LIVISTA

LIVISTA ENERGY | FED DALLAS KANSAS | NOVEMBER 2023

European LIB supply chain status and opportunities

Jose Hofer

Livista Energy, contributing to the development of the European LIB supply chain

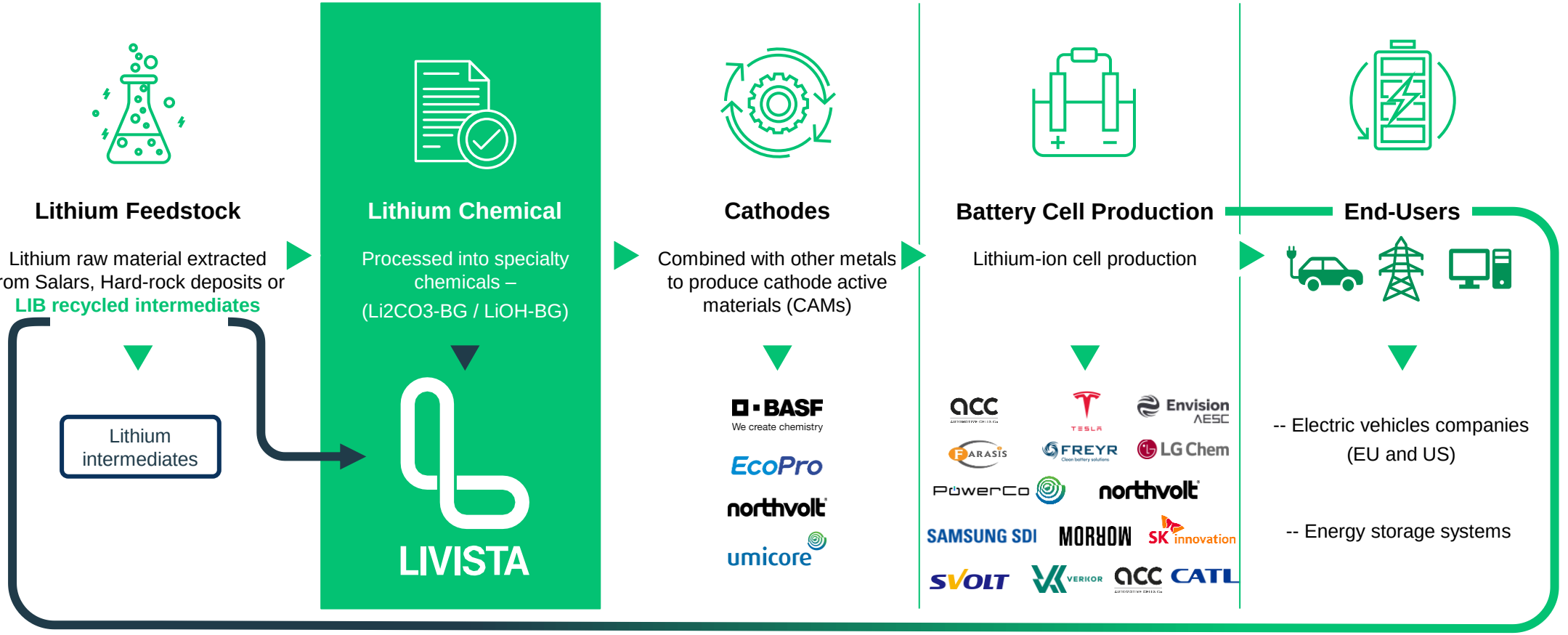
Livista is working to be a leading European lithium refiner of primary and secondary feedstock

SECTION 1

EU Market & Support

With a strategic location in the supply chain

Livista Energy, contributing to the development of the European LIB supply chain.

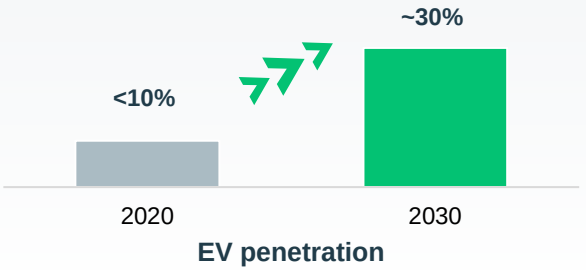


Strong Regulatory Support

Driven by the Critical Need to Secure European Supply

Global EV Revolution

- EV penetration could reach 30% by 2030
- Demand for larger batteries for longer-range vehicles and fewer plug-in hybrids
- ~2,500 GWh demand for lithium-ion cells for EVs by 2030



US Policy

- Strengthen US manufacturing of lithium-ion batteries (Defence Production Act)
- Inflation Reduction Act targeting bUS$350 to support US supply chains in both renewables and storage
- mUS$200 to support battery R&D, and US$8 Bn for wider climate and energy innovation
- Advanced Technology Vehicles Manufacturing – US$17 Bn of loans to support vehicle pack and cell manufacturing
- Federal Consortium on Advanced Batteries – 20-year plan to develop domestic supply chain

