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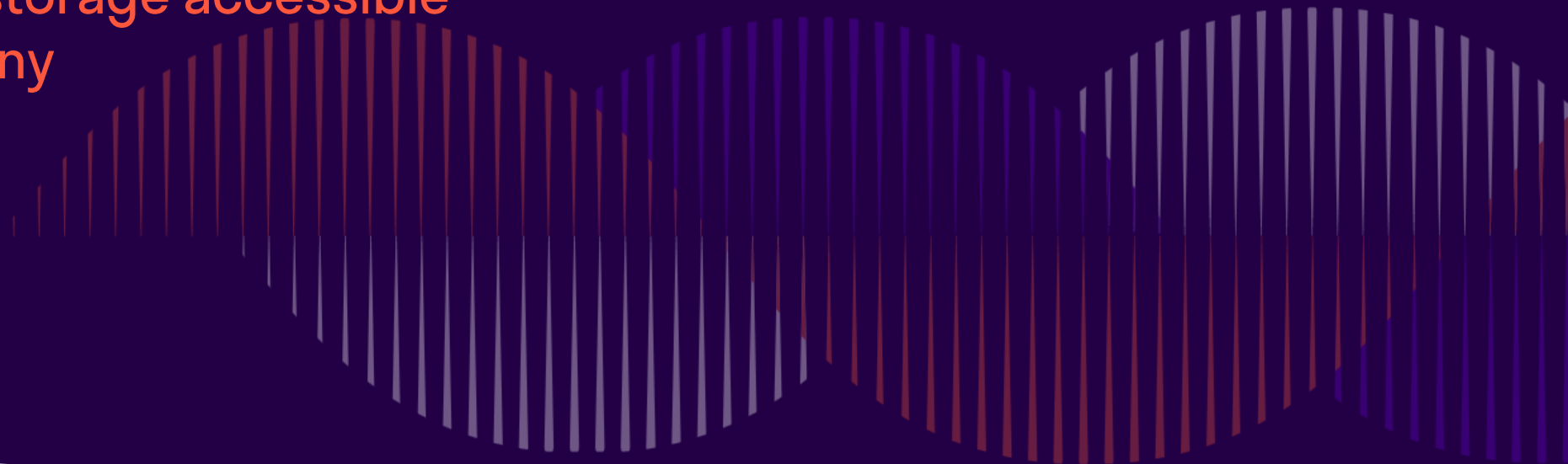
2ND-LIFE BATTERY STORAGE SYSTEMS

