



Evolution of E-Mobility and the associated transformation of an Agile medium-sized Company

DR. CLAUDIA
STERN



Mercedes-Benz





Mercedes-Benz





PORSCHE







Audi





2011 Ford Expedition
Ford.com



PEUGEOT









Intercable Automotive Solutions is a spin-off of the Mutschlechner Entrepreneurial Group, which created and developed the diversified Intercable Group through 50 development and multi-sector industry leadership



Signal & Power Solutions (S&PS)

LEADER IN FULL SYSTEMS AND AUTOMOTIVE GRADE COMPONENTS FOR LOW AND HIGH VOLTAGE DISTRIBUTION WITH GLOBAL DESIGN, OPTIMIZATION, INTEGRATION AND MANUFACTURING CAPABILITIES



170,000+
EMPLOYEES
GLOBALLY

10,000+
ENGINEERS
& TECHNICIANS

ELECTRICAL DISTRIBUTION SYSTEMS

- Power wiring & data cables
- High voltage distribution
- E/EA Optimization

ENGINEERED COMPONENTS

- Connectors & Terminals
- Cable Management
- Electrical centers

\$11.6B
2021 Revenue

VEHICLE ELECTRIFICATION SYSTEMS

- High Voltage Cables & Bus Bars
- High Voltage Connectors
- Charging Inlets

E/EA OPTIMIZATION

Full systems capabilities supports electrical / electrical architecture optimization

• **APTIV** •

INTERCABLE AUTOMOTIVE SOLUTIONS

Industry leader in high voltage charging and power distribution for electrified vehicles

intercable
AUTOMOTIVE SOLUTIONS

LOW VOLTAGE DIST.

High speed / fidelity data distribution solutions for feature rich, highly automated vehicles

• **APTIV** •

AUTO INTERCONNECTS

Comprehensive portfolio of automotive grade connectors and electrical centers

• **APTIV** •

HELLERMANNTYTON

Leading global manufacturer of high-performance and innovative cable management solutions

HellermannTyton

WINCHESTER

Leading provider of advanced interconnect solutions for harsh environment applications

Winchester
Interconnect.

Intercable Automotive Solution's Industrial Footprint (data from 2023)

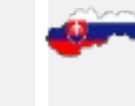
Plant Features

 **Hi-Tech Plant & HQ
Central EU (Bruneck)**

- Global Headquarters
- Global R&D Technology Center
- Global Advanced Quality Labs
- Flex-Factory (from small to high Series Volumes)
- max Vertical Integration (all technologies in place for R&D / Prototyping)

 **Hi-Tech Plant
Mexico (Saltillo)**

- Mexican Plant specialized in Production of Busbar and HV Connection Systems
- Medium and High-Volumes

 **Hi-Tech Plant
Eastern EU (Krivan)**

- East-EU Production Plant specialized in Production of Busbar and HV Connection Systems
- Medium and High-Volumes

 **Hi-Tech Plant
Asia (Ningbo)**

- Asian Production Plant incl. R&D Technology Center for Asia
- Flex-Factory (from small to high Series Volumes)

Plant Footprint

People
Facilities

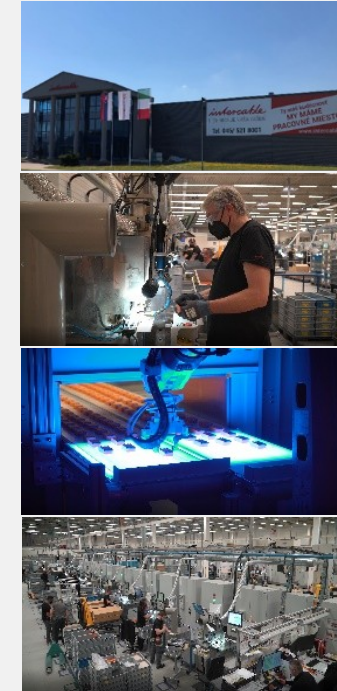
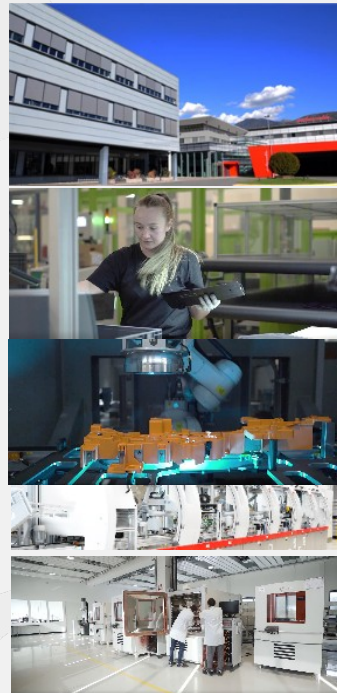
800+ FTE
40.000 m²