Strong Regulatory Support

- The proposed EU Critical Raw Materials Act sets standards for the extraction, processing and recycling of strategic raw materials within the EU
- European Commission Temporary Crisis and Transition Framework (“TCTF”) to foster measures in sectors which are key for the net-zero transition
- R&D funding available through grants including the European Commission Important Project of Common European Interest (“IPCEI”)

European Commission

TEMPORARY CRISIS TRANSITION FRAMEWORK

Source: Rho Motion, SC Insights

SECTION 2

Opportunities and Development in the EU LIB Supply Chain

EU LIB supply chain fundaments

Unique European Midstream Battery Value Chain Opportunity

23% — LIB & Lithium Chemicals Demand CAGR

Europe is seeing considerable growth in lithium chemical demand over the next 10 years:

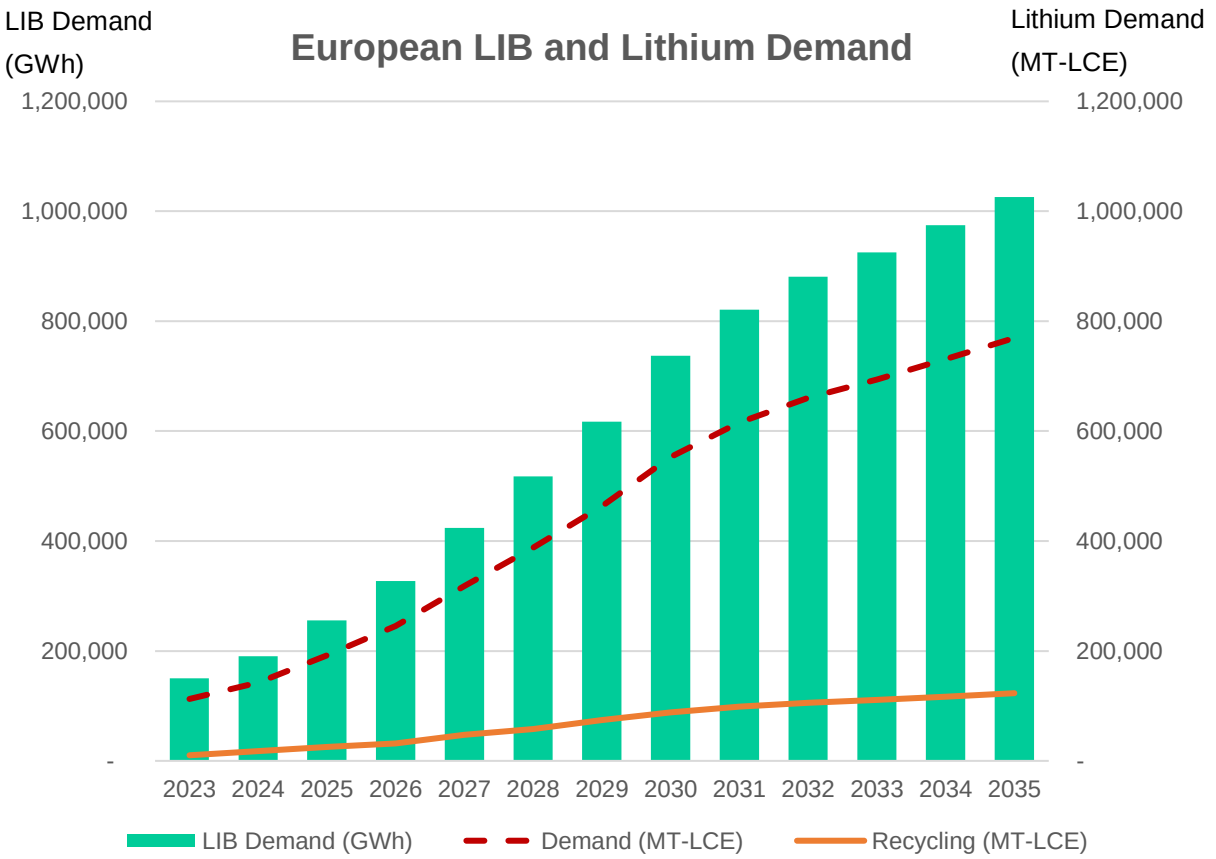
25% — EU share % of Global LIB Demand

SCI is forecasting that Europe will be trending towards one fourth of global LIB Demand

LITHIUM CHEMICALS

CATHODE **LIB CELL**

Proximity between refiner, cathode and cell producer is key. Mining Assets located is secondary



