

The EU Battery Regulation

Sustainable and circular batteries to support EU's energy transition

Karsten Kurz | June 2023

EU Battery Regulation

State of Play

Process – Key Elements

Design Requirements

Art. 7 & Annex II - Carbon Footprint

Art. 8 - Recycled content

End-of-life Requirements

Art. 71 & Annex XII Recycling Efficiency &

Material Recovery

Conformity of Batteries

Subject & Process

Secondary Legislation

Hazardous Substances – Carbon Footprint –
Recycled Content – Performance & Durability –
BESS Safety – Labelling – DD Policies – End-of-life
Management – Reporting – Battery Passport

Conclusions & Recommendations

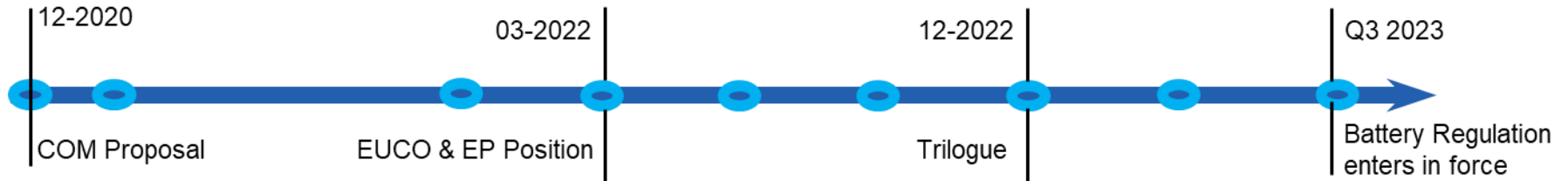
Conclusions – Requirements – Your role?

State of play

Process

- Commission proposal published Dec. 2020
- EUCO & EP agreed their positions in March 2022
- Trilogue took another 9 month
- Compromise took most on the Council positions
- Consolidated text published June 7, 2023
- Final vote by EP & EUCO postponed from March to end of June 2023
- Battery Regulation enters in force 20 days after publication

