

# AppBBB

an oemof application

10.05.2017

Elisa Gaudchau

# Agenda

The project

The model

Transparency

# The Project



## Targets of the energy strategy 2030:

- 23 % energy savings towards 2007
- Increase of the Renewable Energy amount to 32 % of the primary energy consumption
- 72% reduction of the absolute CO<sub>2</sub>-emissions um towards 1990 (25 Mio. t)
- ...



## Energiestrategie 2030 des Landes Brandenburg

Bild: Ministerium für Wirtschaft und Europaangelegenheiten des Landes Brandenburg: Energiestrategie 2030 des Landes Brandenburg; Februar 2012

# The Project

By order of



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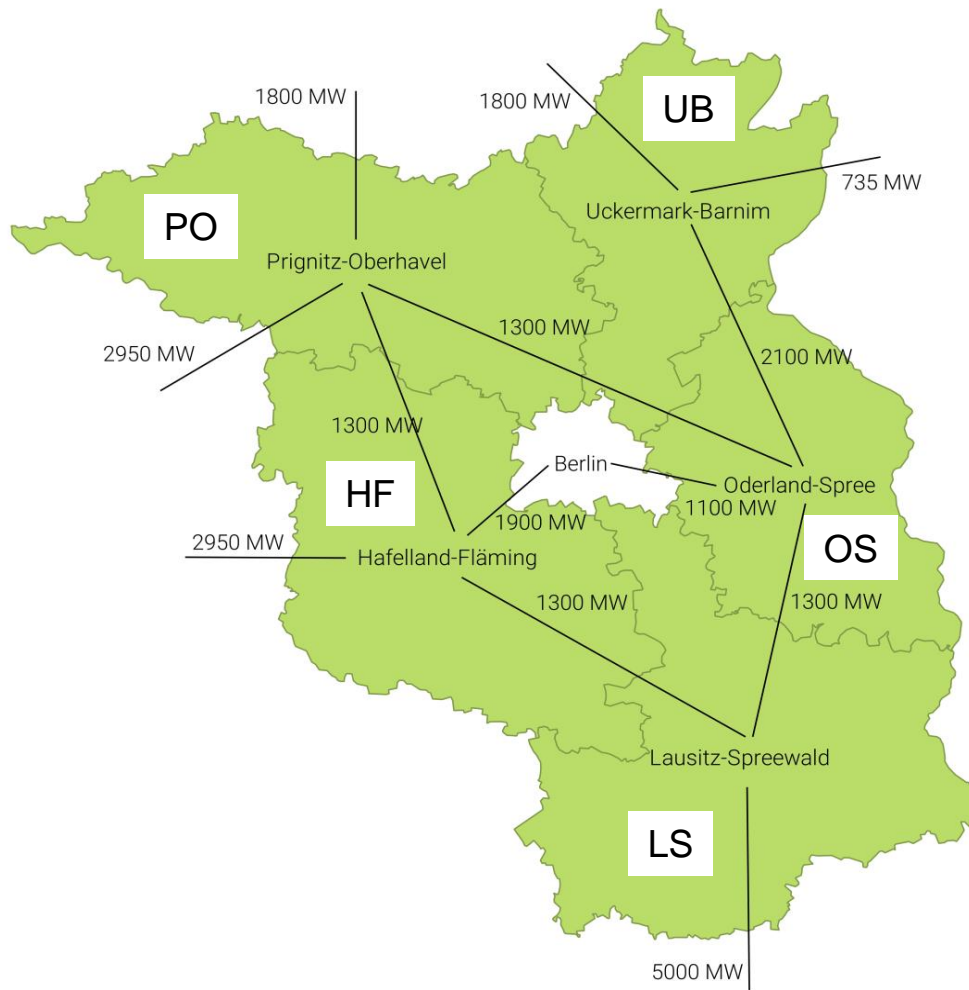


Under new circumstances:

Is it possible to reach the goals without Carbon Capture and Storage (CCS) ?