Source: SC-Insights; Public Information

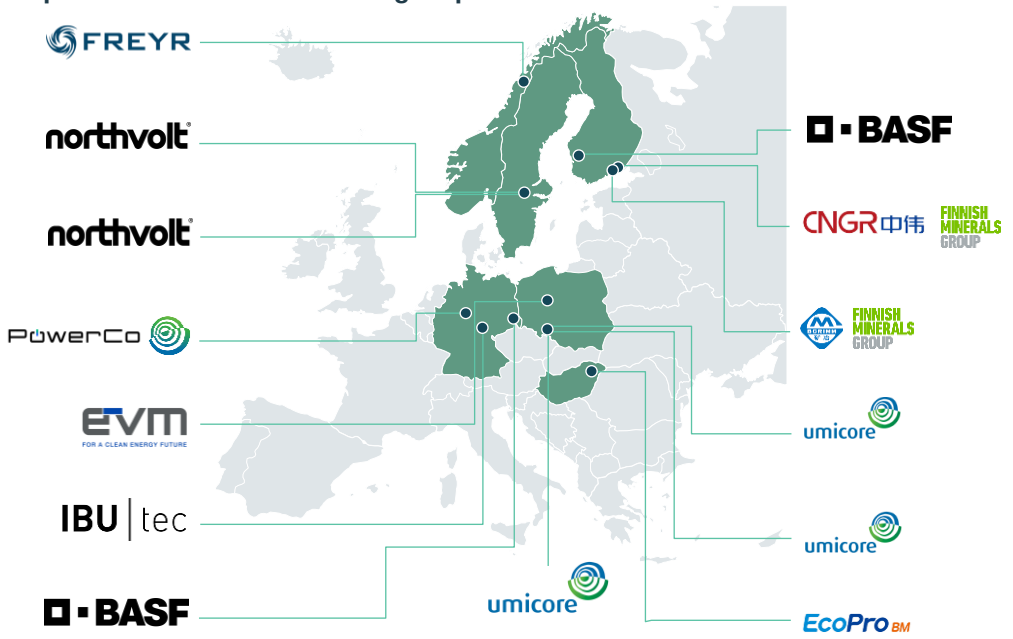
Notes:

1. LIB Demand considers capacity utilization

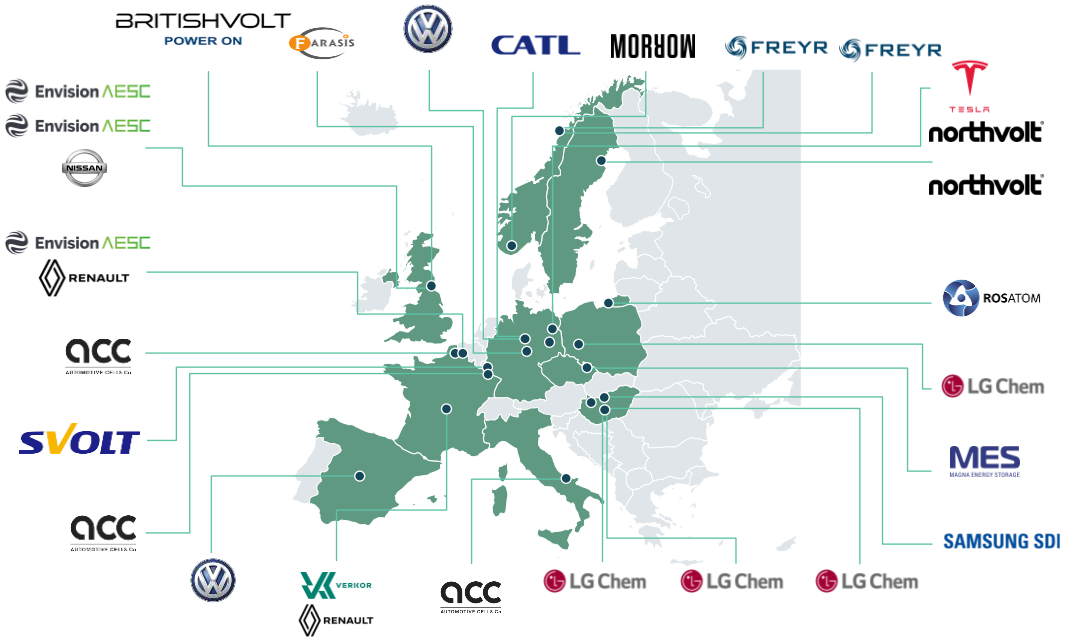
Overview of the European LIB supply chain

>700 GWh Announced LIB Capacity by 2030, with ~550 kMT-LCE lithium chemicals needed

European Cathode Manufacturing Map



European LIB Cell Map



Livista is at the Intersection of Accelerating Green Tailwinds and Macro Trends

- ✓ Acceleration in EV penetration and European lithium demand
- ✓ Strong established infrastructure – within 500 km proximity to the majority of the EU batteries and EV supply chain
- ✓ Strong regulatory support driven by green tailwinds and energy security / supply chain localisation

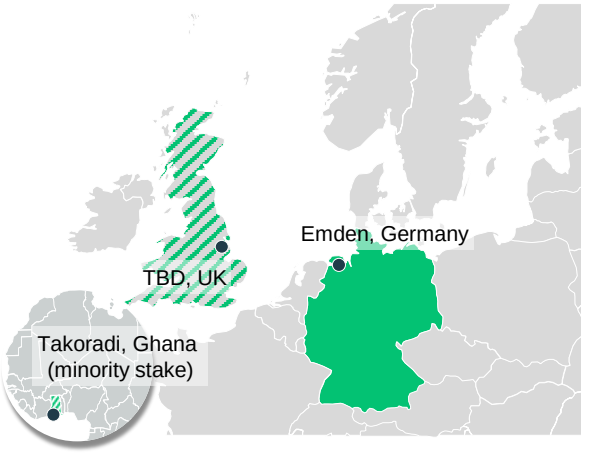
Livista is contributing to the development of the EU LIB supply chain