Battery Regulation now expected entering into force in Q3 2023

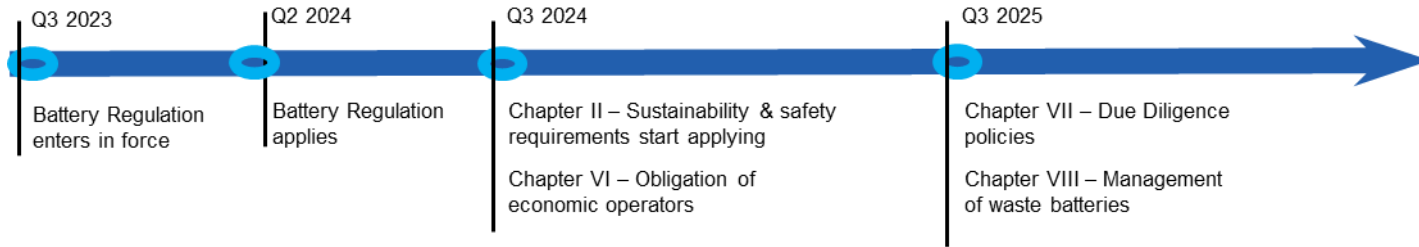


State of play

Process

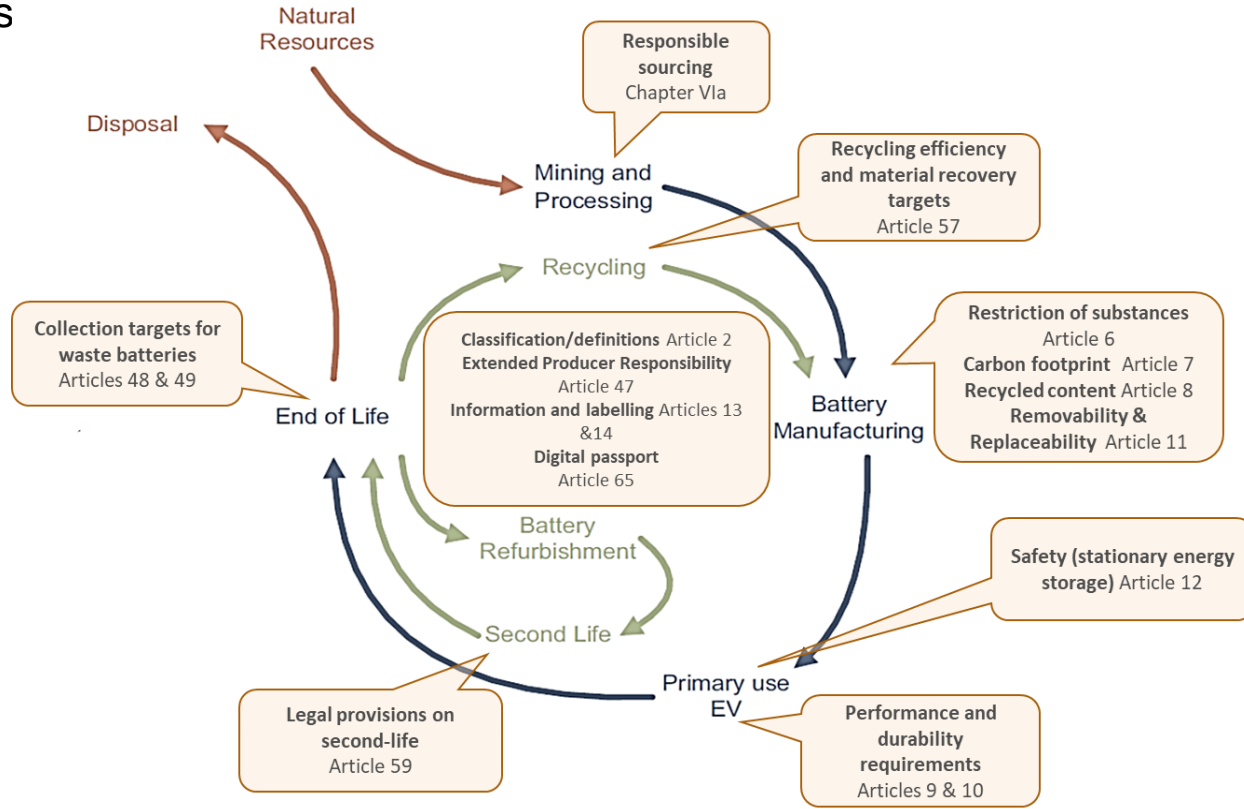
- Battery Regulation applies 6 month after entering into force
- Chapter VI (economic operators) applies 12 month after eif
- **Chapter II Design requirements** kick in with specific schedules, P&D is first and starts applying 12 month after eif
- **Chapter VII Due Diligence & Chapter VIII Management of waste batteries** start applying 24 month after eif
- Secondary legislation under development