Making battery storage accessible for every company

Dr.-Ing. Arthur Singer

as@stabl.com



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The clean energy age

NEEDS BATTERY STORAGE

Businesses need batteries

Energy supply has become unreliable

Soaring electricity prices

Volatile electricity prices

Risk of power outages

Things will get more volatile

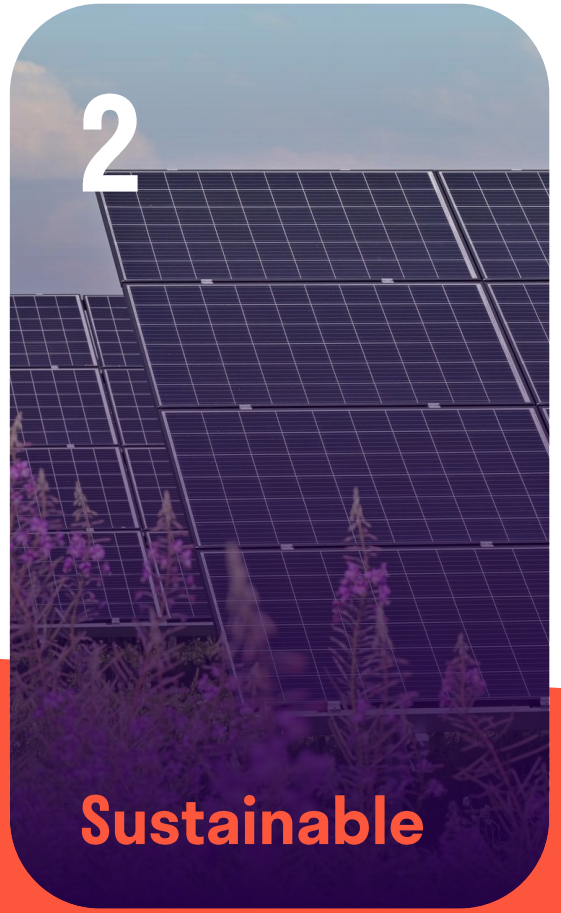
Increasing renewables

More EVs

Slow grid-reinforcement

Batteries bring stability

Our vision

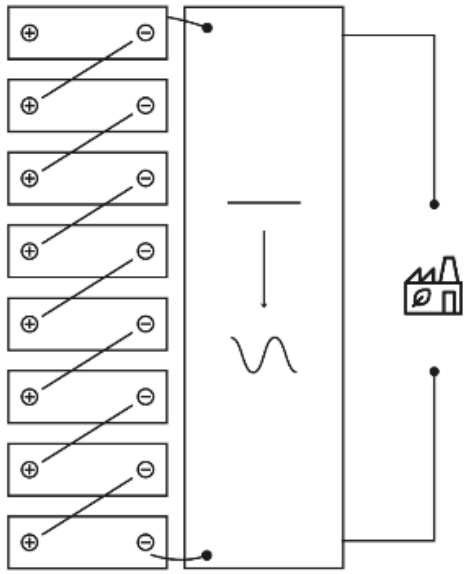


Paving the way to a sustainable energy world.

Problem: Purchasing battery storage is risky

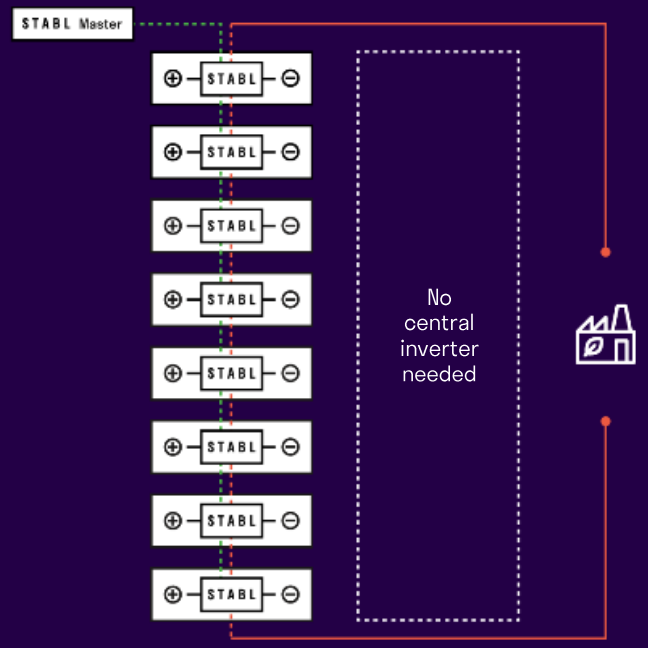
Classical vs. STABL approach

Conventional battery storage system



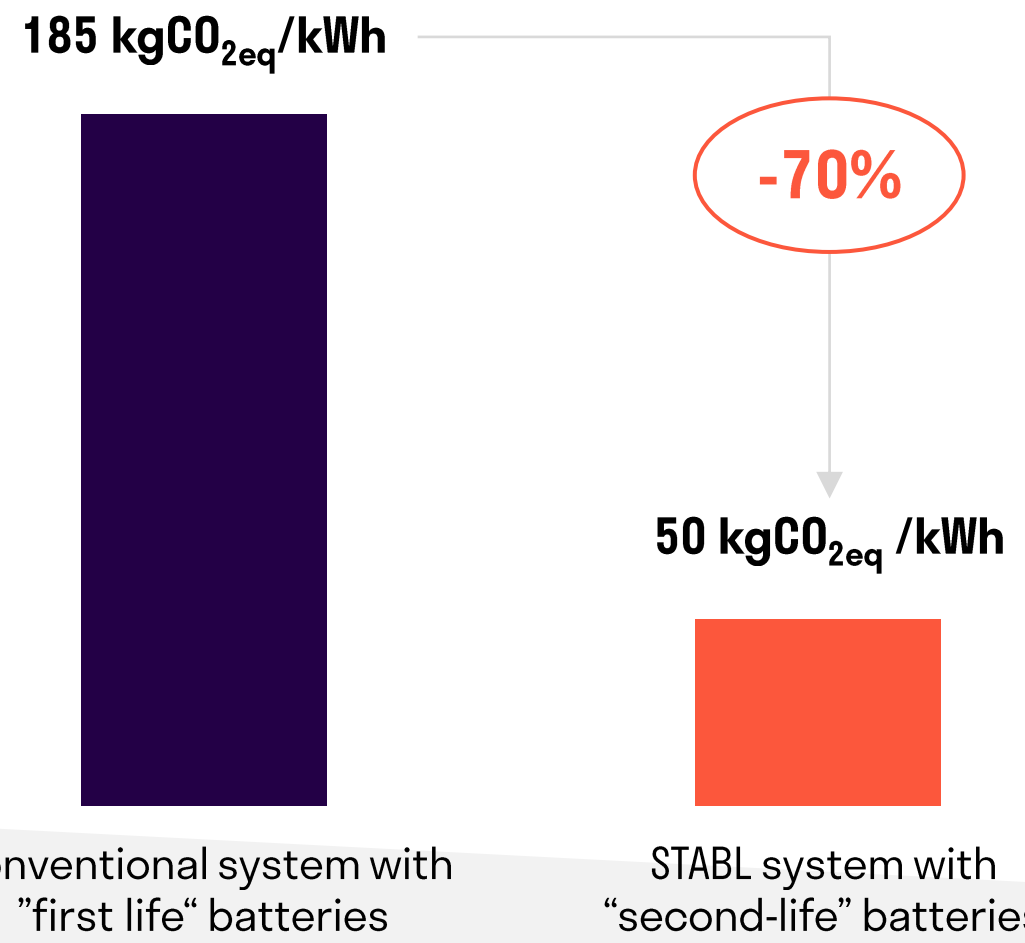
Vulnerable chain. Battery aging **affects the whole system** and replacement is expensive.