Planned 30 kMT-LCE annual production of lithium chemicals by 2027

Livista Business Overview

- Livista is planning to construct a standalone lithium conversion facility in Germany with 36 kMT-LCE initial capacity and availability for a 72 MT-LCE Phase II expansion
  - Plans to continue to develop future plants to meet European lithium chemical demand – **ambition to expand total run-rate production after 2030**
- Converting recycled and scrap battery materials, lithium carbonate and spodumene into lithium hydroxide and lithium carbonate battery-grade using proven technology
- Plans to inaugurate an R&D Centre and Laboratory in France in 2025
- Senior management team with deep project expertise in place

Livista Planned Facilities Overview



- ✓ First site secured in Emden, Germany – PFS completed, DFS awarded and working towards FID in Q3 2024
- ✓ 100% renewable power
- ✓ Site selected for potential future development in Humber, UK and France
- ✓ CAA Mining partnership for a lithium mine / conversion facility in Ghana (future lithium sulphate / carbonate supply)

1+1	Q2 2027	30 kMT-LCE	mUS$531
1 plant in Emden (Phase I & II) + 1 plant in the UK (Phase II & III)	start of production at Emden site	base case run-rate production by end of 2027	Initial CAPEX with single plant economics

Notes:
1. Steady-state EBITDA

SECTION 3

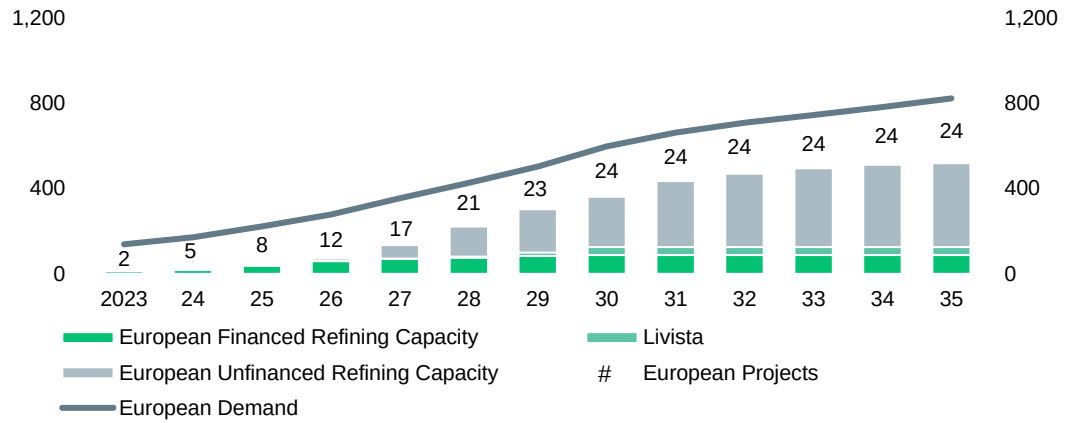
EU Refining and Strategy

Global refining landscape and EU

Refining is much more concentrated than lithium extractions with China having the majority of facilities and capacity

Graphic shows both existing and planned lithium refineries

European Lithium Demand & Refining Capacity



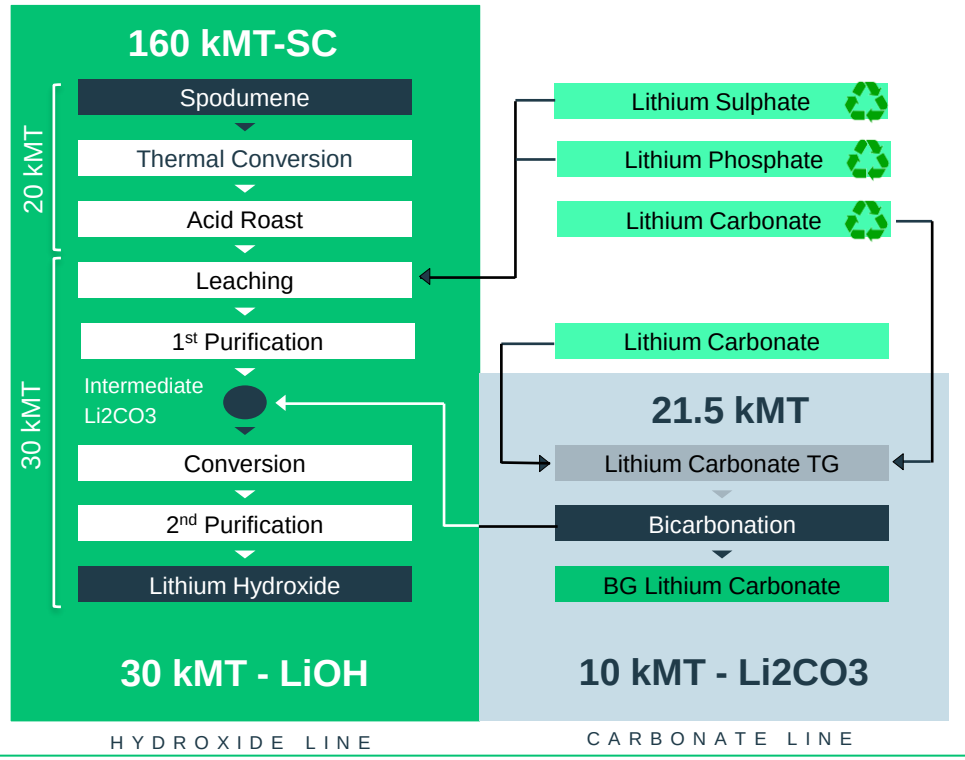
- European lithium refining is also likely to struggle to meet long term demand especially when financing is considered
- Europe has a strong history of chemical refining with some significant advantages:
  - Access to a significant proportion of renewable energy
  - Chemical processes capability and experienced labour force
  - Availability of reagents
- Europe still doesn't have enough projects announced to meet projected demand, especially taking into account financing (vast majority of projects not yet financed)

