

WMF 2023: Key messages EV batteries, which chemistries for fast Scale up and optimum performance

1. Speed is crucial both for improving performance of the current mainstream Li-Ion battery technology/supply chain and for developing the alternative chemistries as over the next 3-4 years a majority of the decisions will be taken. In terms of performance, safety, energy density (150 Wh/kg short term, 500 Wh/kg medium term) and low cost (60\$ by kWh) are the key objectives.
2. After 2027, alternative chemistries (Solid State, Sodium, Sulfur) that will not be able to connect to the existing capacities/infrastructures with minimum added Capex will remain niche even with breakthrough performance.
3. We need to develop strong regional equipment suppliers both in North America and Europe in order to optimize the capital intensity needed for developing/converting to new battery chemistry.