STABL controlled battery storage



Independent module control. Aging is **limited to one battery module** and replacement is easy.

2nd life reduces CO_2 footprint



Source: Mayordomo, C Pueyo, L. Canals Casals, “Greenhouse gas emissions comparison between new versus second life batteries”, Digital Proceedings of the 15th Conference on Sustainable Development of Energy, Water and Environment Systems, SDEWES2020.0644, 1-9 (2020)

Third party validation: Unparalleled efficiency

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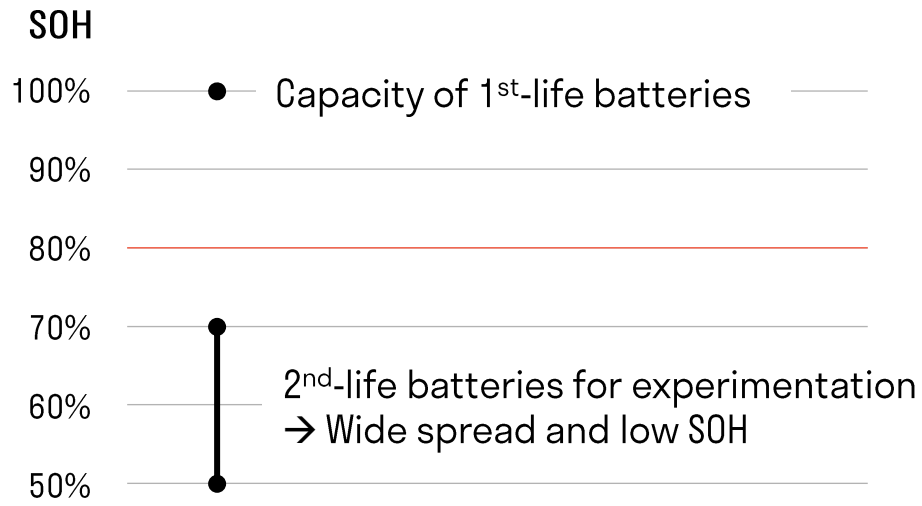
Technical validation and commercial integration project

Goal: Validation of claims

Objective: Validation of technical claims of STABL technology - Operation with high SOH (state of Health) spread, efficiency & performance