Source: SC-Insights
Notes:
1. Steady-state capacity targets
2. Refining considers capacity utilization

Proven and reliable technology designed for feedstock flexibility

Process Design Successfully Proven with >20 Feedstock Samples

Process Overview



Process Design Highlights

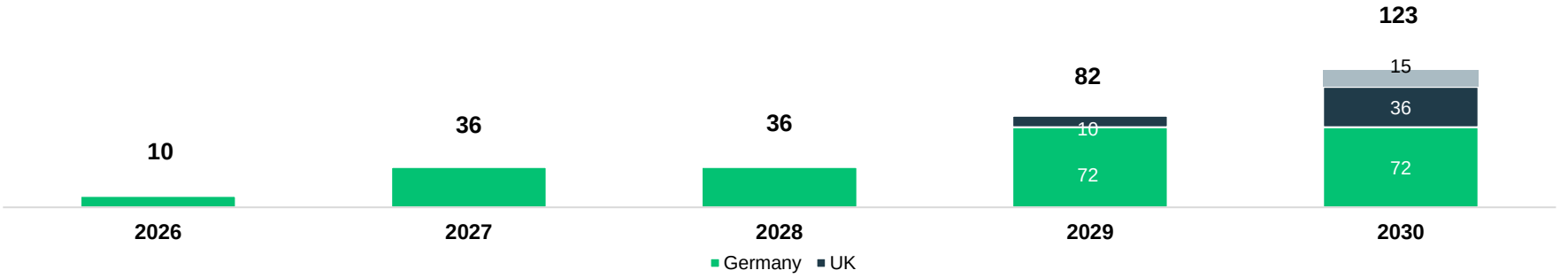
- ✓ Modular design able to accept all sources of raw and intermediate minerals and adjustable to demand
- ✓ Combining lithium hydroxide and carbonate lines into a single plant creates significant synergies with recycled products
  - Significant upside for subsequent plants / expansions which are likely to use recycled feedstock rather than spodumene
- ✓ ANZAPLAN conducted a metallurgical test program as part of PFS, successfully converting 4 varying feedstock samples (spodumene and technical-grade lithium carbonate) to battery-grade lithium product
  - Subsequent tests by Nagrom also included recycled material samples

5	23	>80%
Feedstock sources between concentrate and lithium intermediates	feedstock samples successfully tested	planned plant capacity utilization above 80% due to recycled feedstock synergies

Livista is working to be a leading European lithium refiner

Livista Plans to Reach 30 kMT-LCE Annual Production by end-2027 and targeting 80 kMT-LCE by 2030

Capacity[1]
kMT-LCE



	Germany Phase I	Germany Phase II	Ghana Minority Investment	Phase III & IV
Location	Emden, Germany	Emden, Germany	Takoradi, Ghana	TBD, UK
Capacity	30 kMT- LiOH BG 10 kMT-LCE Li2CO3 BG	30 kMT-LiOH BG 20 kMT-LCE Li2CO3 BG	20 kMT-LCE lithium sulphate or Li2CO3[2]	30 kMT-LiOH BG 20 kMT-LCE Li2CO3 BG
First Production	Q2 2027	H1 2029	2029	2029 2030
Feed Mix	Primary & recycled	Primary & recycled	Primary	Primary & recycled

Notes:
1. Showing base case production plan; "Plan B" alternative for UK Phase I to be built ahead of Phase II expansions in both locations
2. 100% basis

20 kMT-LCE feedstock supply from Ghana at full ramp-up[2]

Significantly de-risked project

First Site in Germany Secured, Advanced Feedstock / Partnership Discussions and Strong Government Support

PFS Completed

PFS completed in December 2022

Site Secured

LOI for land contract signed in June 2023

Established and Experienced Team

Experienced management team with a strong track record in large-scale project execution

DFS/FEED Awarded

FEED / DFS for Phase I to begin in Q3 / Q4 2023

Energy Infrastructure and Access Secured

Adjacent to river with access to seaport, road, power grid and green energy

Feedstock Volumes Under Negotiation

Feedstock volume negotiations ongoing for >200% start-up feedstock requirement for Phase I plant

Permitting Pre-Approval Process Launched

Pre-approval process with regulatory authorities for greater transparency and process visibility