 **2023** 40^{FTE}
3.000 m²

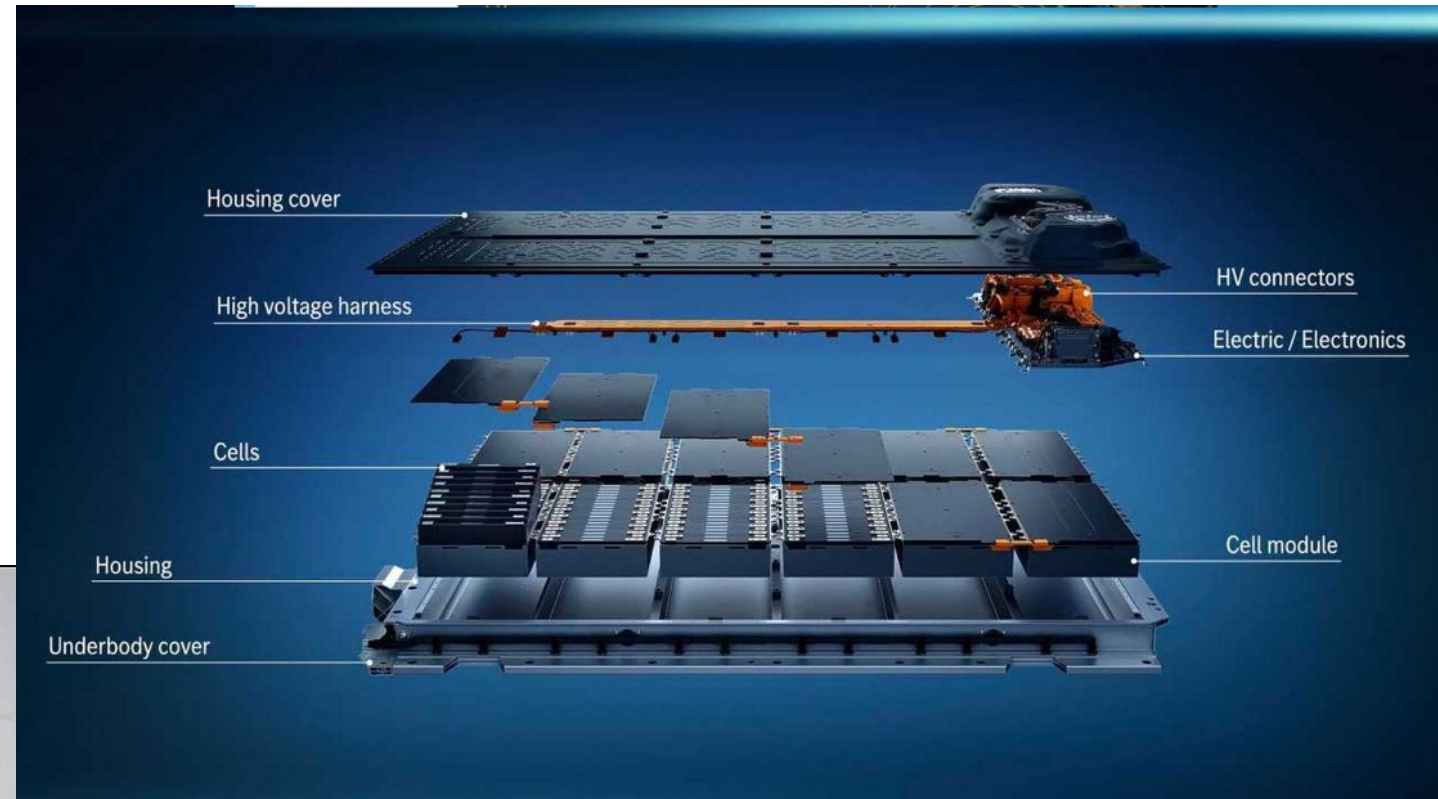