Brandenburg: Energiestrategie 2030 des Landes Brandenburg, Februar 2012

# The model



Dispatch optimization on lowest costs

**6 regions**  
**power and heat**  
**transmission**  
**export**

# The model

## Components

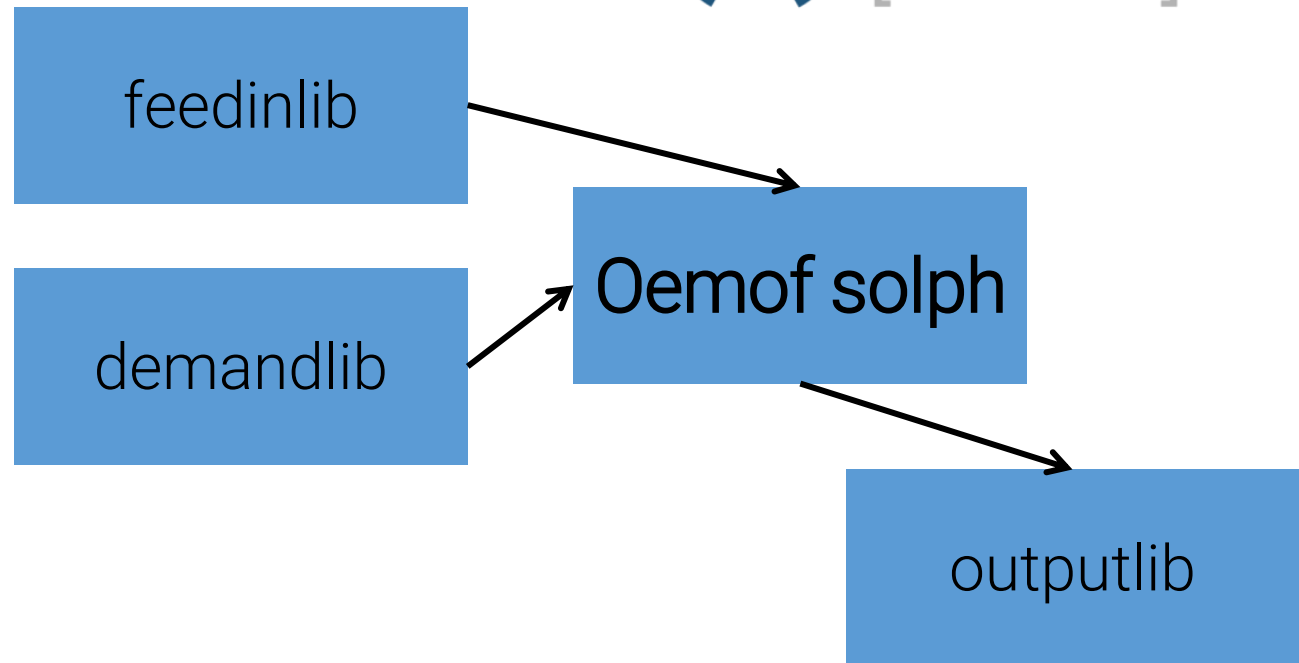
- Powerplants (PV, Wind, Oil, Coal, Biomass, Other / CHP, simple extraction CHP, only power)
- Demands (heat, power, (e-mobility), / households, commercial, industrial, decentral / district heating)
- Transport (simplified modelling of the transmission network)

