

The ECCV Platform

Max Johansson, Oskar Lind Jonsson, Robin Holmbom, Lars Eriksson

The Electrochemical Commercial Vehicle (ECCV) platform is a simulink library for complete vehicle modeling of battery and fuel cell hybrid electric trucks.

The goals of the library are;

- to allow engineers to test the performance of system topologies, controls etc., and
- to allow researchers that study specific components to get reasonable boundary conditions when the components are used for automotive purposes.

The work so far has focused on completing an example vehicle by combining validated component models, that predicts reasonable energy & heat flows in the vehicle.

The plots to the right presents the result of simulating a 40-ton fuel cell hybrid truck driving from Södertälje to Norrköping with a reference speed of 75 km/h.

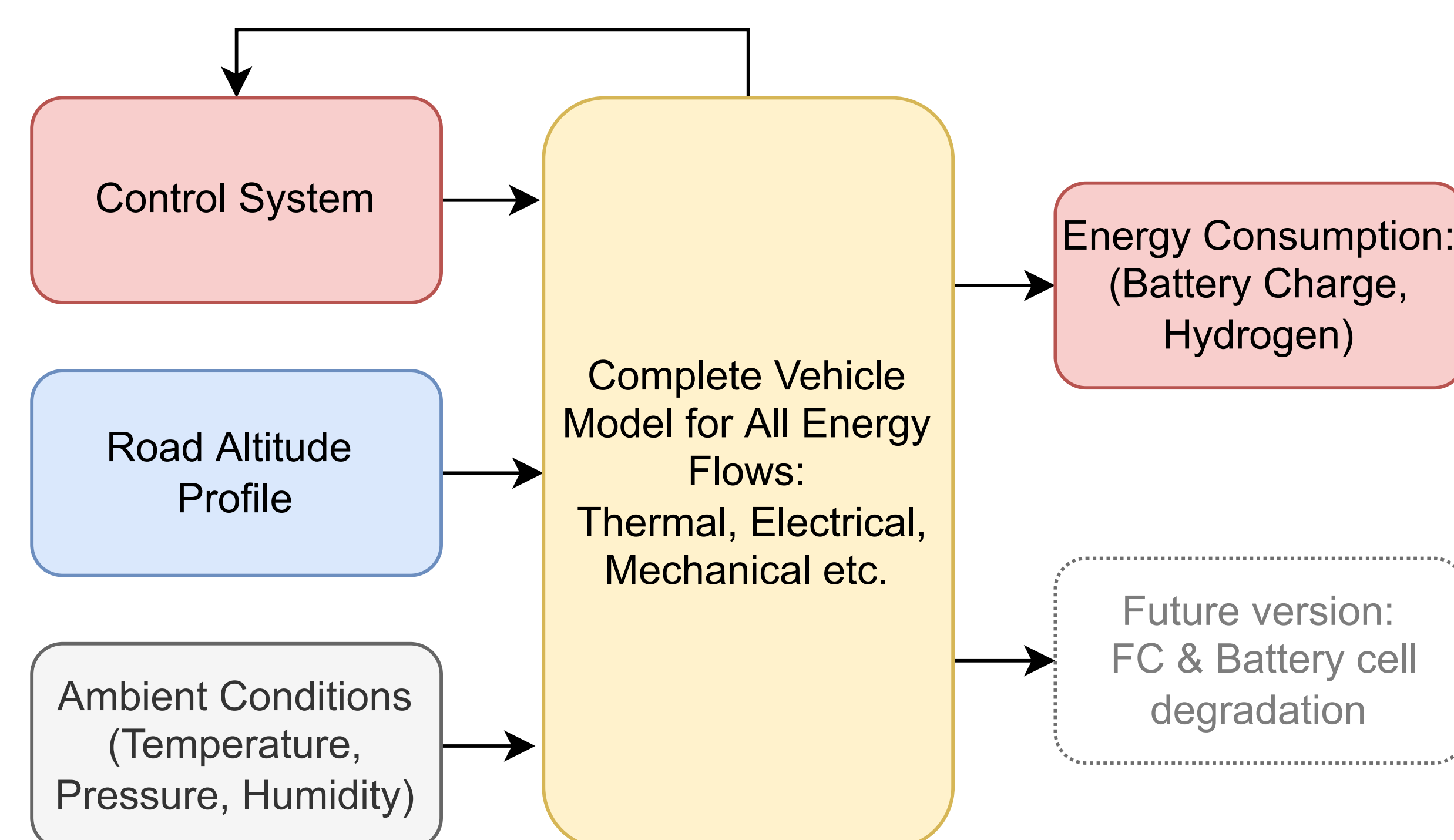


Figure 1: Simulation overview.