Focus now - support secondary legislation



State of play

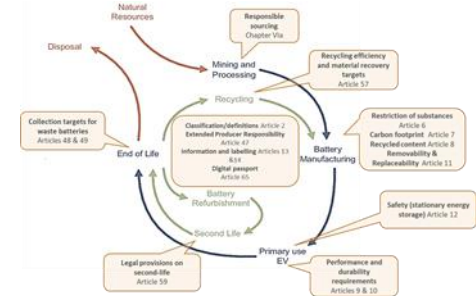
Key elements



State of play

Key elements

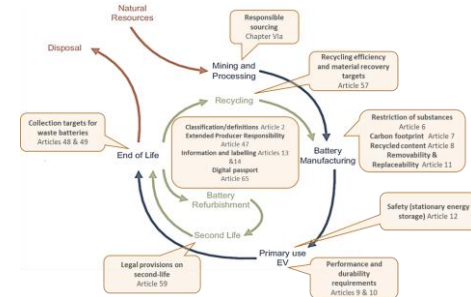
- 1st holistic piece of legislation under EU Green Deal - entire life cycle: sourcing, design, use and end-of life
- Dual legal base – Regulation follows common market rules (Art. 114 of “Treaty”)
- Chapter VIII refers to Art. 192 – **MSs are free to implement more stringent end-of-life management measures.**
- Separate regime to restrict substances in batteries (Art. 6, Art 86 - 88).
- Compliance with design requirements (**Chapter II – Carbon Footprint, Recycled Content, Performance & Durability**) will serve as **criteria for market access**
- Conformity assessment & declaration scheme (**CE Declaration, Chapter IV & V**) as key element for enforcement and market surveillance



State of play

Key elements

- Supply chain **due diligence** (Chapter VII) for selected raw materials
- Chapter VIII on waste management defines provisions for **recycling and reuse** and allocates **EPR**
- Chapter VIII promotes **producer responsibility organization** rather than individual solutions
- Extensive **labeling and information** requirements (Art. 13/Art. 14)
- **QR Code** mandatory for all batteries
- QR Code for LMT, EV batteries and IE batteries > 2kWh will be linked to further level of information (**Art. 77 Battery passport**)



Design requirements – Carbon Footprint

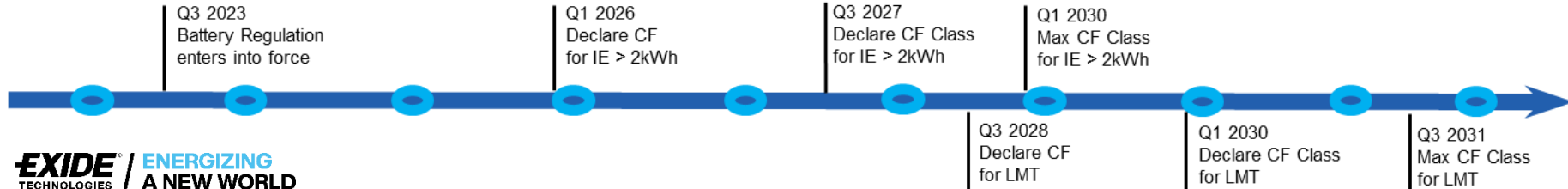
Art. 7 & Annex II - Carbon Footprint

- A design requirement - will also serve as criteria for **market access**
- CF applies to **EV - , IE > 2kWh - and LMT – batteries**
- Stepwise approach as **secondary legislation still needs to be developed and published**
 - COM to publish calculation methodology, Industry has to declare CF information
 - COM to publish CF Classes, Industry has to label CF Class
 - COM defines max. CF class for market access, products above max. CF Class excluded from market
- Applies to **battery model**, CF is subject to **CE Declaration**
- **Double timeline** – reference to COM activity & EIF - whichever is the later applies!

