11 (2021), Nr. 2, S. 291.

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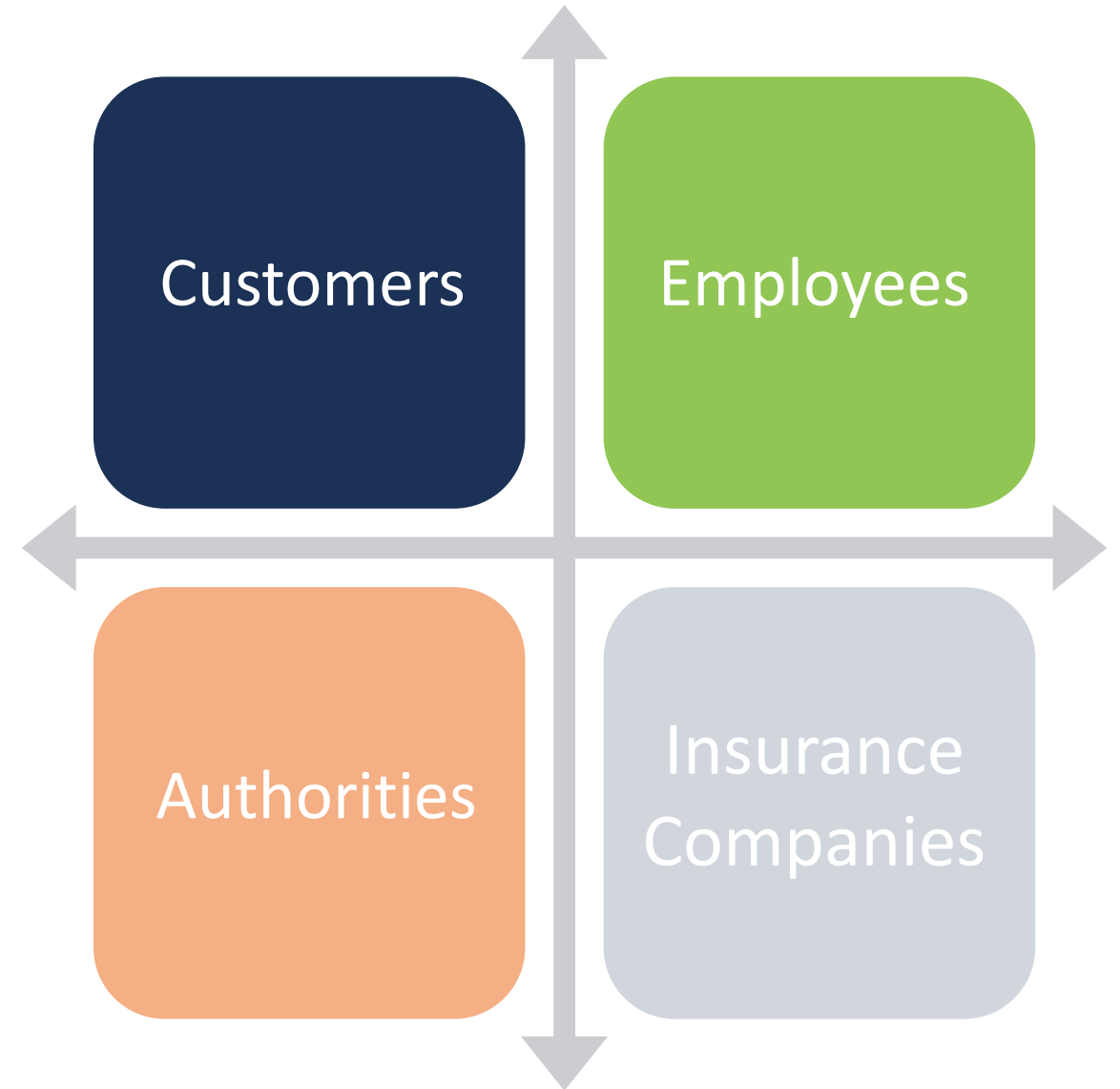
Various recycling process routes

