Model Inputs

Scenarios

- Connectivity
- Renewables Targets
- Demand changes
- Cooperation

Capacity factors
Taken from renewables.ninja (Staffell and Pfenninger, 2016)

- Wind
- Solar

Model parameters

- Demand
- Costs
- Supply factors
- Emission factors

Energy Model

A combined capacity planning model and simulation model formulated using linear programming. The software is written in Python and available freely on Github.

Objective: $\min_x \ f(\mathrm{x}) = \mathrm{c}^T \mathrm{x}$

subject to: $A\mathrm{x} = b$

$l \leq \mathrm{x} \leq u$

Results Database

(1) Analyse risks and trade-offs under various scenarios

(2) Analyse **model sensitivity** to capture distribution of results