Successful Lab Pilot Plant

Pilot lab and metallurgical tests successful with 16 samples, and more to come

>10 Offtake

Negotiations initiated for Phase I & II

Q2 2027

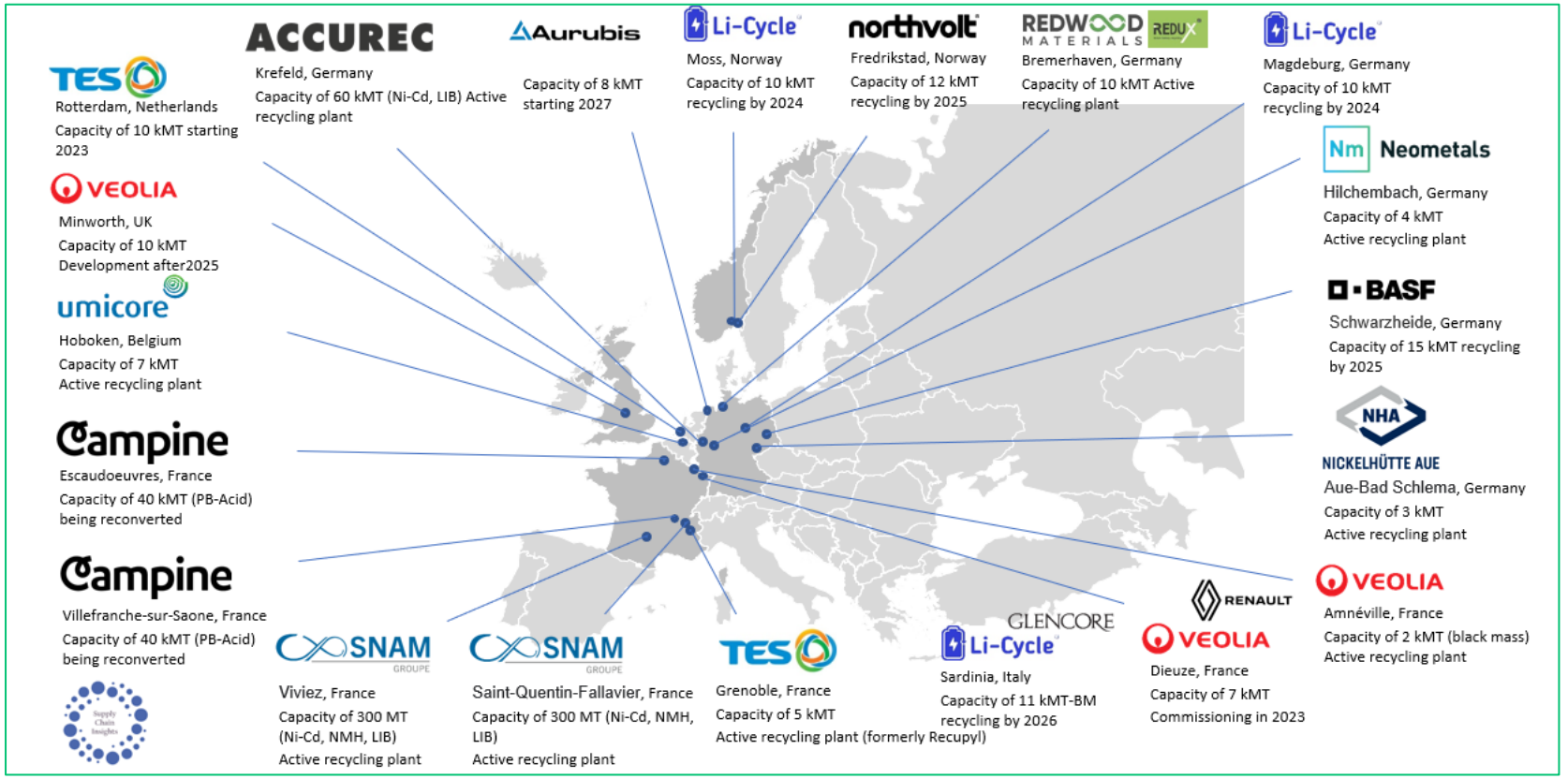
Start of production

SECTION 4

EU LIB Recycling and Feedstock Procurement

LIB Recycling is a market where Europe has great potential

Europe has a long tradition of recycling and refining, with technically outstanding companies



Feedstock	- Manufacturing scrap vs - End of life LIBs
Process	- Black mass vs - Lithium intermediates
Pricing	- Contaminants control vs - Indexation

Source: SC Insights
Notes:
1. Steady-state capacity targets

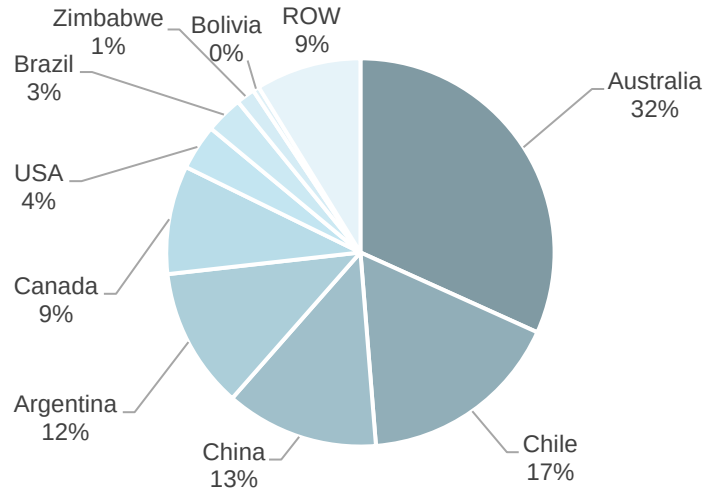
Procurement and customer portfolio

By decade end the market with be far more diverse with Argentina, Canada and Africa emerging as major players.