Design requirements – Carbon Footprint

Art. 7 & Annex II - Carbon Footprint

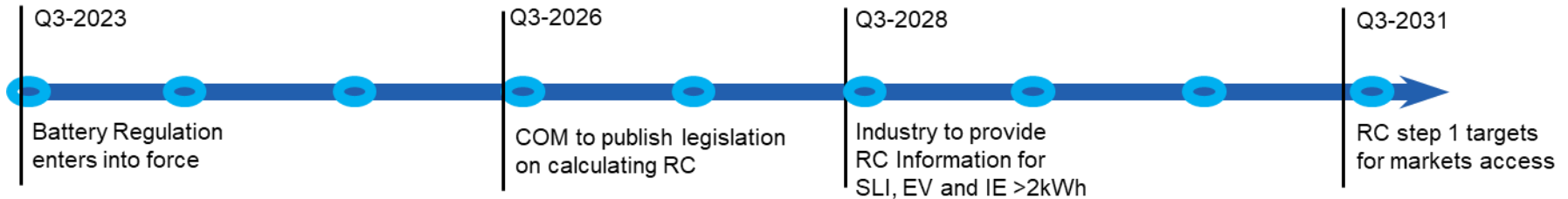
- Declaration
 - EV - 18 month after EIF or 12 month after DA, whichever is the latest
 - IE > 2kWh - 30 month after EIF or 18 month after DA, whichever is the latest
 - LMT - 60 month after EIF or 18 month after DA, whichever is the latest
- CF class label
 - EV - 36 month after EIF or 18 month after DA, whichever is the latest
 - IE > 2kWh - 48 month after EIF or 18 month after DA, whichever is the latest
 - LMT - 78 month after EIF or 18 month after DA, whichever is the latest
- Max. CF class for market access
 - EV - 54 month after EIF or 18 month after DA, whichever is the latest
 - IE > 2kWh - 66 month after EIF or 18 month after DA, whichever is the latest
 - LMT - 96 month after EIF or 18 month after DA, whichever is the latest



Design requirements – Recycled Content

Art. 8 - Recycled Content

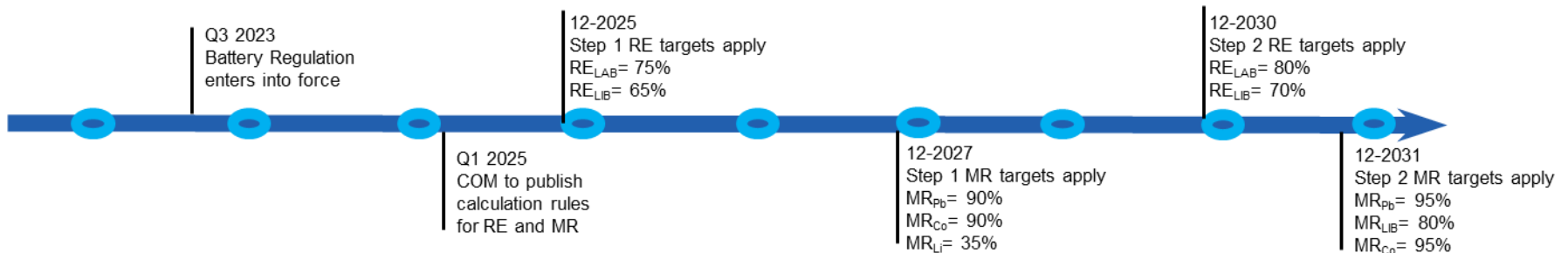
- A design requirement - will also serve as criteria for **market access**
- Applies to **SLI, EV, LMT & Industrial batteries > 2kWh**
- Applies to “battery model”
- RC is subject to **CE Declaration**
- Stepwise approach
 - 2031 - 16% Co, 85% Pb, 6% Li, 6% Ni
 - 2036 - 26% Co, 85% Pb, 12% Li, 15% Ni



End-of-life requirements - RE & MR

Art. 71 & Annex XII - Recycling Efficiency & Material Recovery target

- Expectations on the recycling process, hence **relevant for recycling operations**
- Numeric targets already defined, **calculation methodology is not**, requires secondary legislation!
- EU **Joint Research Centre** was tasked to develop calculation methodology
- **Industry involved** in JRC working group that develops RE & MR calculation rules
- JRC presented initial draft in Feb 2023 - looks fine to us



Conformity of batteries

Subject & Process

- Shortcoming of previous Directive now corrected
- Entire Chapter V describes the administration needed to supervise conformity of batteries
- Notified body (Art. 21) to supervise conformity assessments on national level
- Chapter IV & Annex VIII describe subject & process:
 - Conformity to Articles 6, 9, 10, 12, 13 and 14 follow “internal production control” (Annex VIII, Part A, Module A) – self declaration
 - Conformity with carbon footprint (Art. 7), recycled content (Art. 8) follow “quality assurance of the production process” (Annex VII, Part B Module D1) – declaration supervised by “notified body”

