

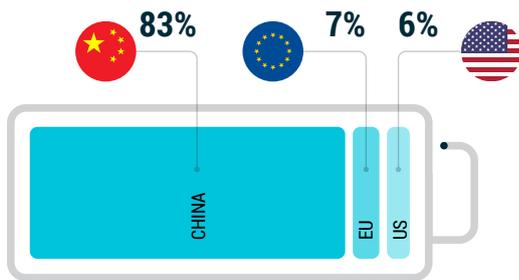


EU BATTERY SUPPLY CHAIN & IMPORT RELIANCE

ASSEMBLED BATTERIES

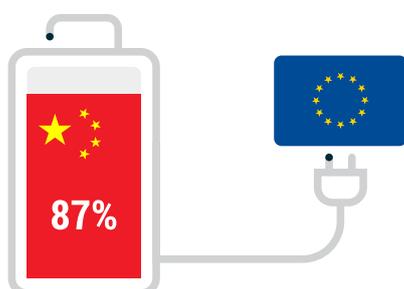
PRODUCTION

- Chinese producers account for 83% of global production in 2023. EU: 7% of global production. US: 6% of global production.
- In the EU: 15% of battery production capacity is managed by companies headquartered in Europe. 75% are owned by Korean companies.



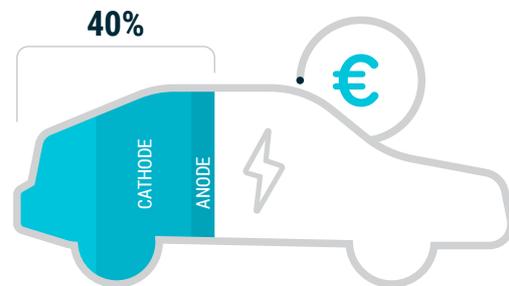
IMPORTS

- The EU imported about €27 billion worth of batteries in 2023.
- About 90% of these imports came from just three Asian countries, with China alone accounting for 87% of total imports.
- China is the world's largest EV battery exporter, with around 12% of its EV batteries being exported.



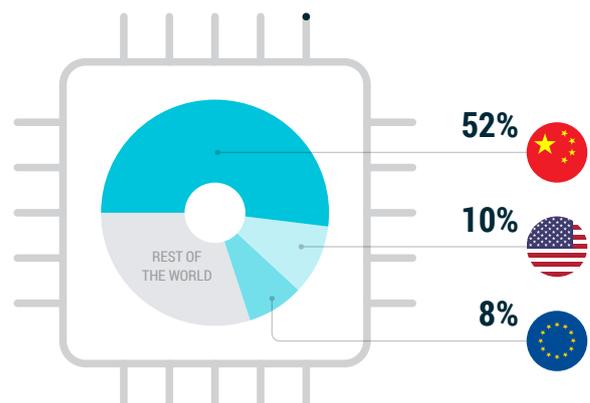
BATTERY COMPONENT AND CELLS

Battery cells represent up to 40% of an average electric car's value. Anode and cathode active materials account for approximately 10% and 50% of the manufacturing costs for battery cells.



- China: nearly 90% of global installed cathode active material manufacturing capacity and over 97% of anode active material manufacturing capacity.
- China produces 76 – 85% of the world's battery cells (depending on the source). EU and US: about 5% each.

2028 PROJECTION ON SEMICONDUCTOR FRONTEND CAPACITY BUILDOUT:



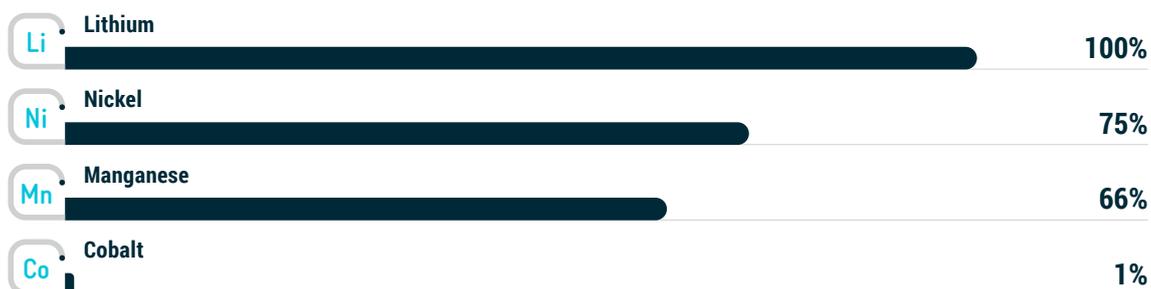
BATTERY RAW MATERIALS

EU import reliance for key battery materials:



PROCESSING AND REFINING

- Cobalt processing: EU accounts for 12% globally.
- All other refining stages (lithium, graphite, nickel, etc) are dominated by China. China controls over 50% of global lithium and cobalt processing.
- China + US account for 87% of global production capacity in the upstream supply chain (EU only 7%).
- EU import reliance for refined materials:



SECONDARY RECYCLED PRODUCTION

The EU's internal secondary production from recycling is low.

For some materials (including rare earth metals), it's close to zero:

