

VALMET AUTOMOTIVE

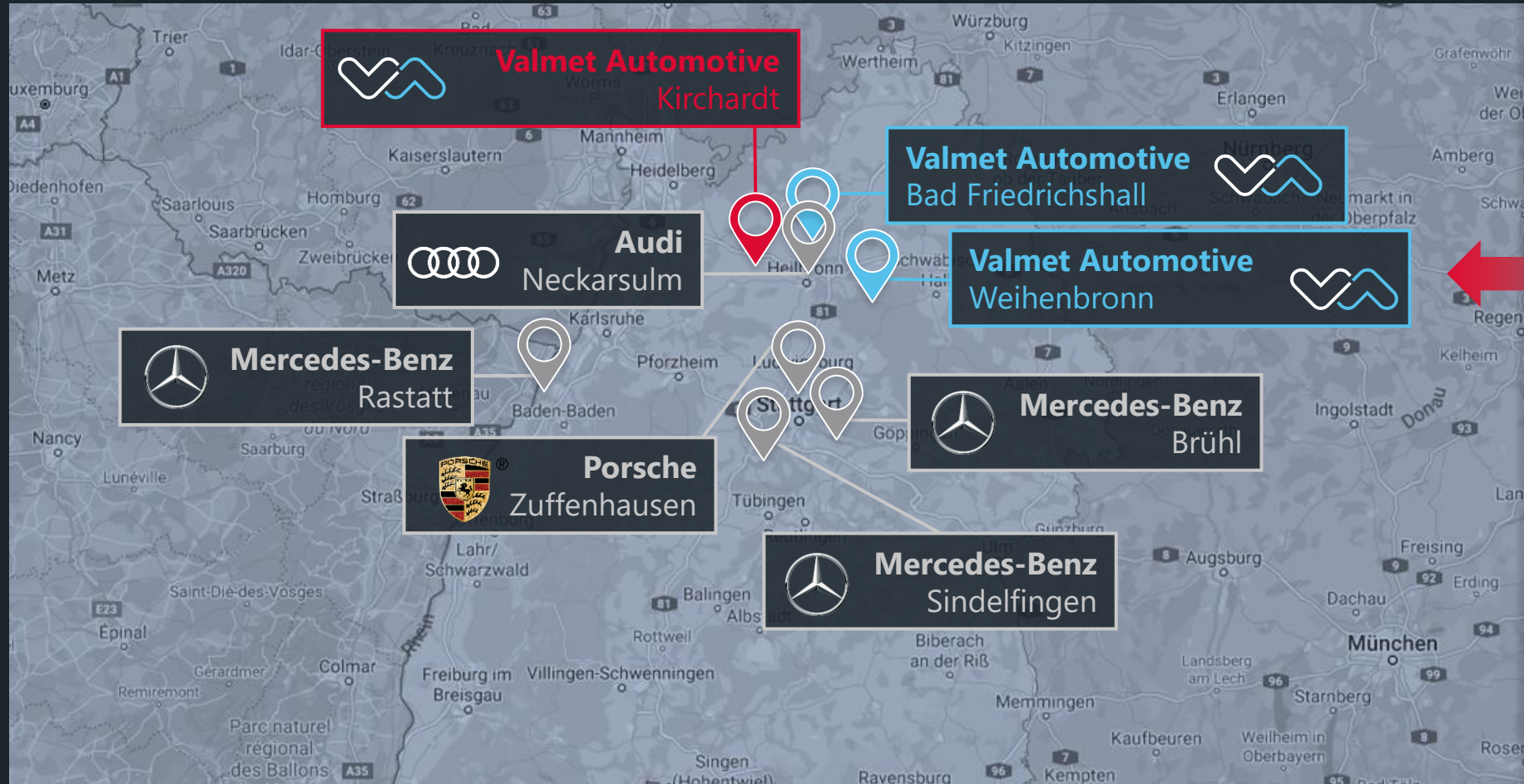
The Kirchardt battery plant – production site and competence center

Manuel Ötsch at Grand Opening of the Kirchardt Battery Plant, Press conference and event
June 30, 2023

