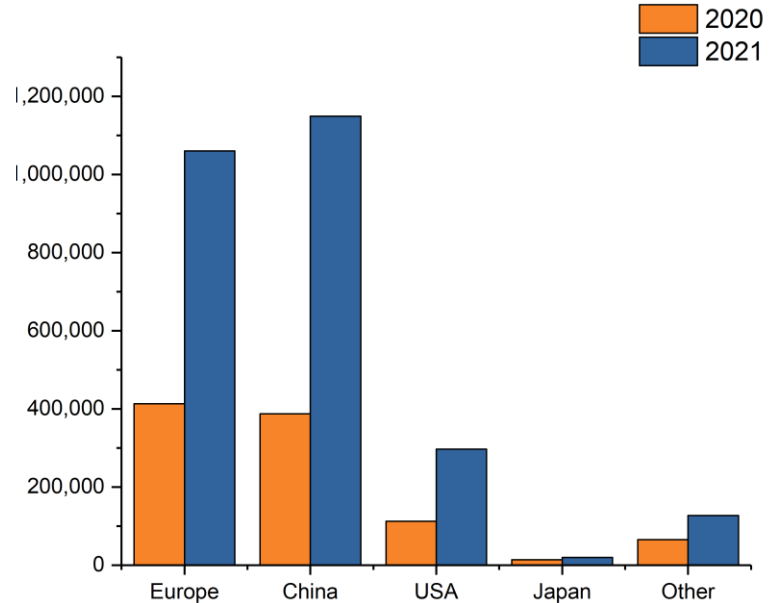
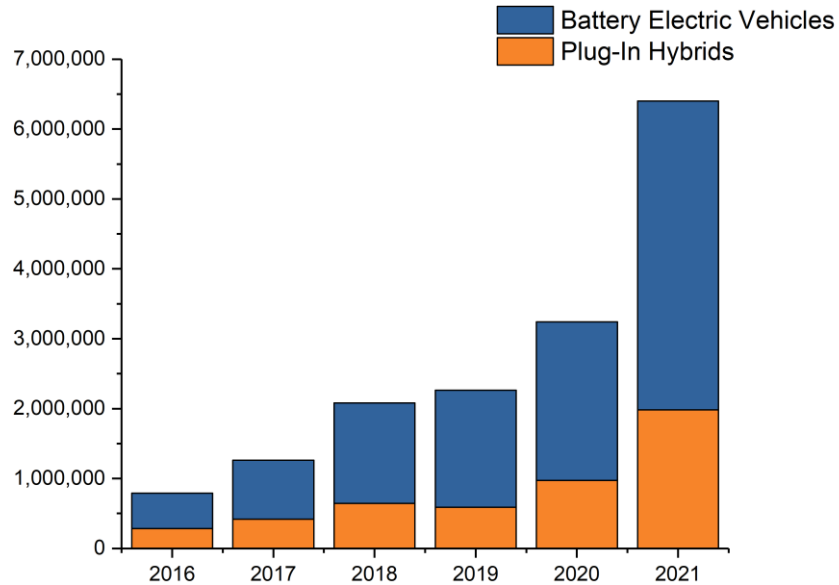


Recycling of lithium-ion batteries

Dipl.-Ing. Dr.mont. Eva Gerold

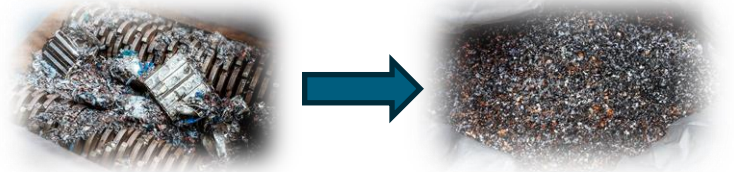
Chair of Nonferrous Metallurgy, Montanuniversität Leoben