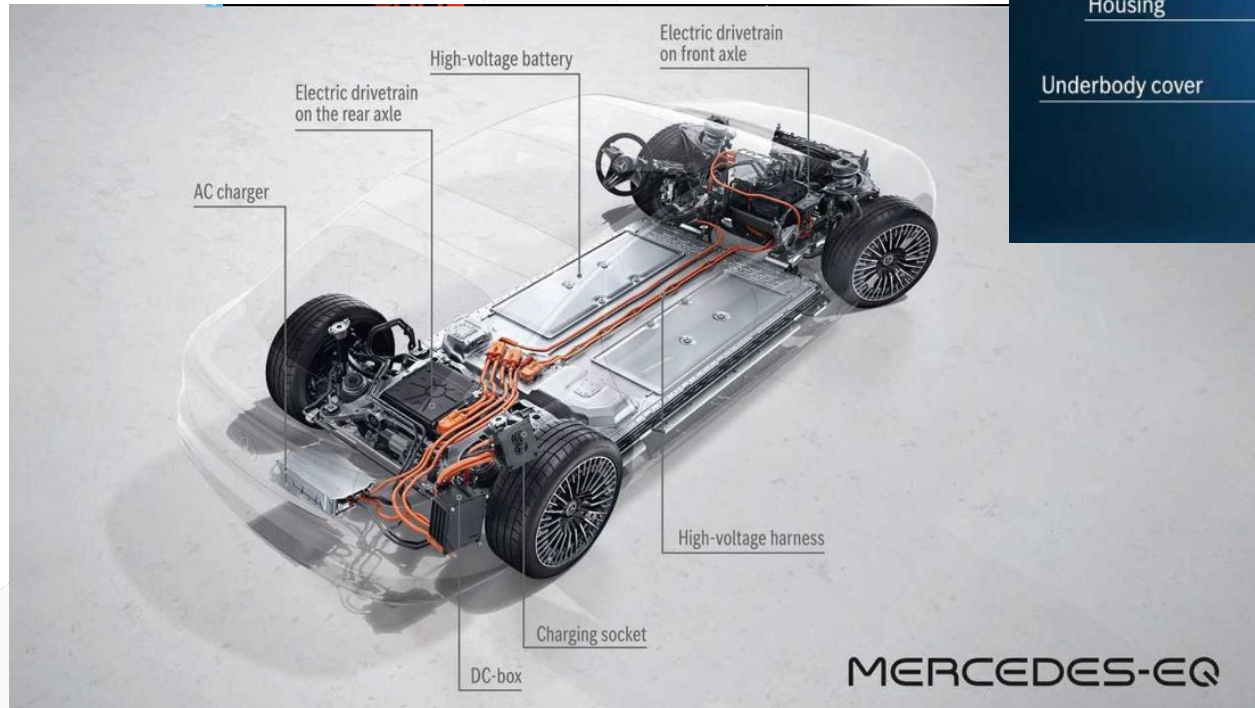
 **2018** 900+ FTE
14.000 m²