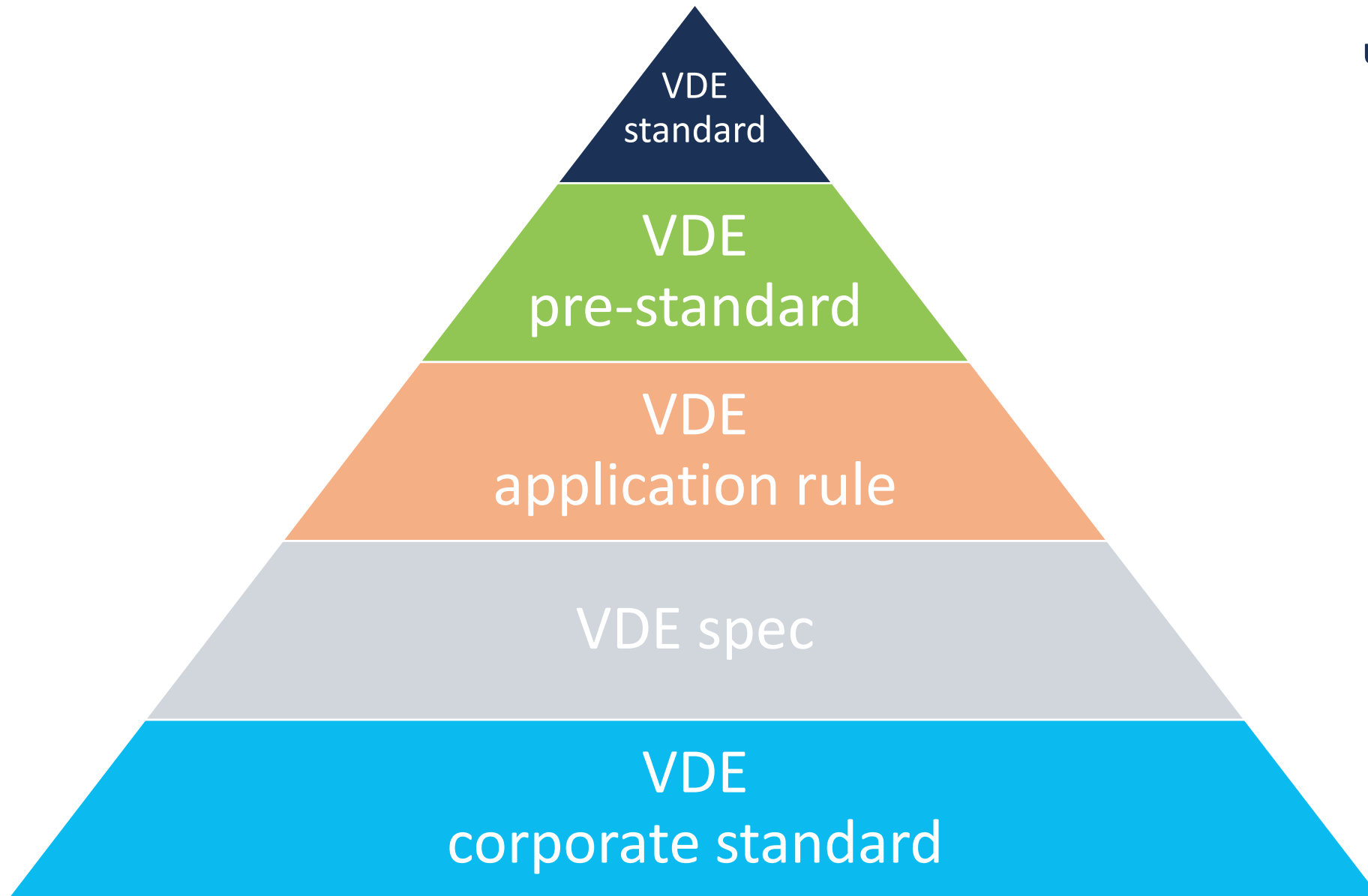


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Deep Discharge

Different definitions of
safe deep discharge and
how to maintain this state!