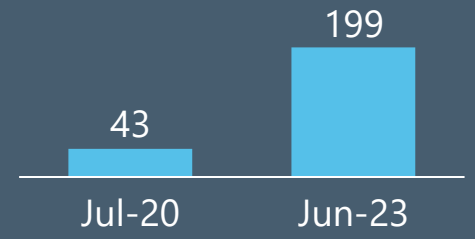


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NEW BATTERY PLANT KIRCHARDT – NEXT TO THE OEMS



VA employees in Baden-Württemberg



NEW BATTERY PLANT KIRCHARDT – GREEN LIGHT FOR THE BROWNFIELD

- Site selection started - Q1 / 2020
- BoD approval given in Q4 / 2020
- Lease contract signed in Q1 / 2021 with Calibrium
- ADS Architects selected for planning purposes
- Partnership and contract signed with Fortum in Q3 / 2022
- Recruiting started end of 2020 (end 2021 = 7; end 2022 = 47)
- Successful collaboration with the mayor and the local authorities



Valmet Automotive
Kirchartt



Nomination first customer project in Q1 / 2020, contract for Kirchartt plant signed Q1 / 2021, first pre-series production started in Q3 / 2022, Inauguration + first SOP in Q2 / 2023

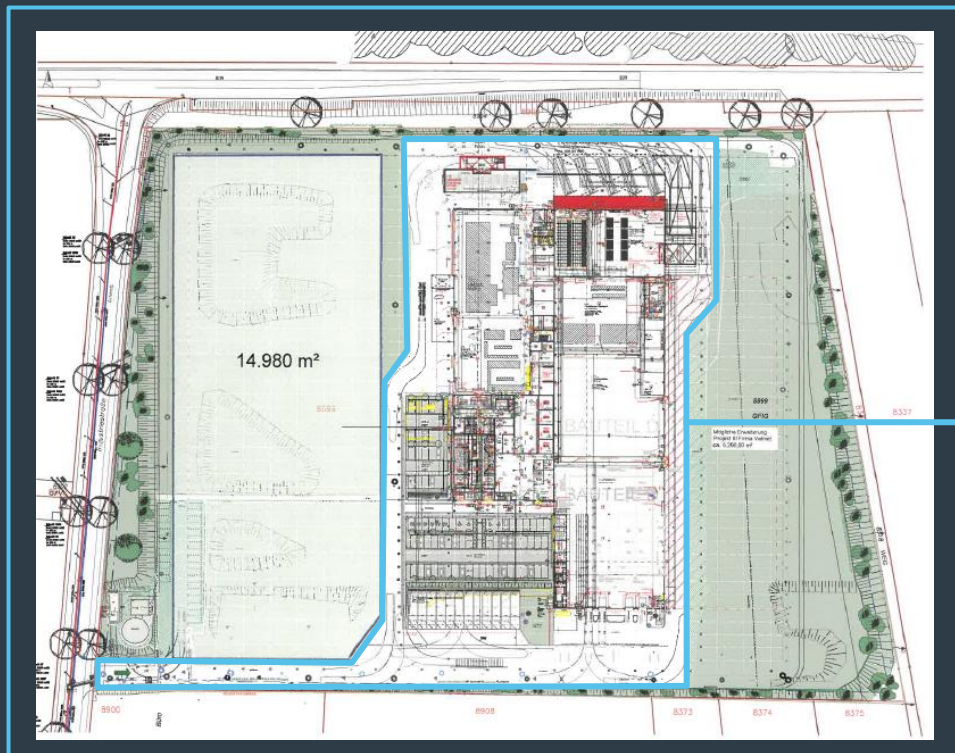


NEW BATTERY PLANT KIRCHARDT – PLANT ‘ARCHITECTURE’

VA BATTERY PLANT KEY FACTS



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Current usage

Key facts

- Plot: approx. 60,000 m²
 - Current usage: 11,500 m²
 - Immediately extendable by further 15,000 m²
- Lease contract signed 2021
- Total invest: higher double digit million EUR
- 2 production lines, 2 products
 - PHEV, cell module and pack
 - BEV, pack assembly
 - Option to double capacity
- Other areas, e.g. logistics, offices
- Battery recycling by Fortum
- Employees: approx. 160 headcount



NEW BATTERY PLANT KIRCHARDT – PRODUCTION PROCESSES

Site flexibility

Extension of production space possible short-term by further ca. 15,000 m²

Autonomous organization

Full production scope can be planned and executed in Kirchartd

Process know-how

Vertical integration in many applications, e.g. bending, cutting, laser welding, gluing, screwing, Tightening testing & EoL testing

