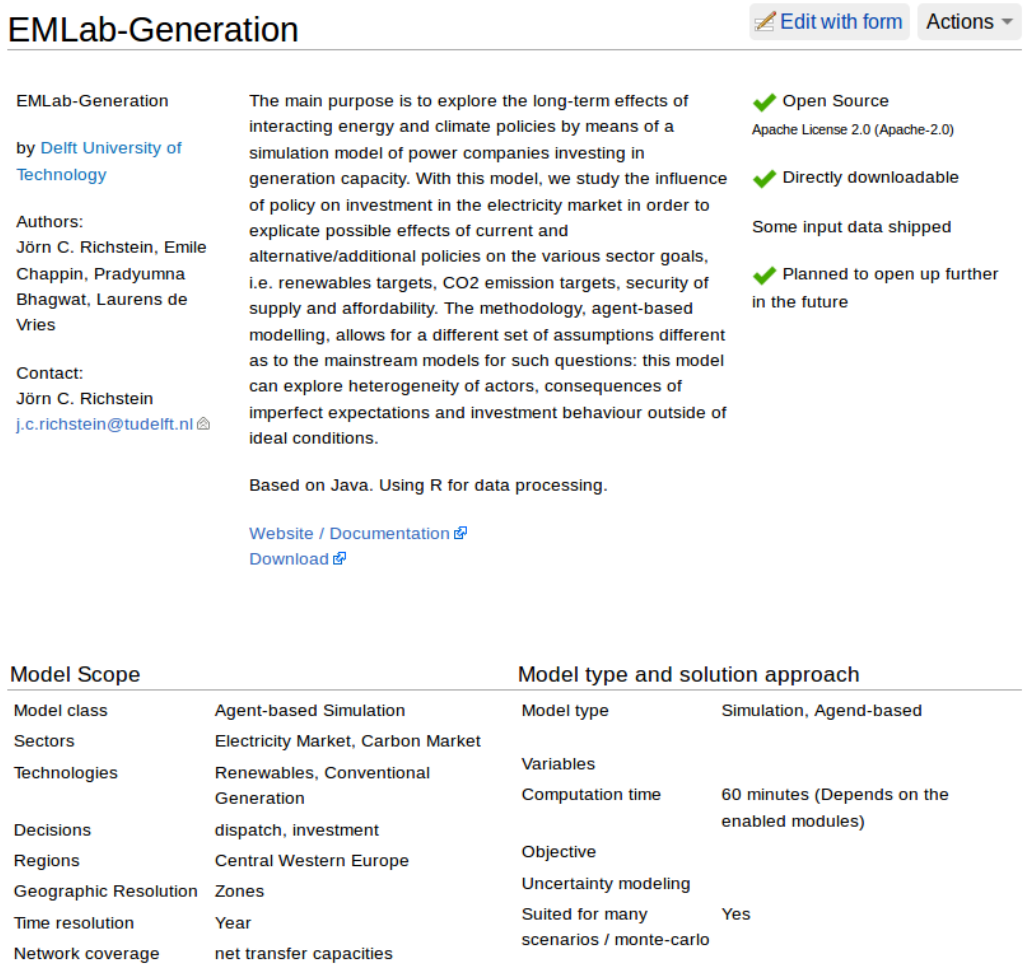
Website, Wiki & Model Factsheets

- What information do we provide on our website?
- Improve the structure and presentation of the model fact sheets?
- How to motivate people to add their/others models
- How to provide links to data in a structured way?



EMLab-Generation

Edit with form | Actions

EMLab-Generation

by Delft University of Technology

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The main purpose is to explore the long-term effects of interacting energy and climate policies by means of a simulation model of power companies investing in generation capacity. With this model, we study the influence of policy on investment in the electricity market in order to explicate possible effects of current and alternative/additional policies on the various sector goals, i.e. renewables targets, CO2 emission targets, security of supply and affordability. The methodology, agent-based modelling, allows for a different set of assumptions different as to the mainstream models for such questions: this model can explore heterogeneity of actors, consequences of imperfect expectations and investment behaviour outside of ideal conditions.

Based on Java. Using R for data processing.

Website / Documentation
Download

✔ Open Source
Apache License 2.0 (Apache-2.0)

✔ Directly downloadable

Some input data shipped

✔ Planned to open up further in the future

Model Scope

Model class	Agent-based Simulation
Sectors	Electricity Market, Carbon Market
Technologies	Renewables, Conventional Generation
Decisions	dispatch, investment
Regions	Central Western Europe
Geographic Resolution	Zones
Time resolution	Year
Network coverage	net transfer capacities

Model type and solution approach

Model type	Simulation, Agend-based
Variables	
Computation time	60 minutes (Depends on the enabled modules)
Objective	
Uncertainty modeling	
Suited for many scenarios / monte-carlo	Yes