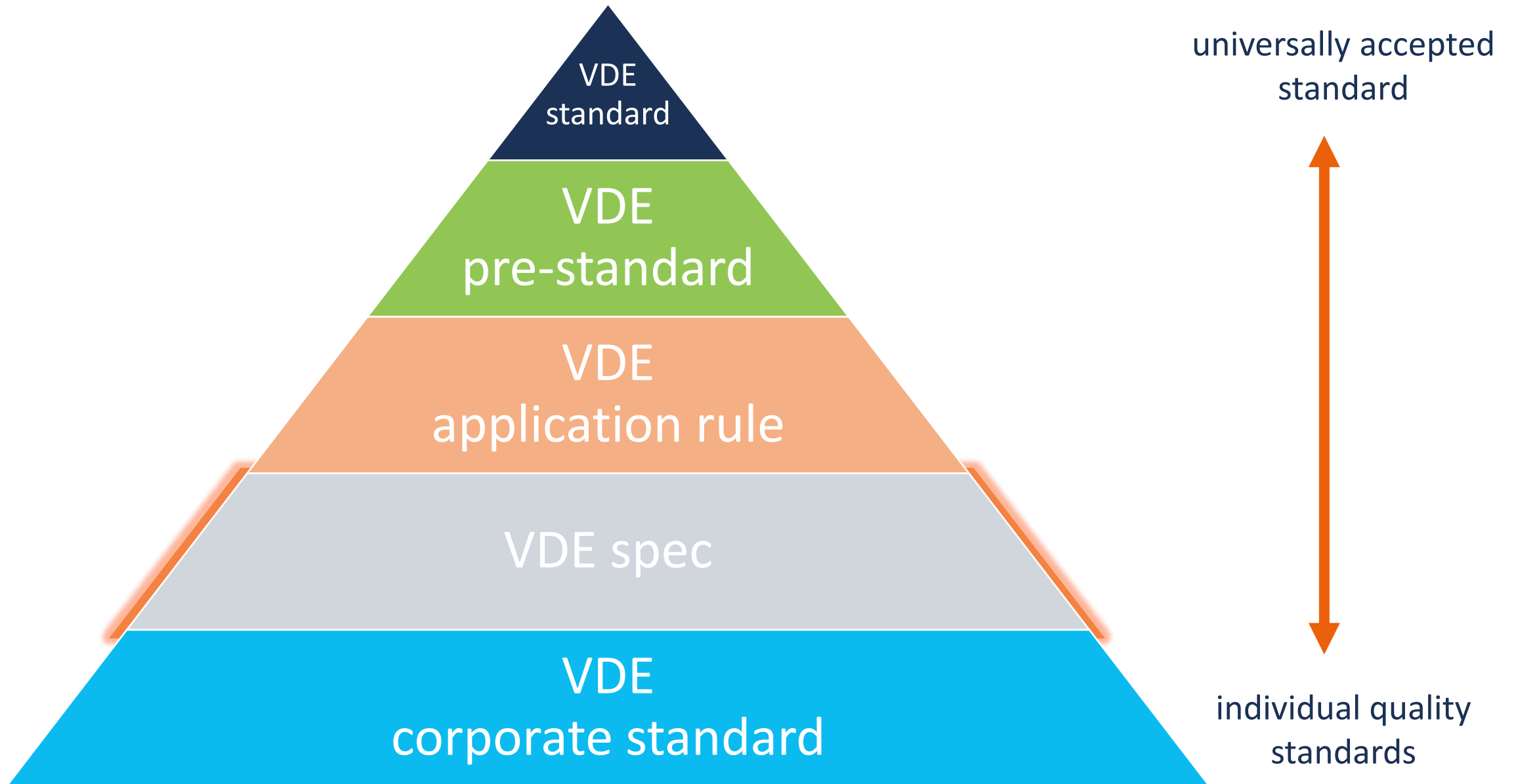


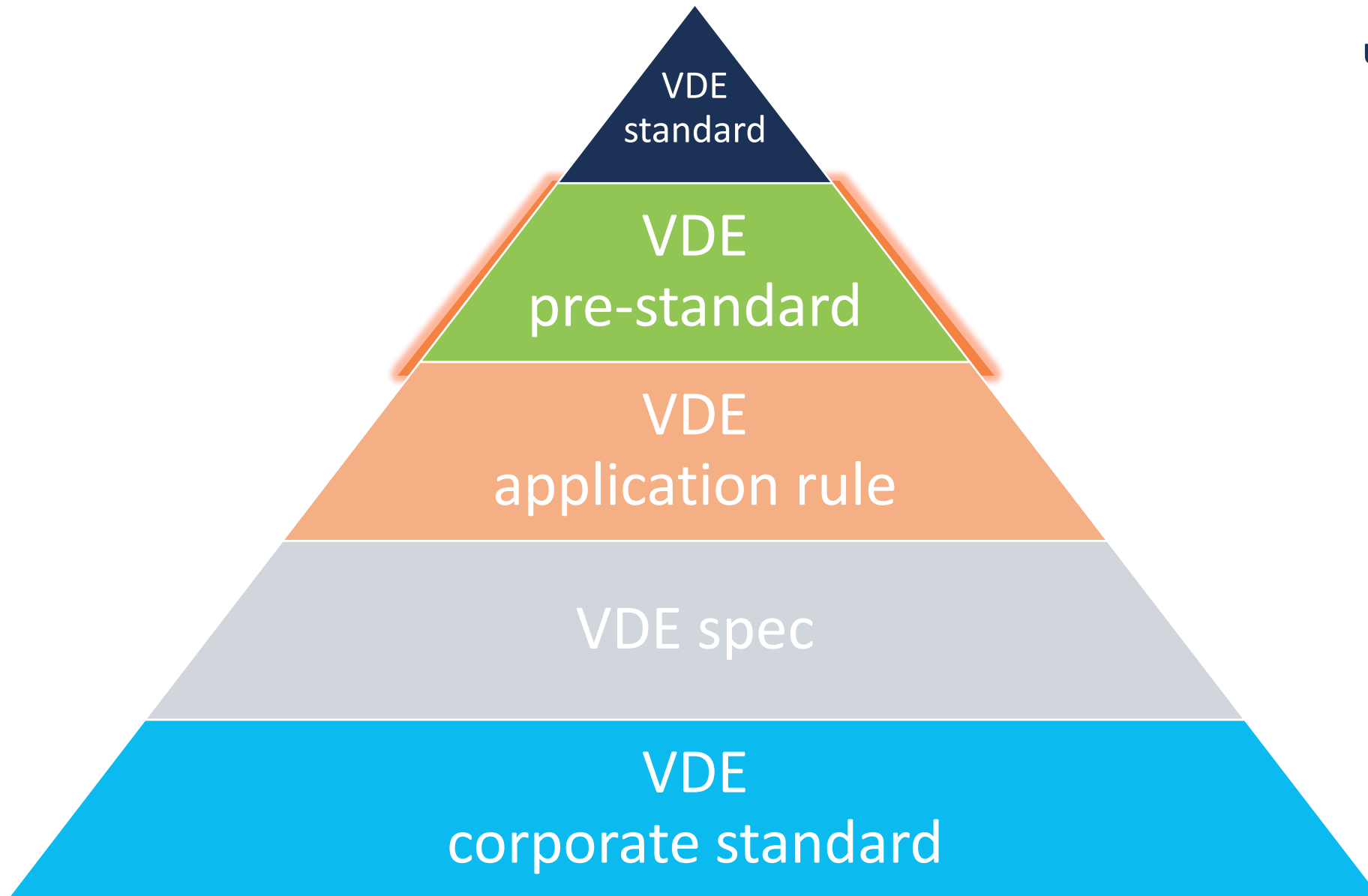


universally accepted
standard



individual quality
standards





universally accepted
standard

individual quality
standards

What is the definition of Deactivation according to DIN VDE V 0510-500*?

*still in the comment phase

A cell, module, or battery
that no longer poses an electrical hazard
and whose measurable voltage after deactivation,
taking into account the relaxation time,
is no more than 1% of the nominal voltage.

Objectives of the working group



Potential Hazards

- › Electrical hazard
- › Fire
- › Burn
- › Arcing
- › Etc.



Standardized definitions for deep discharge and deactivation

- › Procedural requirements
- › Testing procedure

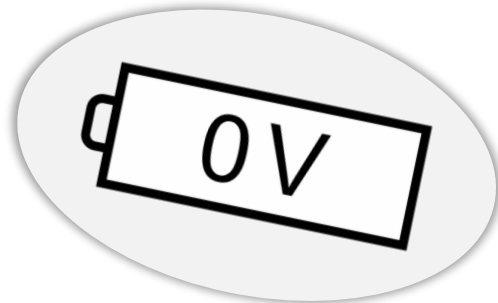


Basis for recommendations for action

- › Workplace safety
- › Recycling process
- › Transportation
- › Warehousing

Status Quo

- › Definition of deactivation of a cell / module / battery
 - › No electrical hazard
 - › Measurable voltage after deactivation of max. 1 % of the nominal voltage
 - › Consideration of the relaxation time
- › Three steps of the deactivation procedure
 - › Preparation for deactivation
 - › Deactivation process
 - › Ensuring deactivation



Outlook

- › Completion of the German draft standard
- › Continuation of the German draft standard on an international level
- › Transferring the results to other standards and stakeholders:
 - › Battery Directive
 - › KrWG//Waste Management Law
 - › AVV Numbers
 - › Work Safety
 - › DGUV
 - › Transport
 - › Packaging
 - › ADR
 - › Storage (in cooperation with insurance companies and fire departments)



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