 **2017** 170 FTE
9.000 m²

Plant Portrait



Mercedes EQ Technology



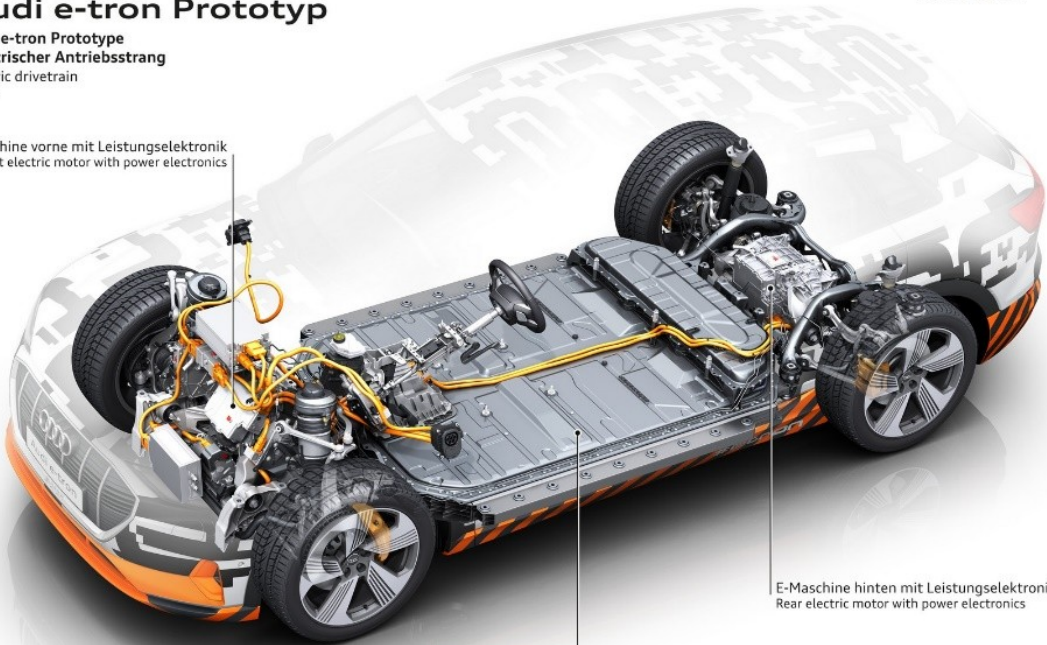
Audi e-tron Technology



Audi e-tron Prototyp

Audi e-tron Prototyp
Elektrischer Antriebsstrang
Electric drivetrain
04/18

E-Maschine vorne mit Leistungselektronik
Front electric motor with power electronics



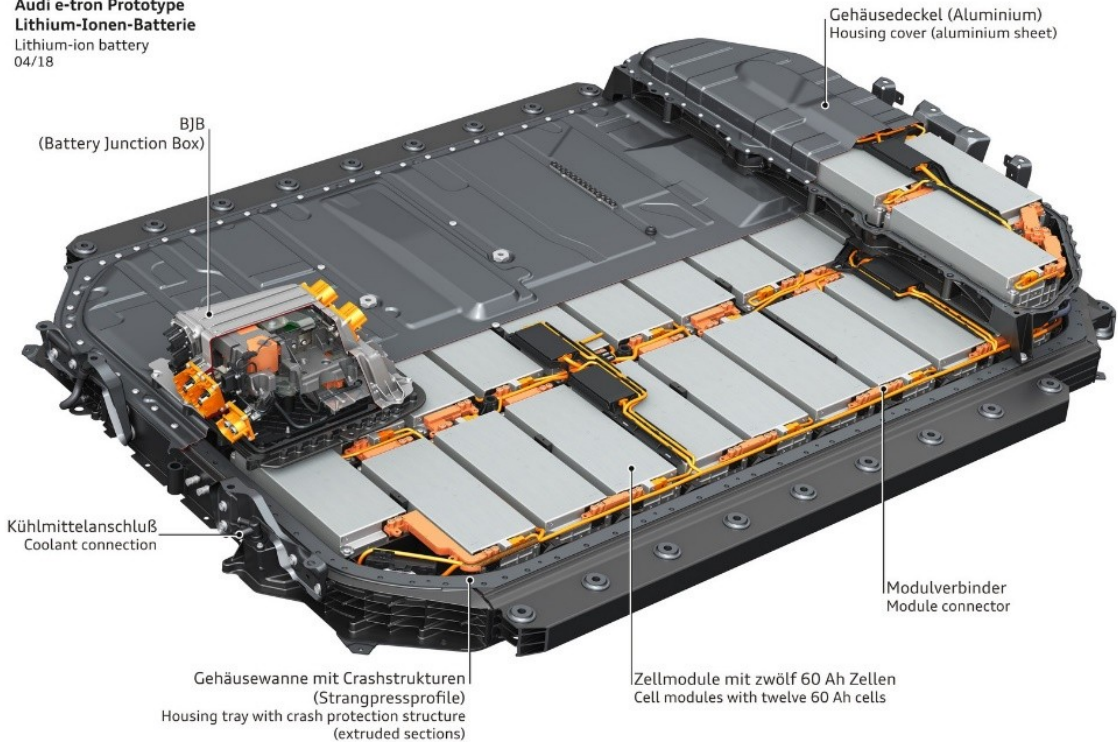
E-Maschine hinten mit Leistungselektronik
Rear electric motor with power electronics

Flüssigkeitsgekühlte Lithium-Ionen-Batterie mit 95 kWh
Liquid cooled lithium-ion battery with 95 kWh



Audi e-tron Prototyp

Audi e-tron Prototyp
Lithium-Ionen-Batterie
Lithium-ion battery
04/18



BJB
(Battery Junction Box)

Gehäusedeckel (Aluminium)
Housing cover (aluminium sheet)

Kühlmittelanschluß
Coolant connection

Modulverbinder
Module connector

Gehäusewanne mit Crashstrukturen
(Strangpressprofil)
Housing tray with crash protection structure
(extruded sections)

