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

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 modeling, 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

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, Agent-based
Variables
Computation time: 60 minutes (Depends on the enabled modules)
Objective
Uncertainty modeling
Suitability for many scenarios / monte-carlo

openmod open energy modelling initiative