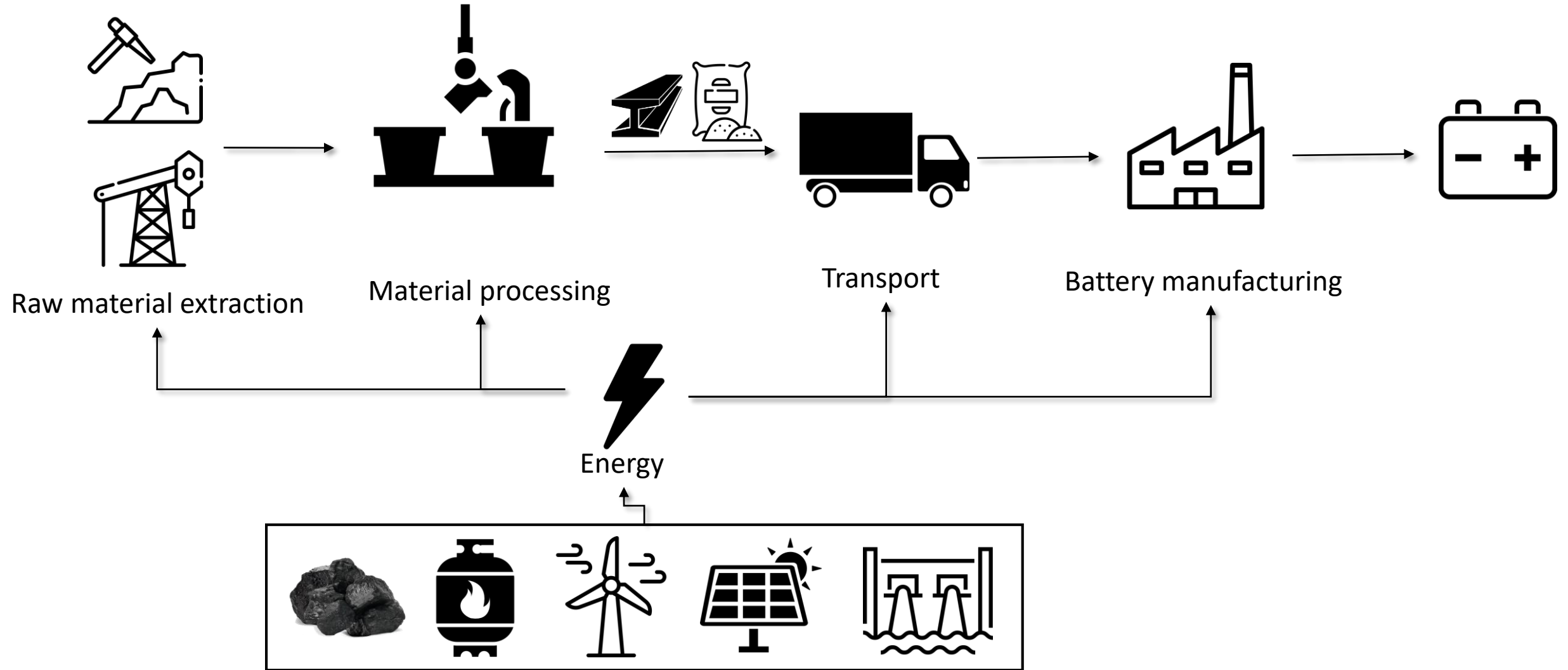


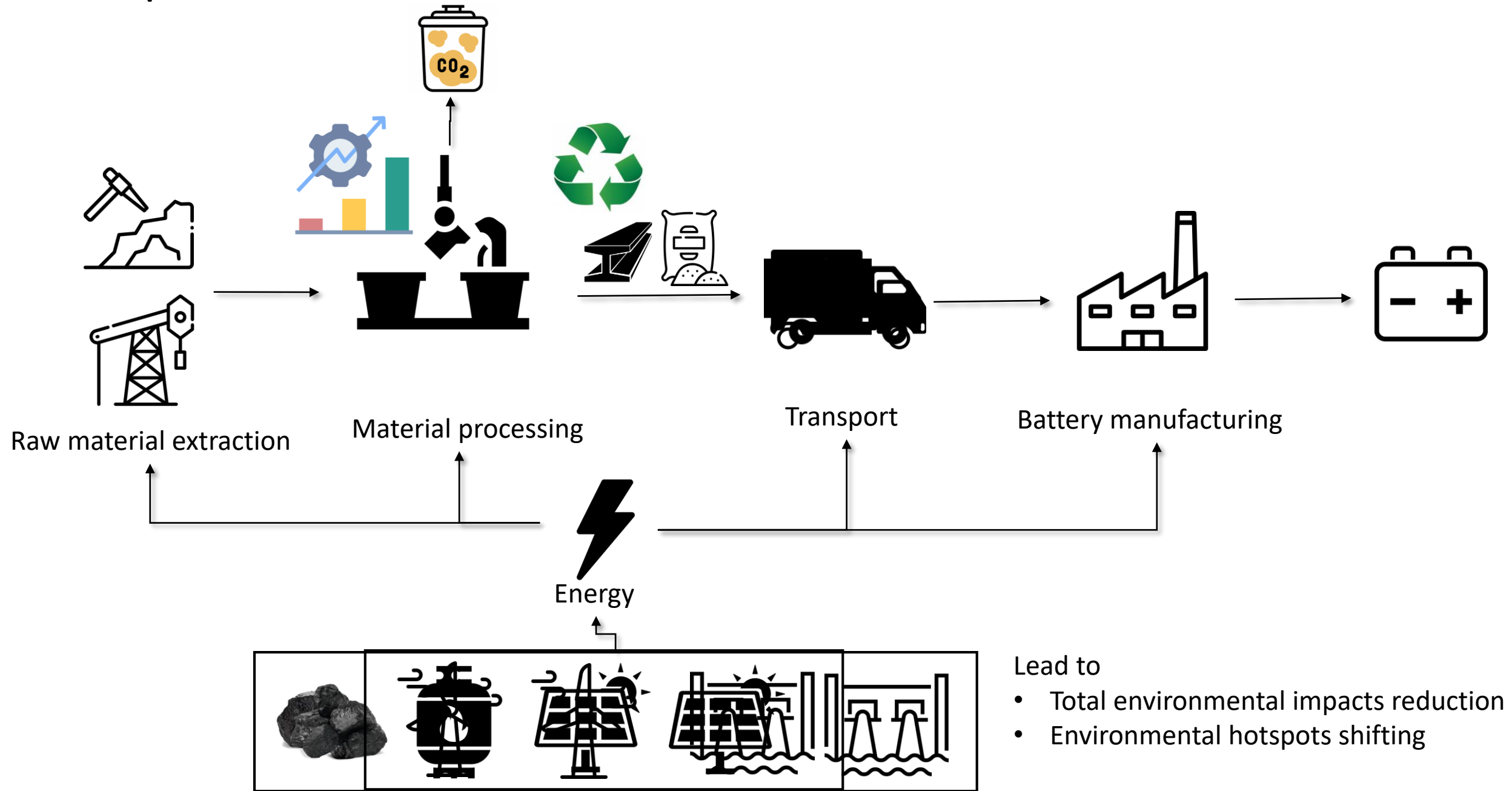
# Prospective LCA for novel battery chemistries

Department of Energy and Technology, SLU  
Shan Zhang

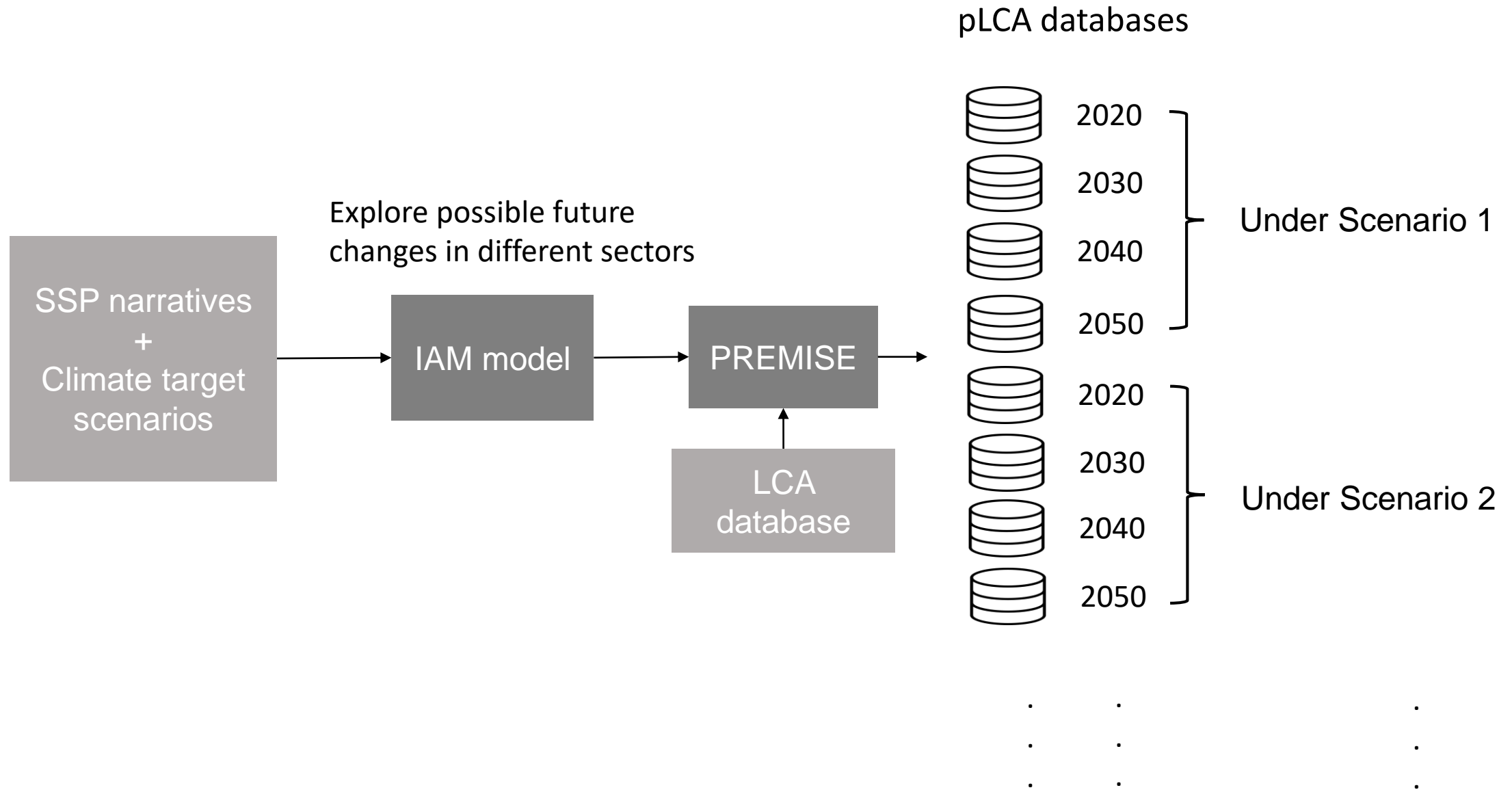
# Production chain of batteries



# Future production chain of batteries

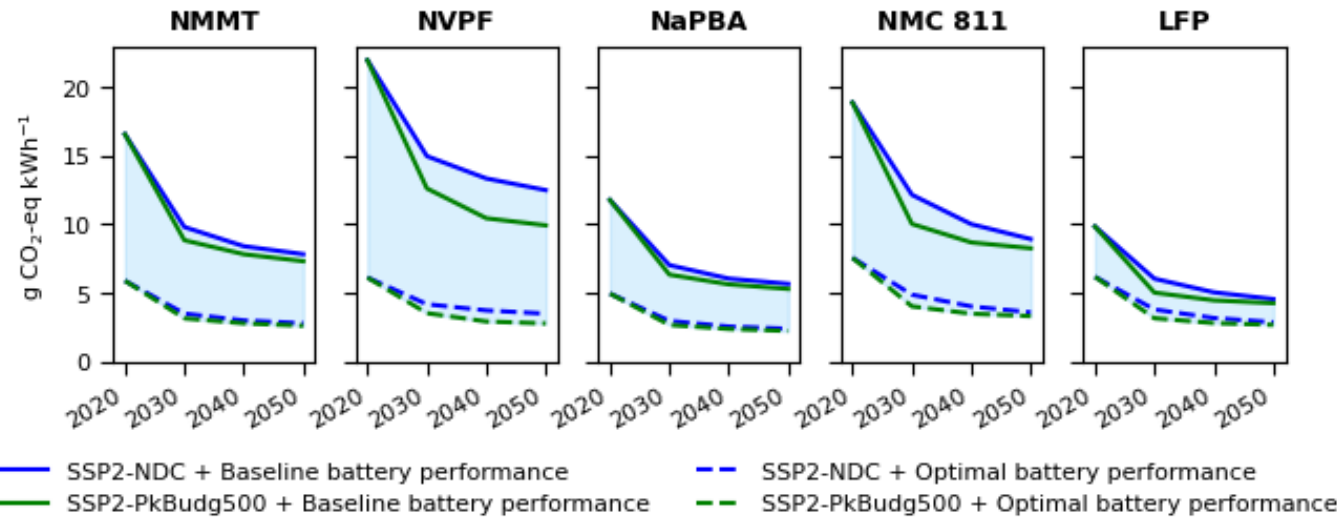


# How to integrate possible future changes in pLCA?



# Example

Comparing climate impacts of sodium-ion batteries and lithium-ion batteries at 2030, 2040, 2050.



Climate impacts decrease overtime regardless of scenarios and battery chemistries

Relative environmental contribution of battery manufacturing process decreases from 18-32% to 2-4%

