H2-CCS chain tool and evaluation methodologies for integrated chains

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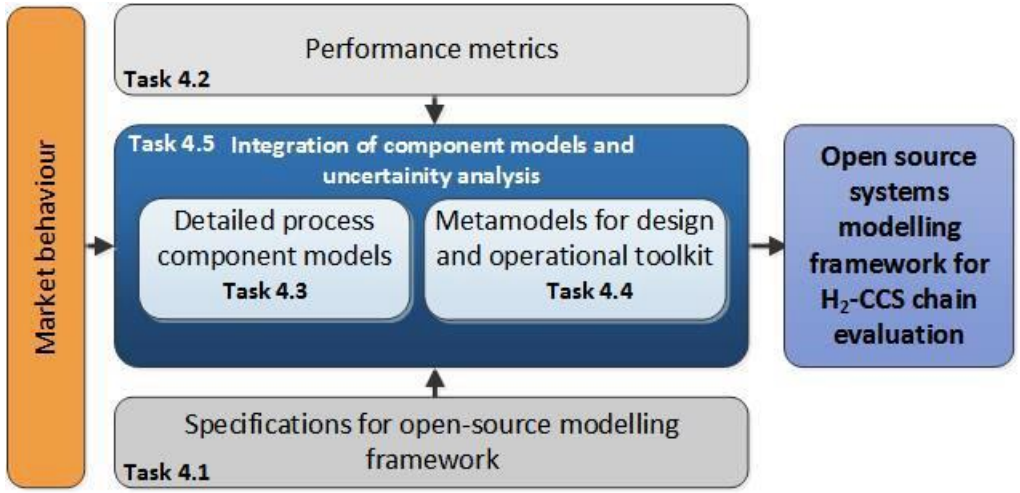
Aims of WP4

- Develop an open-source systems modelling framework with a steady-state design mode and a dynamic operational mode.
- Develop multiscale models and an integrated modelling approach for the chain components incorporating results from WP1 and WP2.
- Apply the methodology in conjunction with the case studies in WP5 with respect to

  (i) the potential time evolution of the system and (ii) integrated assessments of the proposed designs.

WP4 forms a link between the research done in WPs 1,2 and 3 and the case studies performed in WP5.



Programme

- 1230-1245: Overview and rationale of the work package; modelling framework (Nilay Shah, ICL)
- 1245-1315: Model reduction approach and rationale (Julian Straus, SINTEF)
- 1315-1345: Integrated design optimisation and LCA – method development and application study (Nixon Sunny, ICL and Karin Treyer, PSI)
- 1345-1400: Overview of operational modelling, including local thermodynamic models (Edward Graham, ICL)