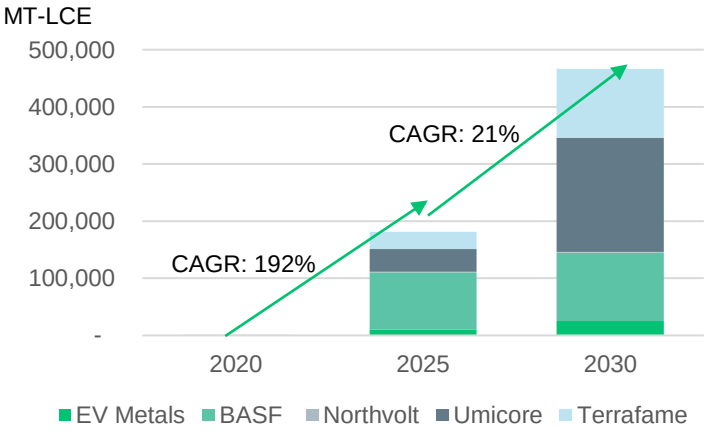
Graphic shows both existing and planned lithium extraction assets

Source: SC-Insights
Notes:
1. Steady-state capacity targets

Lithium extraction - 2030 Distribution



EU Cathode – Growth rate



SECTION 5

Livista Lithium Refining Project in Germany

Emden site secured

Strategic site with port access and close to customers

Site Overview

- Selected site is a 32-hectare plot adjacent to the Ems River in Emden, an independent city and seaport in Lower Saxony
- The plot is located in an industrial park near a major Volkswagen manufacturing hub and is zoned for industrial purposes
  - Close proximity to local industry players, allowing use of locally-produced feedstocks and reagents
- The plot is one of the last industrially zoned land plots on a deep sea port in Western Europe that can be developed
- Access to the power grid via existing substation
  - 100% renewable power with local grid serviced by an abundance of offshore wind
  - Local and national energy companies are developing a green hydrogen supply chain onsite
- Livista won the land tender in December 2022, with LOI for land contract signed in June 2023
  - Strong local government support for Livista's lithium refinery project

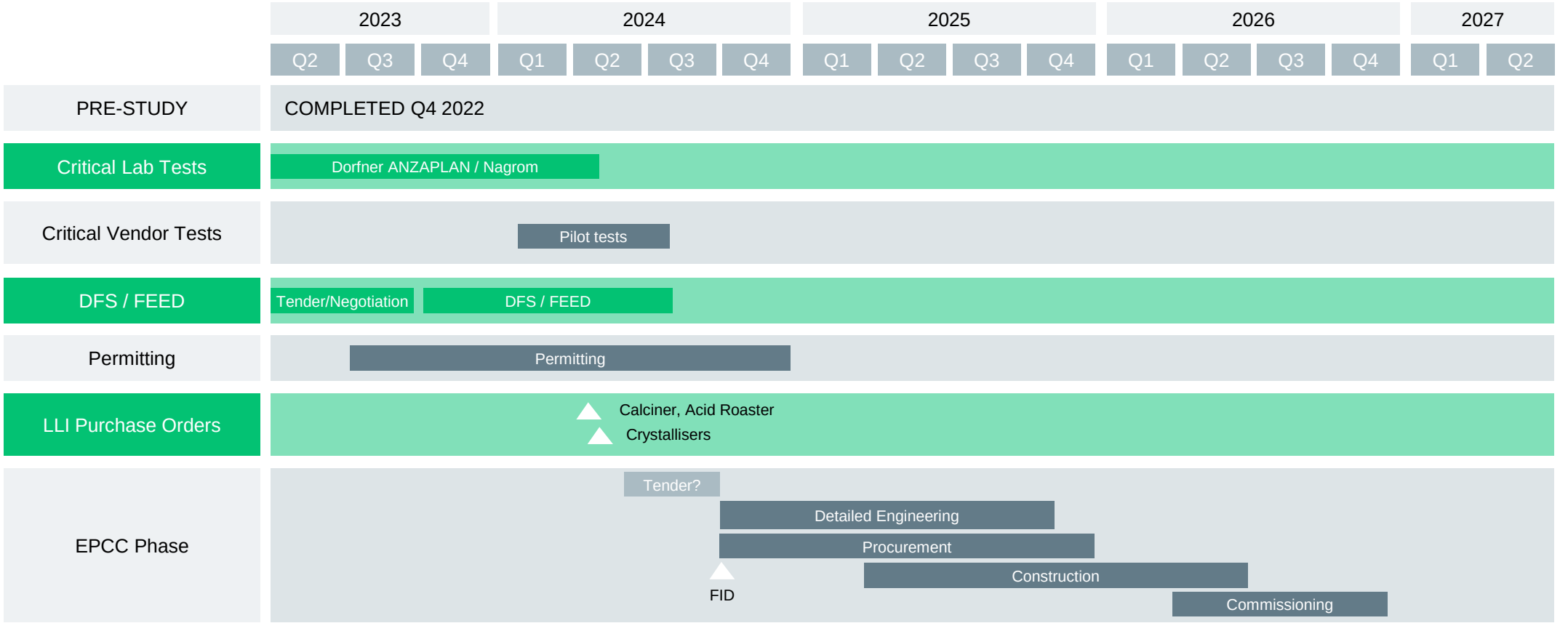
Strong government support with meaningful subsidies under discussion

