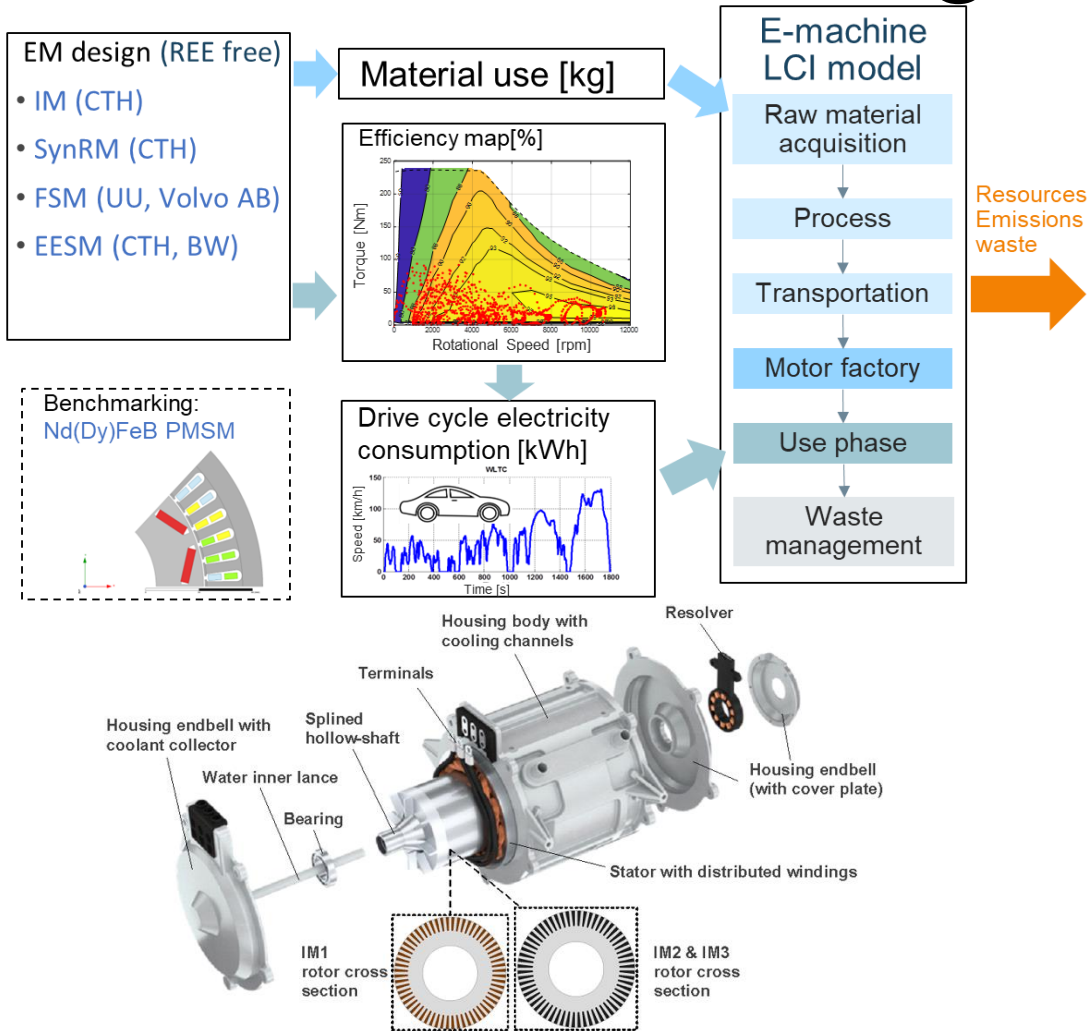


E-machine design and environmental impact



The Goal of the Project:

To establish the environmental impact of using various types of E-machines in propulsion drive cycles. To establish important design requirements which can improve environmental impact

Expected Result:

- Design proposal for an induction machine (IM)
- Design proposal for a synchronous reluctance traction machine (Syn-RM)
- Design proposal for a Ferrite traction machine (Fe-PMSM)
- Environmental assessment of a stator and rotor stack for an EESM
- Quantified suggestions for reduced environmental impact through design measures
- Benchmarking of various E-machines in terms of energy losses in drive cycles and the resulting environmental
- Environmental (including losses during the lifetime) assessment for the investigated machines
- 5 publications, of which at least 2 are journal publications
- A PhD thesis