Automation level

Automated production equipment for large and small series

Just in sequence capabilities

JIS delivery in 3 shifts with short distances to the OEM plants

Team mix

Young, motivated team with Tier-1 and OEM experience



Kirchartd plant is more than a site for battery assembly – it is a process know-how and competence center



NEW BATTERY PLANT KIRCHARDT – SELECTED PROGRAMS

Program	PHEV – module and pack assembly	BEV – pack assembly
Planning start	Q1/2020	Q3/2020
SOP	Q1/2023	Q3/2024
Line concept	Low volume line	High volume line
Line builder – building process	<ul style="list-style-type: none"> • Line design and process developed jointly with AVL and PIA Automation • From SOP on in full responsibility of VA 	<ul style="list-style-type: none"> • Line design developed with Schmid • Full responsibility at VA

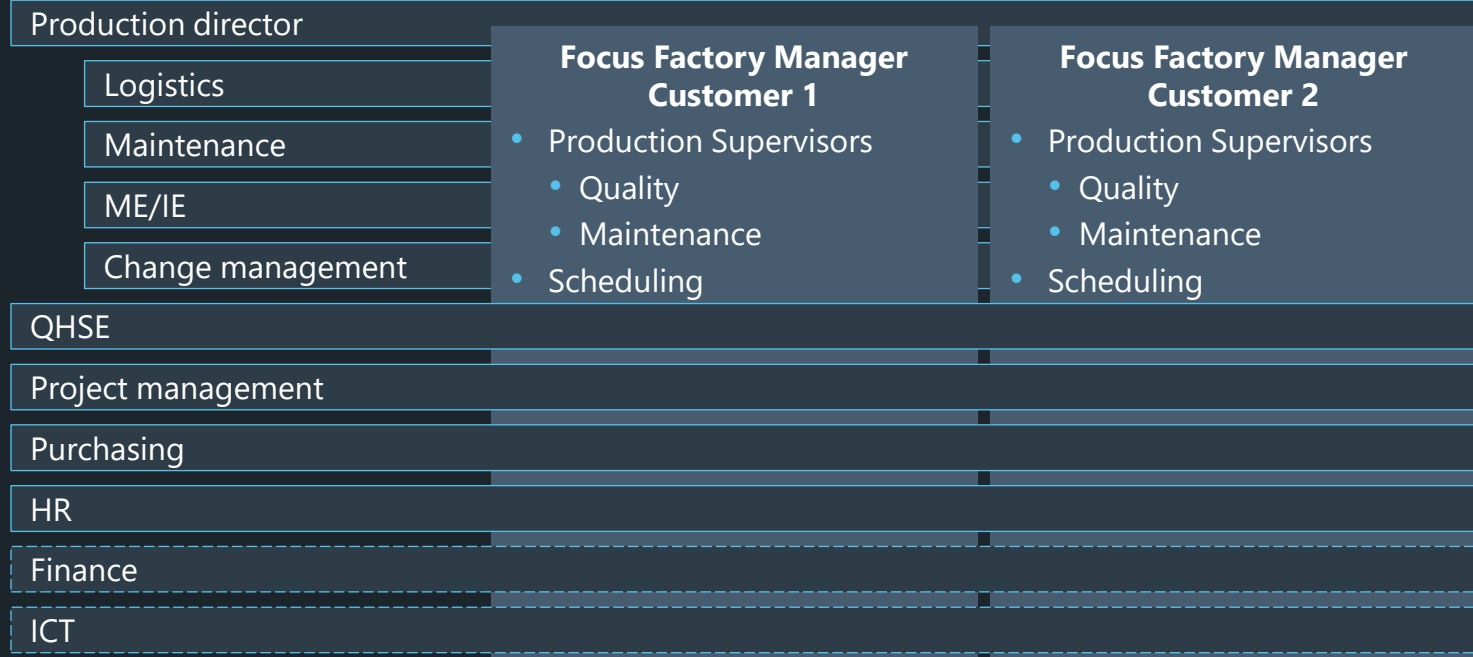


Broad scope of activities e.g., from module to pack, low volume to high volume, PHEV to BEV