Volumes of EV Sales

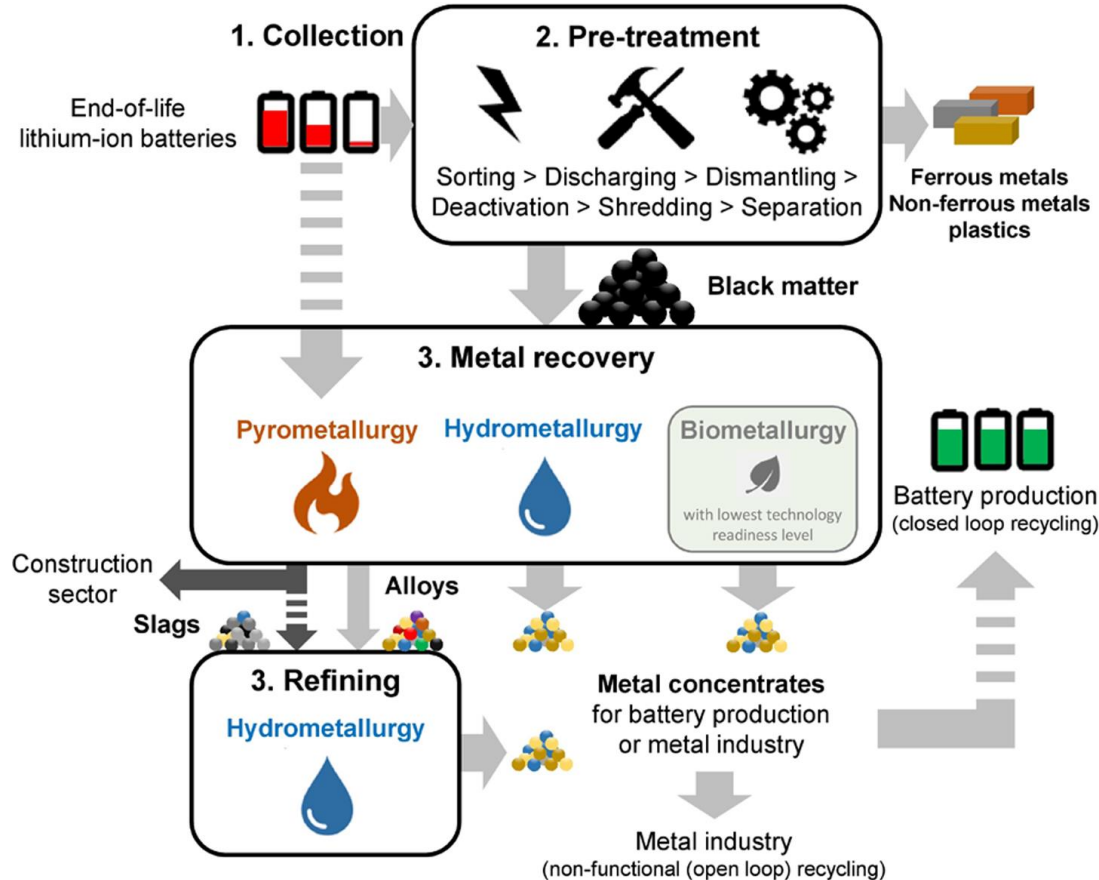


Expected EV Sales:

- 13.1–20 million by 2025
- 25.8–46.8 million by 2030



Recycling chains



Future challenges

Current recycling capacities for LIBs in Europe (September 2021)

Country	Company	Capacity [t/a]
Belgium	Umicore	7,000
Germany	Accurec, Duesenfeld, Erlos**, Nickelhütte Aue, Promesa**, Primobius*, Redux	23,000–36,000
Finland	Akkuser Oy, uRecycle**	1,000–4,000
France	Eramet (Valdi, BASF, Suez), Euro Dieuze Industrie, SNAM, TES-AAM (before Recupyl)	20,000–26,000
Switzerland	Batrec, Glencore, Kyburz**	3,200–8,000
Total		54,200–81,500

*expected start in 2021, ** no data available about plant capacity

Need for sustainable recycling technologies (effluents, exhaust gases, CO₂ footprint of chemicals, etc.)