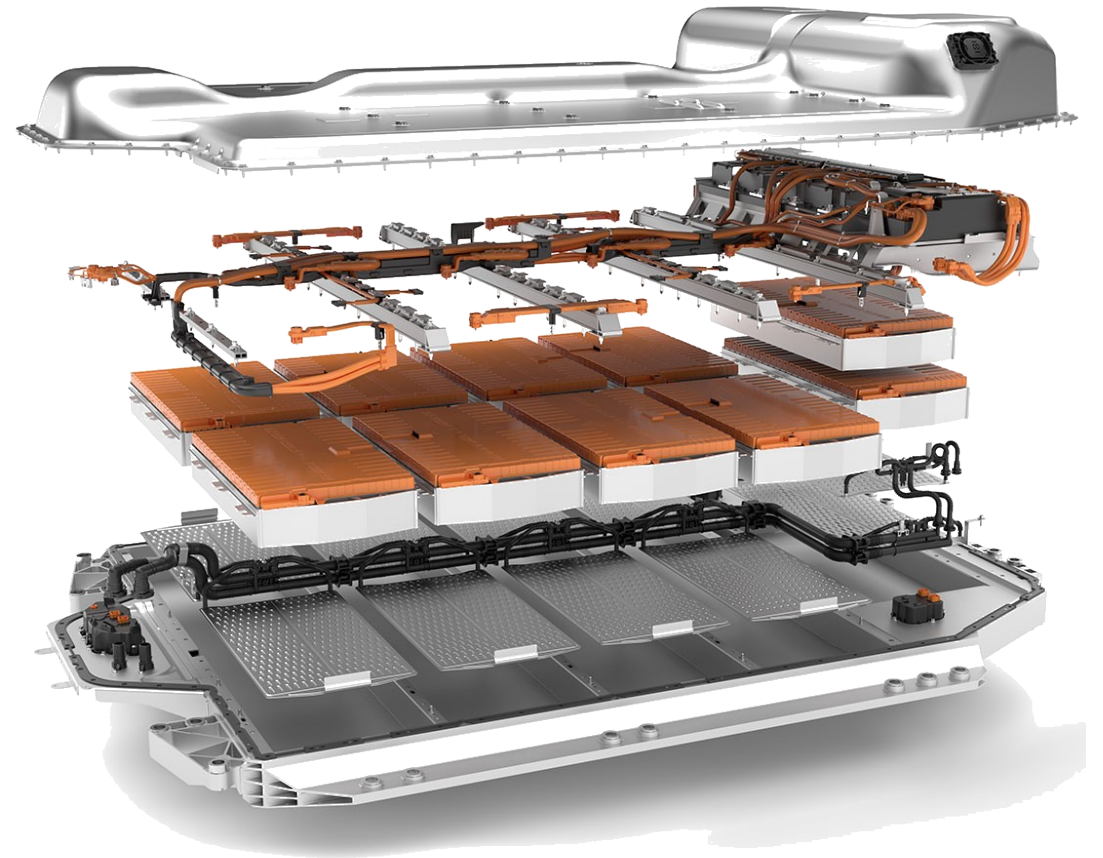
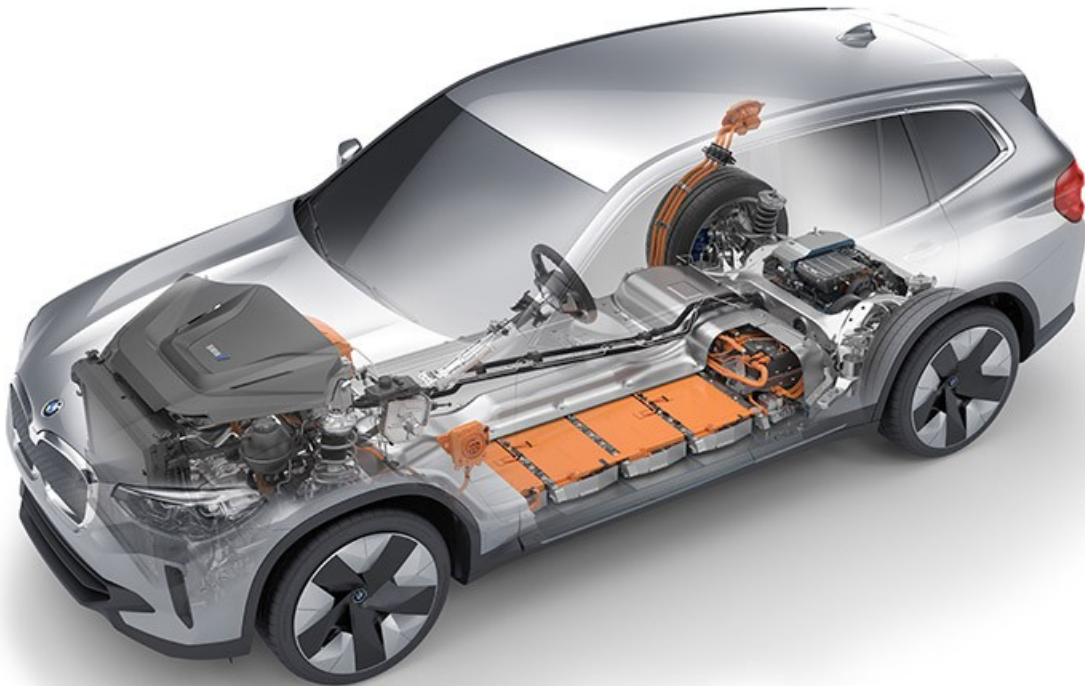
Zellmodule mit zwölf 60 Ah Zellen
Cell modules with twelve 60 Ah cells