VA BATTERY PLANT KIRCHARDT – LEAN ORGANIZATION MODEL

Managing director



Selected benefits

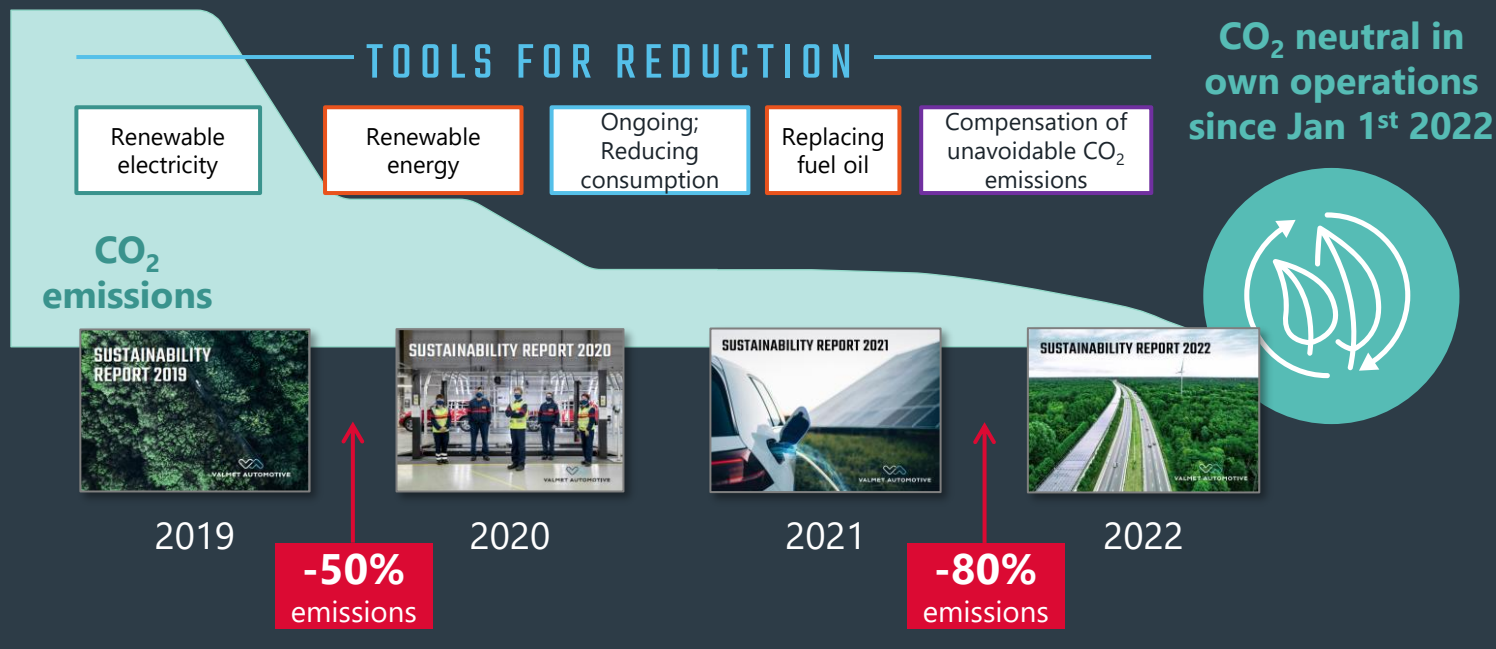
- **Factory level responsibility** ✓
- Central department can **focus** on advanced engineering tasks ✓
- **Customer specific** managers (incl. supervisors, planners) ✓
- Strong **support functions** ✓

New modern organization model with focus on customer centricity and factory level enhanced responsibility, especially for manufacturing engineering (ME), a key Valmet Automotive core competence



SUSTAINABILITY & CO₂ NEUTRALITY IN OUR OPERATIONS

Sustainability & CO₂ neutrality at Valmet Automotive



Measures at Kirchartd plant

- Photovoltaic on the roof planned
- Charging stations for EVs
- Local employees
- Reusable packages, from recycling material
- Electric floor vehicles
- Cloud based infrastructure
- Hybrid heating system
- Battery recycling capabilities nearby with reuse of energy
- ...



VA is committed to a 'true green' approach in production and supply chain – in our Kirchartd plant, various measures are in place and regularly reviewed

Note: Ca. 8,000 tons of CO₂ were compensated end of 2021, e.g., for fossil fuel oil in Uusikaupunki plant
Source: Valmet Automotive



THE FAST LANE TO FUTURE VEHICLES



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