## Constraints

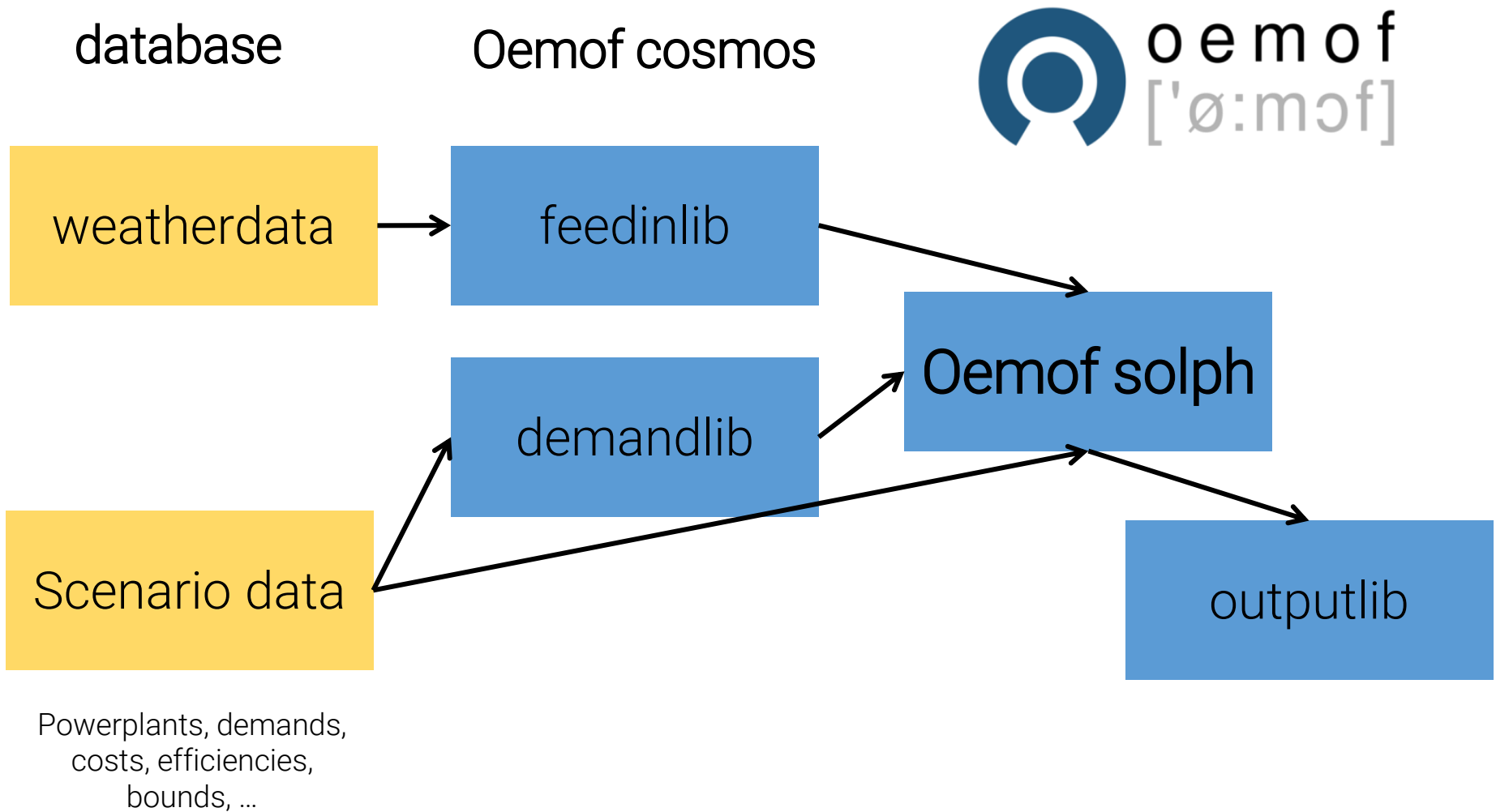
- CO<sub>2</sub>-limit
- Export-minimum

# The model

Oemof cosmos



# The model



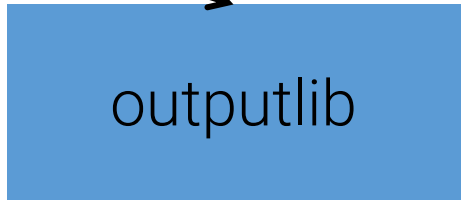
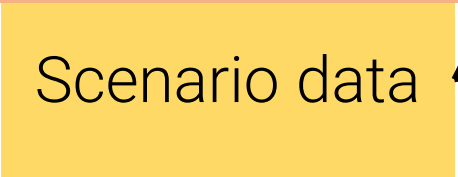


# The model



database

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Powerplants, demands,  
costs, efficiencies,  
bounds, ...

# Transparency

Quellcode und Dokumentation:

<https://github.com/rl-institut/appBBB>.

Factsheets in englischer Sprache zu dem Modell und den Szenarien:

<http://oep.iks.cs.ovgu.de/factsheets/frameworks/5/> (framework)

<http://oep.iks.cs.ovgu.de/factsheets/models/32/> (model) und

<http://oep.iks.cs.ovgu.de/factsheets/scenarios/4/>

<http://oep.iks.cs.ovgu.de/factsheets/scenarios/3/> (scenarios)

Eingangsdaten:

<http://193.175.187.164/dataedit/view/scenario> (Schema scenario: alle Tabellen mit „abbb“ im Namen)

**Attention! This app runs on the „old solph“ (v0.0.9)**

Report: <http://reiner-lemoine-institut.de/untersuchungen-zur-energiestrategie-brandenburgs-gaudchau-et-al-2017>

Vielen Dank für Ihre  
Aufmerksamkeit.