Audi e-tron Technology



115 pcs

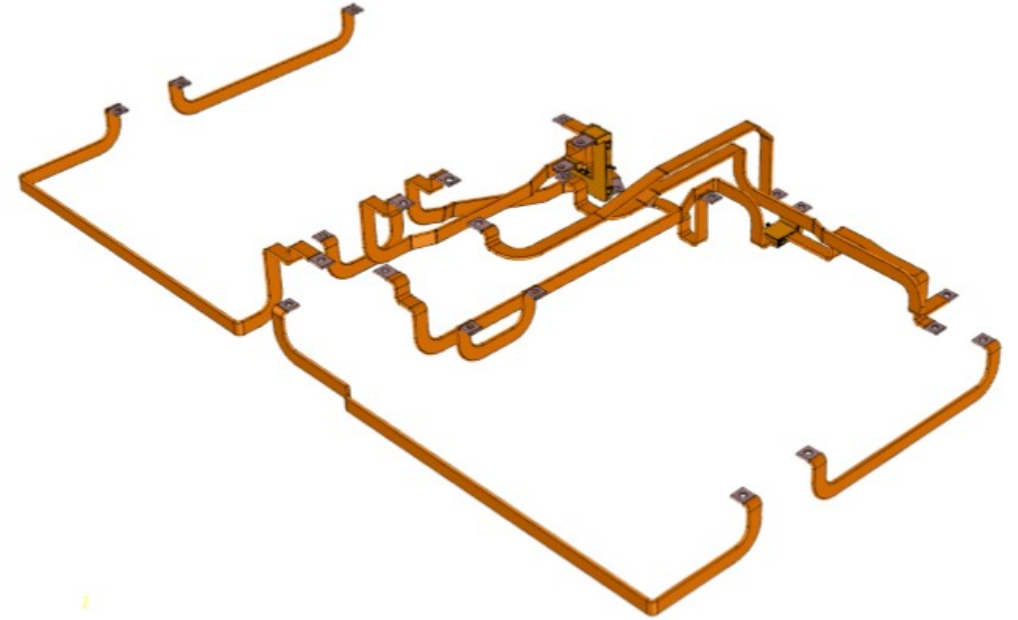
BMW i Technology



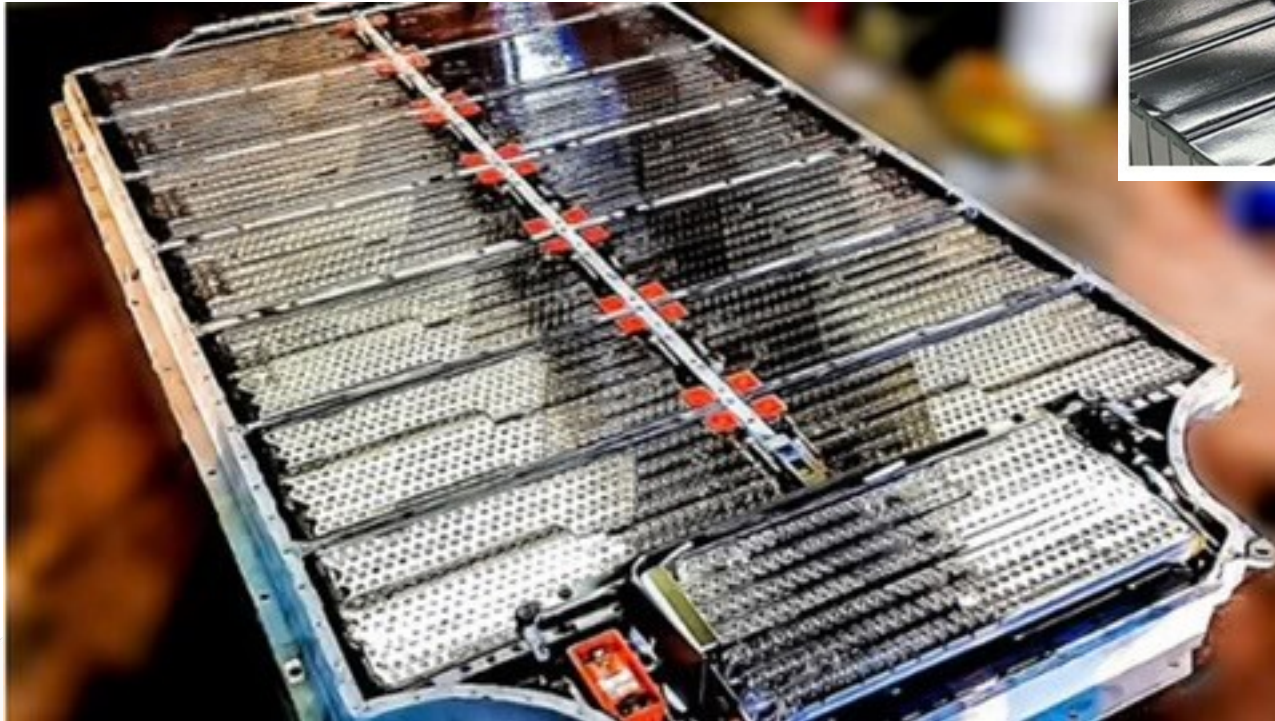
Peugot e 208 Technology



busbars for JRL (battery from CATL)