Focus Area: STABL balancing of unequal SOH battery modules



➢ Strong variations within SOH of one system

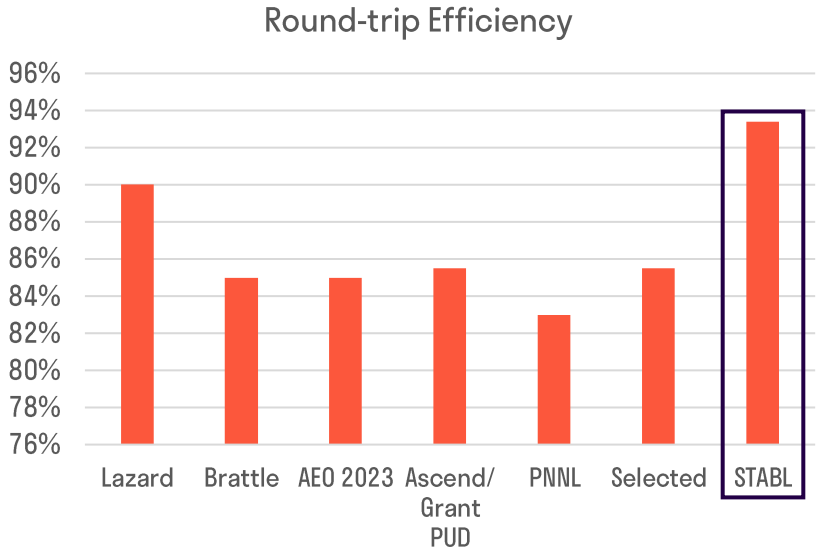
Results: Best Efficiency in market

STABL system working as intended with

93,4% Round Trip Efficiency

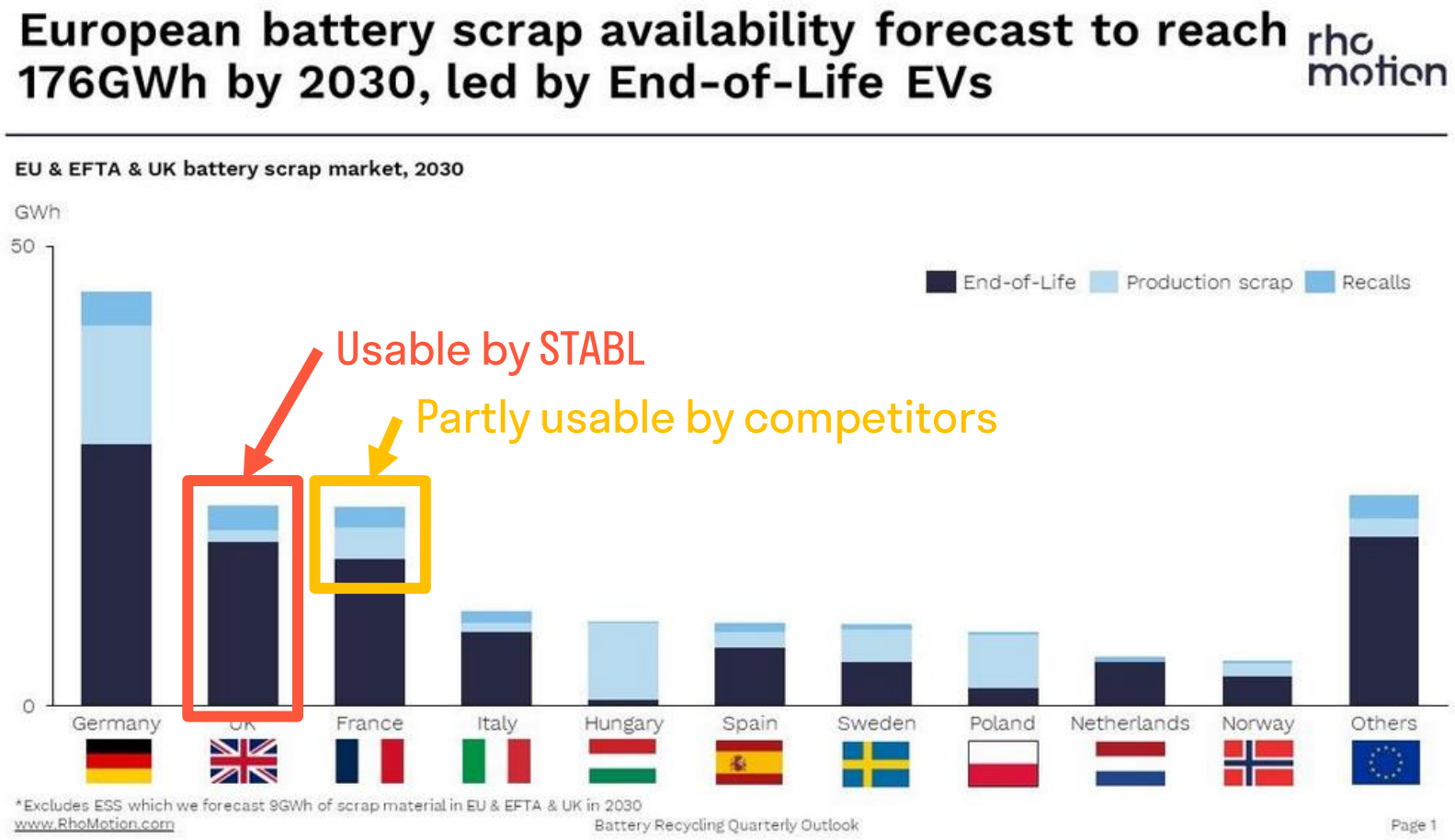
➢ ~5% higher than competitors

Usable capacity vs. claimed (20% SOH range fully used)



Source: NREL/TP-6A40-85332 June 2023

Massive feedstock available for STABL



- Competitors can use only „virgin“ batteries
- STABL tech lowers battery quality requirements

→ more batteries available for use & less competition for those batteries

Enough battery supply for the energy transition?