Conformity of batteries

Subject & Process

		Portables	SLI & AUX	Industrial <2kWh	Industrial >2kWh	LMT	EV	BESS
Annex VIII Part A	Art 6 - Chemicals	X	X	X	X	X	X	X
	Art 9/10 P&D	X			X	X	X	X
	Art 11 Removeability	X				X		
	Art 12 Safety of BESS							X
	Art 13 Labelling	X	X	X	X	X	X	X
	Art 14 State of health					(X)	X	X
Annex VIII Part B	Art 7 CF				X		X	X
	Art 8 RC		X		X		X	X

X - agnostic | (X) - specific to technology / design

Secondary legislation

Risk & Opportunities!



Hazardous substance management
COM evaluation report (Art. 6) – restriction
procedure (Art 86-88)



Labelling (Art. 13)
Harmonized specifications



Carbon Footprint (Art. 7)
Methodology – Format – Classes – Market access



Due Diligence Policies (Art. 47ff)
Application guideline – Substances – Risk categories



Recycled Content (Art. 8)
Methodology – Target re-assessment – Market
access



End-of-life Management (Art. 71ff)
Recycling efficiency – Material recovery –
Equivalent conditions – Reuse & repurpose



Performance & Durability (Art. 10)
Methodology – Market access



Reporting (Art. 76)
Report to Commission



BESS Safety (Art. 12)
Common specification



Battery Passport (Art. 77)
Format - Update content – Access level criteria

Conclusions & Recommendations

Conclusions

- Design requirements, Substance management, Supply chain DD, more complex EPR & enhanced labeling and information requirements, extensive reporting of market- and eol- data results in [micro managing the battery industry](#)
- [More complexity & more dynamics](#)
 - Directive – 30 Articles, 17 Definitions, 3 Annexes, 2 pieces of secondary legislation
 - Regulation – 96 Articles, 68 Definitions, 15 Annexes, 40+ pieces of secondary legislation (DAs & IAs)
 - Complex implementation schedule
- Dual legal basis is a [missed opportunity](#) for level playing field among the MS
- Regulation defines [framework to support European Industry](#), more content (Secondary legislation) needed - Execution will be key

Conclusions & Recommendations

Requirements to batteries

	Portables	SLI & AUX	Industrial <2kWh	Industrial >2kWh	LMT	EV	BESS
Art 6 Chemicals	X	X	X	X	X	X	X
Art 7 Carbon Footprint				X	X	X	X
Art 8 Recycled Content		X		X		X	X
Art 9/10 P&D	X			X	X	X	X
Art 11 Removability	X				X		
Art 12 Safety of BESS							X
Art 13 Labelling	X	X	X	X	X	X	X
Art 14 State of health					(X)	X	X
Art 18 Declaration of Conformity	X	X	X	X	X	X	X
Art 20 CE Label	X	X	X	X	X	X	X
Art 48 Due Diligence	(X)	(X)	(X)	(X)	(X)	X	(X)
Art 59/60 Collection Targets	X				X		
Art. 77 Battery Passport				X	X	X	X

X - agnostic | (X) - specific to technology / design

Conclusions & Recommendations

Clarify your role under Battery Regulation

Be active partner in developing secondary legislation!

Define your role and responsibilities!

- Review Chapter VI & Definitions - Identify your role as **economic operators** – Manufacturer, Producer, Importer,...
- **Classify your portfolio** (SLI/AUX , Industrial, LMT,...) along the Battery Regulation definitions
- Set up schedule & responsibilities for **design requirements** under Chapter II
- Extend purchase policies to satisfy Chapter VII **due diligence** requirements
- **Allocate responsibilities** for Chapter VIII “Management of waste batteries”

Thank you

Karsten Kurz | June 2023

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