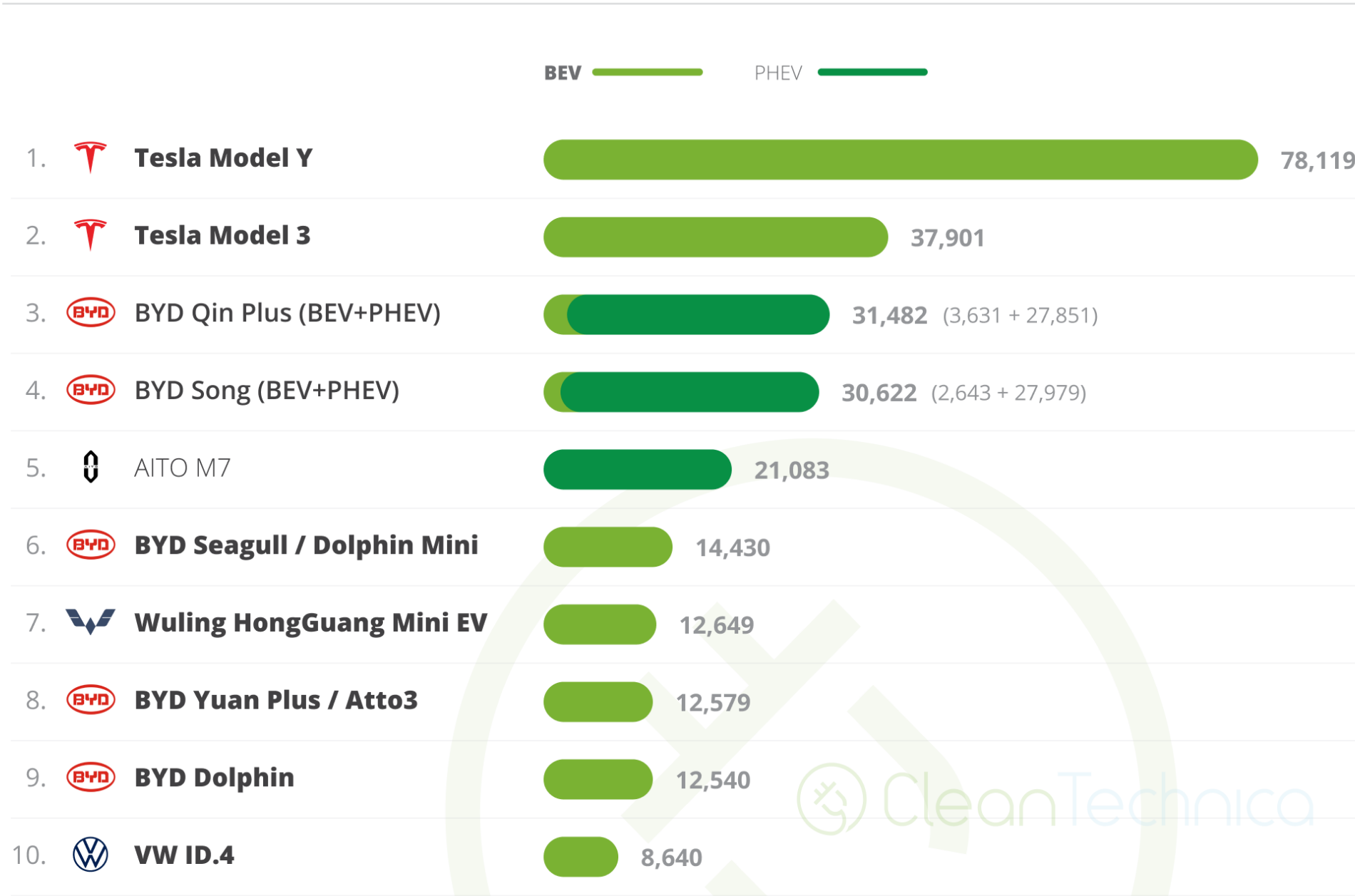


Tesla Battery Technology



Top Selling Plugin Electric Vehicles in the World

February 2024





2. Analyst insights

Tesla Model Y remains on top, while domestic brands claim second place

Top BEV models in Q1 2024 (sales volume ranking Q1 2024 ↑↓ vs. FY 2023)

European Top 4 			USA 			China 		
Model	Sales Q1 2024		Model	Sales Q1 2024		Model	Sales Q1 2024	
 Tesla Model Y	21,403	→ 0	Tesla Model Y	96,729	→ 0	Tesla Model Y	100,366	→ 0
 Peugeot E-208	11,092	↑ 5	Tesla Model 3	30,842	→ 0	BYD Seagull	70,319	↑ 2
 Tesla Model 3	9,763	↓ 1	Ford Mustang Mach-E	9,589	↑ 1	BYD Yuan Plus	46,992	↓ 1
 Fiat 500e	8,344	↓ 1	Rivian R1S	8,017	↑ 3	Wuling Hongguang Mini EV	44,215	↑ 1
 MG 4	6,472	↑ 1	Ford F-150 Lightning	7,743	↑ 3	BYD Dolphin	38,271	↓ 2
 Renault Megane Electric	5,699	↑ 4	Chevrolet Bolt EV/EUV	7,040	↓ 3	BYD Qin Plus EV	34,887	New