Positive indications in Germany with parallel subsidies discussions in the UK

	Country	Government	Grant / subsidy	Status
Focus Geography for Phase I & II		Lower Saxony government	• 15% subsidies via new TCTF programme (cap of €150 MM) – 30% funded by Lower Saxony government	Final decision at end-2023
			• Discussing guarantee of funding for external project finance	Under discussion
			• Price cap for gas and electricity	✓
			• Letter of support with proposal to compensate part of the jetty infrastructure	✓
			• 15% subsidies via new TCTF programme (cap of €150 MM) – 30% funded by Lower Saxony government	Final decision at end-2023
		German federal government	• 15% subsidy via new TCTF programme (cap of €150 MM) – 70% funded by federal government	Final decision at end-2023
			• Untied loan guarantee with Euler-Hermes	Application submitted in Q1 2023
"Plan B"		Automotive Transformation Fund	• 70% subsidy for site selection study	✓
			• 15% expense if the project proceeds to FID	Pre-approved
HQ / Laboratory		Luxembourg federal government	• Letter of support from national banks consortium to participate in a syndicate for project finance with support of the state	✓
			• Up to 20% capex subsidy for laboratory	✓
			• Up to 70% opex subsidy for laboratory	✓

Main project milestones and critical path for Germany Phase I

DFS tender finalized and site selected



Execution support

Technology partners

Technip Energies

- Following a competitive bidding process, Livista awarded the DFS/FEED tender to Technip Energies (“Technip”) in June 2023
- Under the scope of the DFS, Technip Energies will perform:
  - Engineering, early procurement activities, cost estimations and all permitting works required to build the first lithium refinery in Emden
  - Early works for Phase II expansion on the same site location
  - Pre-FEED for Phase II will be performed in parallel based on Phase I design, increasing efficiencies and lowering overall costs
- Technip Energies is a global leading engineering and technology player for the energy transition, with a 60-year history of engineering and execution of some of the world’s largest projects
  - Strong global reputation for delivering projects on-schedule and on-budget
- **Technip Energies offered an overall plant Performance Guarantee at EPCC stage**

Technical Services Agreement

- Two world class contractors currently in final phase of tendering process for technical services agreements to support Livista in developing the project with Technip Energies

Other Technology Partners

Lithium Technology	LITHIUM Consultants Australasia	• Recognised world-class lithium expertise • Supporting Livista since 2020 • Services provided include: process design development, technical and technology support, process simulation, greenhouse gas analysis and laboratory analysis support
Laboratory Analysis	ANZAPLAN dorfner group NAGROM	• Chemical laboratories with lithium experience • Services provided include: laboratory-scale proof of concept for spodumene and carbonate samples, validation of process flowsheet, chemical analysis, pilot-scale demonstrations and validation of impurity limits for recycled materials
Permitting	GICON Group PRO TERRA TEAM	• Local German permitting specialists • Awarded initial Tischferlage permitting scope to Gicon, supported by Pro-Terra • Tischferlage completion expected August 2023 for onshore and jetty scope
Jetty Concept		• Tender launched for jetty concept and support with permitting activities with 5 experienced local companies • Clarification meetings ongoing with contract award expected August 2023
Land Lease	Niedersachsen Ports	• Site selected for Phase I plant in Emden, Germany with capacity for expansion for Phase II plant • LOI signed in June 2023 with contract to be signed in July 2023

Compelling Equity Story

Unique European Midstream Battery Value Chain Opportunity

1. **Substantial growth in European lithium refining capacity needed to meet accelerating demand from significant investment in the battery chain**
2. **Strong regulatory support driven by the critical need to secure European supply**
3. **Aiming to become a leading European lithium chemical refiner, with plans to reach a capacity of 36 kMT-LCE by end-2027 and potential for 72 kMT-LCE by 2030 in Emden(1)**
4. **Significantly de-risked project with first site in Germany secured, advanced feedstock / partnership discussions and strong Government support**
5. **Proven and reliable technology with flexible design allowing feed variations (including recycled products) and ability to respond to market dynamics**
6. **Attractive project economics**
7. **Highly experienced management team with track record of large scale project delivery**

Notes:
1. Steady-state capacity targets

Thank you

Questions?

Final remarks?

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