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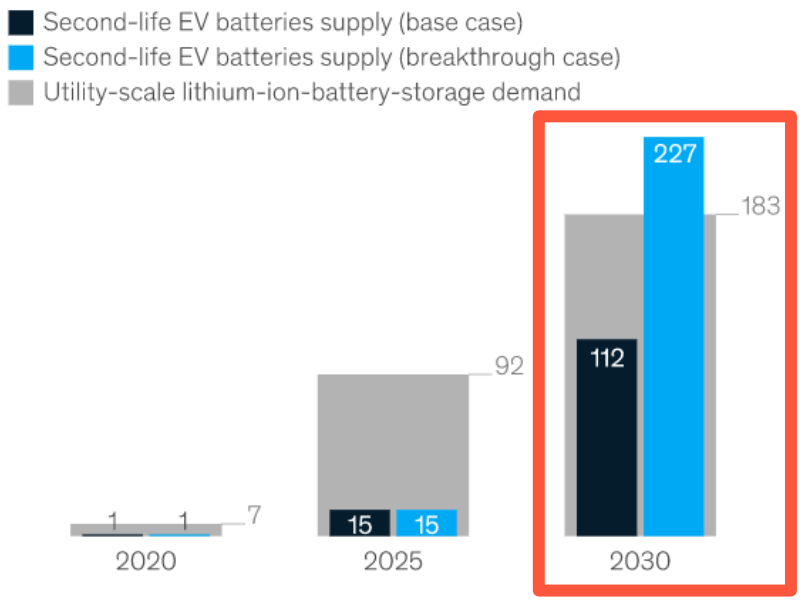
STABL does not have to fear any supply bottlenecks for batteries.

- Dependency on Asian manufacturers high for new batteries
- Rising number of EVs in EU
- 112-226 GWh/y on 2nd life batteries available by 2030

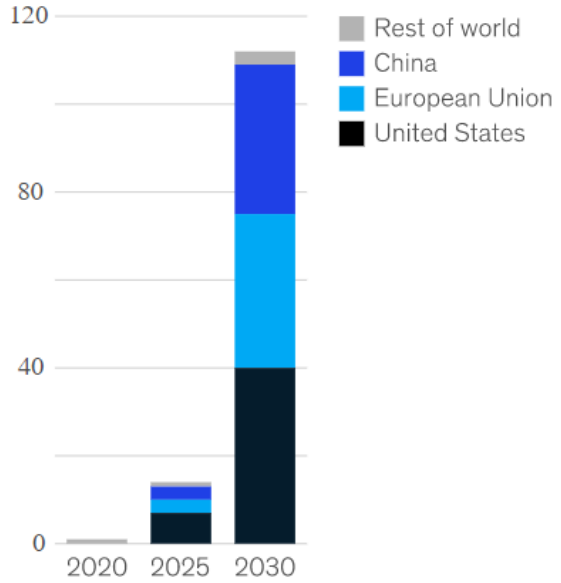
→ Lower dependency of battery supply by re-using EV batteries

Second-life lithium-ion battery supply could surpass 200 gigawatt-hours per year by 2030.

Utility-scale lithium-ion battery demand and second-life EV[1] battery supply,[2] gigawatt-hours/year (GWh/y)



Second-life EV battery supply by geography (base case[2]), GWh/y



[1]Electric vehicle.
[2]Only for batteries from passenger cars.

McKinsey & Company

Commercial storage installations

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Currently active in the DACH region with focus on SME

Why businesses go for a STABL BESS

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- Electricity bill is too high
- Only 30 % of self-generated electricity is used
- EV-charging and heat pumps are prohibited by the grid connection
- CO_2 footprint is damaging the business

Want to cut your energy bill?

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STABL Energy storage systems could be the answer!

You could benefit from:

- Autarky rate up to 85%
- Break-Even Customer Investment: 5-7 years
- Increased PV self-consumption

Family-owned smart meter manufacturer:

- peak shave their load
- increase self-consumption rate
- Second-life suits customer's values

BESS: 337,5kW & 490kWh

Self-consumption increase: 50.000 kWh

Autarky rate: 67%

Break-Even Customer Investment: 6 years

Sonderaktion bis zum 31.5.2024

Want to cut your electricity bill?

arthur.singer@stabl.com

+49 89 2153 6316

www.stabl.com

Dr. Arthur Singer

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