 BMW iX1	5,484	↑ 7	Hyundai IONIQ 5	6,822	↓ 1	Changan Lumin	32,112	↑ 3
 Skoda Enyaq	5,340	↑ 1	Volkswagen ID.4	6,167	↓ 3	Tesla Model 3	32,054	↑ 1
 Dacia Spring	5,324	↓ 5	Cadillac Lyric	5,800	New	Wuling Bingo	31,152	↓ 1
 Volvo EX30	5,143	New	Tesla Model X	5,607	↓ 1	Aion S	29,754	↓ 3

Best selling EV models-Sedan (Jan-Mar 2023)

Nr.	OEM	Vehicle	Sales	Price range (k€)
1	BYD	Qin	87,955	17~23
2	SGMW	HG Mini	69,842	4.2~13.12
3	BYD	Dolphin	67,951	15.35~17.95
4	AION	AION S	48,310	18.37~23.62
5	TESLA	Model 3	42,310	30.18~43.3
6	BYD	Han	37,817	27.55~43.56
7	ChangAn	Lumin	24,033	6.56~9.18
8	BYD	Seal	19,573	15.35~17.97
9	DEEPAL	SL03	18,808	22.57~91.84
10	NIO	ET5	18,703	43.03~50.64
11	GEELY	Panda Mini	17,211	5.25~7.48
12	BYD	Destroyer 05	13,752	13.36~20.7
13	Hongqi	E-QM5	12,310	16.11~31.49
14	BAIC	EU	10,389	17.06~22.57
15	Chery	QQ ice-cream	9,821	4.72~7.54



In the competition for the future, suppliers must address three questions:

